SR & BGNR GDC (A), Khammam.

Department of Public Administration.

Bridge Course.

Academic year

2021 - 22

Oct 1/10/2021

Inter లో B.P.C, M.P.C మరియు Vocational చదివిన విద్యార్థులకు ప్రభుత్వ పాలన విధానాలపై మరియు ప్రస్తుతాంశాలపై విద్యార్థులపై తరగతి గదిలో చర్చలు జరిగినవి.

B.A (Public Admn) లో చేరిన విద్యార్థులకు Bridge Course కార్యక్రమం తరగతి గదిలో చర్చలు జరిగినవి. ప్రస్తుత సమస్యలపై తరగతి గది చర్చలను జరిపి సమస్యలు మరియు పరిష్కారాలు:

1) ప్రభుత్వ పాలన - ప్రాధాన్యత గుర్తించడం
2) రాజ్యాంగ విలువలు గుర్తించడం
3) ప్రభుత్వ పాలనలో పారదర్శకత,
4) తెలంగాణ పాలన చరిత్ర గుర్తించడం
5) Election Commission గురించి
6) CAG గురించి

Taken by 1) Lt. Le. Sukumar
2) P. Narasimha Rao

S.No	Name	Inter group	Present group	Signature
1	A. Abinai	(I.A)	HEPA.	A. Abinai
2)	B. Chandrakala	multipurpose	HPP.	B. Chandrakala
3)	B. Maheswari	CEC	HPP	B. Maheswari
4)	G. Swapna	multipurpose	HPP	G. Swapna
5)	K. Ganesh	BPC	HPP	K-Ganesh
6)	Kotu Sruthi	Multi purpose	HPP.	K. Sruthi
7)	Koltupally Ajay	ET	HPP	K. Ajay
8)	Linga boina Sravani	Multi purpose	HPP	L. Sravani
9)	SK. Mazeed pasha	MPC	HPP	Mazeed pasha

SC No	Name	Inter group	Present group	Signature
10	P. Srinivas Rao	M.T	EPP	P. Srinivas rao.
11)	Naladagi Bhuvanasri	MPC	HEPA	N. Bhuvanasri
12)	M. Madhu	BPC	HPP	M. madhu
13)	B. Karthik	O.A	HPP	B. karthik
14)	B. Sreelekha	O.A	HPP.	B. Sreelekha
15)	D. Sai	ET	HPP	D. Sai.
16)	Eruku. Chandu	BPC	HPP	E. chandu.
17)	K. Nandini	multi purpose	HPP	K. Nandini
18)	M. Renuka	multi purpose	EPP	M. Renuka

...ndance Register of Year Class Subject

Roll No	Name of the Student	Month	10/24	10/24	10/24	10/24	10/24											
		Date	4	5	6	7	8											
		Signature of Lecturer																
		No. of Lecturer	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	A. Abinai		1	2	2	3	4											
2	B. Chandra Sekhar		1	2	3	4	5											
3	B. Maheswari		1	2	3	3	4											
4	G. Swapna		1	2	3	4	5											
5	K. Ganesh		1	2	3	4	5											
6	K. Sruthi		1	2	3	4	5											
7	K. Ajay		0	1	2	3	4											
8	L. Sravani		1	2	3	4	5											
9	Sk. Mazeed Pasha		0	1	2	2	3											
10	P. Srinivasa Rao		1	2	2	3	4											
11	N. Bhuvanasri		1	2	3	4	5											
12	M. Madhu		0	1	2	3	4											
13	B. Karthik		1	2	3	4	5											
14	B. Sreelekha.		0	1	2	3	4											
15	D. Sai		1	2	3	4	5											
16	E. Chandu.		1	2	3	4	5											
17	K. Nandini		1	2	3	4	5											
18	M. Renuka.		0	1	2	3	4											

SR & BGNR GDC (A), Khammam.

Dept. of. Public Admn.

Bridge Course.

Academic year. 2020-21.

Inter or M.P.C. Bi.PC నుండి Vocational Group చదివిన విద్యార్థులకు ప్రభుత్వ శాఖల పై, ప్రభుత్వ శాఖల శిక్షణ ~~[illegible]~~ పై విద్యార్థులకు బి.కాం లేదా సమానమైన Degree or BA Public Admn గా మారిన విద్యార్థులకు Bridge classes నిర్వహించాలని ప్రభుత్వం నిర్ణయించింది. నుండి తమ శాఖలకు ప్రభుత్వ ~~[illegible]~~ సంస్థలను కేటాయించిన సంస్థల నుండి బి.కాం లేదా సమానమైన కోర్సులను ~~[illegible]~~ నిర్వహించింది.

~~[illegible]~~ Bridge classes or తెలుగు యూనివర్సిటీ పై నిర్వహిస్తారు.

1) ప్రభుత్వ శాఖల - పరిధి - విధానాలు.
2) రాష్ట్ర చట్టాలు పద్ధతులు.
3) Public Service Commission నియామకాలు
4) రాష్ట్రం మరియు స్థానిక సంస్థల నియామకాలు,
5) Election Commission నియామకాలు.
6) CAG, నియామకాలు పద్ధతి నియామకాలు,

తెలంగాణ శాలిని చరిత్ర గురించి
ప్రాణత్వ సంస్థల సిద్ధాంతాల గురించి
) క్విజ్ - పద్యాలు, సామెతల గురించి

Taken by
Lect. K. Sukumar
P. Narayana murthy

Sl NO	Name	Inter group	Degree group	Signature
1	S. pavan	E.T	B.A.(hpp)	S. pavan.
2)	K. Sandeep	E.T	B.A.(hpp)	K. Sandeep
3)	D. Vamsi	AET	B.A(HPP)	D. Vamsi
4)	J. karthik	MET	BA (HPP)	J. karthik
5)	U. Rajkumar	E.T	BA(EPPA)	U. Rajkumar
6)	P. Venkatesh	MET	BA(HPP)	P. Venkatesh
7)	Sk. Anwar	AET	B.A(HPP)	Sk. Anwar
8)	Sk. madhi	ET.	BA. HPP	Sk. madhi
9)	P Sai Kiran	AET.	BA.HPP(TM)	P Sai Kiran
(10)	A. Nagendrababu	E.T	(BA HPP)	A. Nagendrababu
11)	B Vamshi	E.T	(BA HPP)	Vamshi
11)	S. Mohan	A.E.T	BA. HPP	Mohan
(13)	B Eswar	E T	B.A. HPP	B. Eswar

S.No	Name	Inter group	Present group	Signature
14)	K. KISHORE	M.E.T	B.A H.P.P	Kishore
15	G. NIKHIL	M.E.T	B.A E.HPA	G. Nikhil
16.	K. Pradeep	M.E.T	B.A H.PP	K. Pradeep
17	E. chandralekha	M.P.C	B.A H.P.P	E. chandralekha
18.	MOHAMMED RUVIDA	B.P.C	B.A HPP	md. Ruvida
19.	V. Sony	M.P.C	BA. (HPPA)	V. Sony.
20	B. Neeharika	I/M	B.A [H.E.PA]	B. Neeharika
21	B. Prathyusha	Dairy	B.A [H.P.P]	B. Prathyusha
22.	R. Madhuri	MPC	BA [HEPA]	R. madhuri

Register of

Year Class Subject

	Name of the Student	Month	December 2020															
		Date	1	2	3	4	5											
		Signature of Lecturer																
	2020-21	No. of Lecturer	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	S. Pawan		1	2	3	4	5											
2	K. Sandeep		1	2	2	3	4											
3	D. Vamsi		1	2	3	4	5											
4	J. Karthik		1	2	3	4	5											
5	U. Raj Kumar		0	1	2	3	4											
6	P. Venkatesh.		1	2	3	4	5											
7	Sk. Anwar		1	2	3	4	5											
8	Sk. Modhin		1	2	3	4	5											
9	P. Sai Kiran		0	1	2	3	4											
10	A. Nagendra Babu		1	2	3	4	5											
11	B. Vamsi		1	2	3	3	4											
12	B. Tharun		1	2	3	4	5											
13	B. Eswar		1	2	3	3	4											
14	K. Kishore		1	2	3	4	5											
15	G. Nikhil		1	2	3	4	5											
16	K. Pradeep		0	1	2	3	4											
17	E. Chandrakala.		1	2	3	4	5											
18	Md. Ruvider.		1	2	3	4	5											
19	V. Sony		1	2	3	3	4											
20	B. Neeharika.		1	2	3	4	5											
21	B. Bathyunthan		1	2	3	4	5											
22	R. Madhun		0	1	2	3	4											

SR & BGNR GDC(A), Khammam.

Dept. of. Public Administration.

Bridge Course.

Academic year. 2019-20.

Inter లో Bi.P.C. MPC మరియు Vocational Group చదివిన విద్యార్థులకు ప్రశ్నపత్రాల తయారీ విధానాలపైన, ప్రశ్నపత్రాల తయారీ శాస్త్ర పరిజ్ఞానంపైన, శాసనాలు నాయకులు చేసిన చట్టాలపైన అవగాహన లేదు. మరియు ప్రశ్నలూహించగలిగిన శక్తిగాని, నాణ్యత విశ్లేషణ, నూతన శాస్త్రములపైన అవగాహన లేని విద్యార్థులకు అవగాహన కలిపించేటటువంటి కార్యక్రమములపైన శాసనాలు పాలన అంశాలపై అవగాహన కలిపించటం జరిగింది.

Bridge class లో చేసుకున్న పాఠ్యాంశాలు.

(1) రాష్ట్రము యొక్క లక్ష్యాలు.

(2) ప్రశ్నలూహించగల వర్గీకరణ- పద్ధతులు.

(3) దీనసంక్షేమము; రక్షణలు ఉద్యోగములు రాష్ట్ర.

(4) ఉద్యోగ నియామక సంస్థలైన UPSC, TSPSC లపై అవగాహన.

(5) ప్రభుత్వ పాలన విధానాలపై అవగాహన

(6) కేంద్ర- రాష్ట్ర- స్థానిక ప్రభుత్వాలపై అవగాహన

(7) రాజ్యాంగం, మానవ హక్కులు, కాలుష్యనియంత్రణ పైన అవగాహన కలిపించటం జరిగింది

0	Student Name	Inter group	Present group	Signature
1.	D. Nagalaxmi	M.P.C	E.P.P	Nagalaxmi
	B. Saichandrika.	C.S.E	HPP	B. Saichandrika
3.	T. Naveen	E.T	H.E.P.A	Naveen.
4.	P. Ravinder	E.T	H.E.P.A	Ravinder
5.	K. Sandeep	E.T	H.E.PA	K. Sandeep
6.	Vinod.	E.T	HPP	J. Vinod
7.	R. Rohith	E.T	H.E.P.A	R. Rohith.
(7)	G. Naresh	M.E.T	H.P.P	G. Naresh
8,	S. Mahesh.	C.E.C	HPP	S. Mahesh
9	D Suresh	Dairying	HPP	D Suresh
10.	A. Venkatesh	E.T	E.P.P	[illegible]
11.	B. Nagaraju	CP	H.P.P	B.N.[illegible]
12.	G. Bhaskar	CP	H.P.P	G. Bhaska
13	B. Naveen	CP	HPP	B. Naveen.
14.	M. Madhu	AET	H.P.P	M. Madhu
15.	P. Vamshi	AET	H.P.P	P. Vamshi
(16)	N. Mahesh	C.S.E	H.P.P	[illegible]

S L NO	Student Name	HT NO	Practical	Signature
17	B. Vamshi	AET	HPP	Vamshi
18	Ch. Ramachandra Rao	APC	HPP	Ch. Ramachandra Rao
19	A. Nagaraju	CROP	HPP	A. Nagaraju
20	D. Venkanna	MET	HPP	D. Venkanna
21	A. Sai kumar	AET	HPP	A. Sai kumar

Attendance Register of Year Class Subject

Roll No.	Name of the Student	Month	June – 2019														
		Date	24	25	26	27	28	29									
		Signature of Lecturer															
	2019-20	No. of Lecturer	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	D. NagaLaxmi		1	2	3	4	5	6									
2	B. Sai Chandrika.		1	2	3	4	5	6									
3.	T. Naveen		1	2	3	4	4	5									
4	P. Ravindar		1	2	2	3	4	5									
5	K. Sandeep		1	2	3	4	5	6									
6	Vinod		0	1	2	3	4	5									
7	R. Rohith		1	2	3	4	5	6									
8	G. Naresh.		1	2	3	4	5	6									
9	S. mahesh.		1	2	3	4	4	5									
10	D. Suresh		1	2	3	4	5	6									
11	B. NagaRaju		0	1	2	3	4	5									
12	G. Bhaskar		1	2	3	4	5	6									
13	A. Venkatesh		1	2	2	3	4	5									
14	B. Naveen		1	2	3	4	5	6									
15	M. Madhu		1	2	2	3	4	5									
16	P. Vamshi		1	2	2	3	4	5									
17	N. Mahesh.		1	2	3	4	5	6									
18	B. Vamshi		1	2	3	4	5	6									
19	Ch. Ramachandrakumar		1	2	3	4	5	6									
20	A. Nagaraju		0	1	1	2	3	4									
21	D. Venkanna.		1	2	3	4	4	5									
22	A. Sai Kumar.		1	2	3	4	5	6									

SR & BGNR GDC (A), Khammam.

Dept. of. Public Administration

Bridge Course

Academic year. 2018-19.

Inter లో Bi.P.C, M.P.C, మరియు Vocational మరియు open Inter చదివిన విద్యార్థులకు పాఠశాస్త్రం (ప్రశ్నపత్రం) పాత విధానంపై ఉపన్యాసాలు నిర్వహించడం. కొత్తగా తెలంగాణ విద్యార్థులు ఉద్యోగాల పాత్ర, ప్రశ్నపత్ర విధానాల తయారీ, గణితం మొదలగు అంశాలపై Degree 1st year విద్యార్థులకు ఉపన్యాసం కల్పించడం జరిగింది.

Bridge classes లో తీసుకున్న శిక్షణలు.

1) తెలంగాణ విద్యార్థులు ఉద్యోగాల పాత్ర
2) ప్రశ్నపత్ర విధానాల తయారీ, గణితం మొదలగు అంశాలపై ఉపన్యాసాలు.
3) ప్రేరణాత్మక అంశాలపై ఉపన్యాసం.
4) ఉద్యోగార్థులకు సహకరించే upsc / TSPSC లపై ఉపన్యాసం.
5) గ్రూప్ / రాష్ట్ర / స్థానిక ప్రశ్నలపై ఉపన్యాసం

౦. నిలిచి పోయినవి / స్వతంత్ర సంస్థలు వాటి
పనితీరుపై చర్చించాలి.

౧. Election Commission పై చర్చించాలి.

Name	Inter group	Signature
1) B. Gopiraj	MPC	B.Gopiraj
2) R Charankumar	MPC	[illegible]
3) D. Jeevan kumar	MPC	D. Jeevankumar
4) B. Goverdhanachary	MPC	B. Goverdhanachary
5) A. Sandhya.	MLT (Vocational.)	A. Sandhya
6) G. Raja	ET [Vocational]	Raja
7) S. gopi	CA [Vocational]	S. gopi
8) B. Nandi Vardan	BiPC	Nandi
9) B. kishor	E.T	Kishor
10) M. Sai	ET	M Sai
11) A. Ashok.	AET.	A. Ashok.
12) M. Mohan	MET	M. Mohan
13) T. Gopi	ET	T. Gopi
14) M. Kalyan.	ET	M Kalyan
15) B. saidulu	ET	B. saidulu
16) J. Venkateswarlu	AET	J venkateswarlu
17) L. DEVAKI	Bi.P.C	L. DEVAKI

Attendance Register of Year Class Public A Subject

Bridge course.

2018-19

Roll No	Name of the Student	Month	June															
		Date	25	26	27	28	30											
		Signature of Lecturer																
		No of Lecturer	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	B. Gopiraj		1	2	3	4	5											
2	R. Charan Kumar		1	2	3	3	4											
3	D. Jeevan Kumar		1	2	3	4	5											
4	B. Govardhanachary		0	1	2	3	4											
5	A. Sandhya.		1	2	3	4	5											
6	G. Raja		1	2	3	4	5											
7	S. gopi		1	2	3	4	5											
8	B. Nandivardhan		1	2	2	3	4											
9	B. Kishor		1	2	3	4	5											
10	M. Sai		0	1	2	3	4											
11	A. Ashok.		1	2	3	4	5											
12	M. Mohan		1	2	2	3	4											
13	T. Gopi		1	2	3	4	5											
14	M. Kalyan		0	1	2	3	4											
15	B. Saidulu.		1	2	3	4	5											
16	J. Venkateshwarlu.		0	1	1	2	3											
17	L. Devaki		1	2	3	4	5											

SR & BG NR GDC (A), Khammam.

Dept of Public Administration.

Bridge course.

Academic year - 2017-18

(P. Narasimha Rao)
Dept. of. Pub. Admn.

Inter or Bi.P.C, M.P.C, Vocational courses పరీక్షలు often Inter చదివిన విద్యార్థులకు, పాఠశాస్త్రం, ప్రత్యేకమైన విధానాలపై అవగాహన చూడడం కష్టమైన ప్రశ్నలు పాంచిన విధానాలు, ఉపాధ్యాయులు పాఠాలు బోధించేటప్పుడు మరియు టర్మ్స్ / వర్గాల / స్థాయిల ప్రశ్నలు అడిగే విధానాలపై అవగాహన కలిగించడం జరిగింది.

Bridge classes తీసుకున్న పాఠ్యాంశాలు.

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1) రాష్ట్ర / రాష్ట్ర / కేంద్ర వ్యవస్థలపై అవగాహన
2) జిల్లా / వర్గాల / స్థాయిల ప్రశ్నలపై అవగాహన
3) Election commission పై అవగాహన
4) UPSC, TSPSC లపై అవగాహన.
5) outsourcing / VRA లపై అవగాహన.
6) పురపాలిక సంస్థలపై అవగాహన (కార్పొరేషన్, మున్సిపాలిటీ, నగర పంచాయతీ)
7) కార్యాలయ పని దినాల పద్ధతిపై అవగాహన.

Name	Intern group	Signature
M. Santosh Kumar	MET	M. Santosh Kum
2) B. Pulla Rao	E.T	B. Pulla Rao
3) K. Sunil Kumar	A.E.T	K. Sunil Kumar
4) M. Laxmanudu.	M.P.C	M. Laxmanudu
5) M. Ramudu.	M.P.C	M. Ramudu.
6) D. Laxmi Prasanna	M.P.C	D. Laxmi Prasanna.
7) K. Anusha.	O.A.S.	K. Anusha
8) G. ROJA	I(M) (BO)	G. ROJA
9) D. Ganesh.	MET	D. Ganesh
10) J. Naveen	E.T	J. Naveen
11) D. Suman.	MET	D. Suman
12) G. Johny	O.A.S	G. Johny
13) M. Vijay Chandran	M.P.C	Vijay
14) J. Sandeep	CP&M (Agreculture)	J. Sandeep
15) J. Rajukumar	A.E.T	J. Rajukumar
16) V. Ashok kumar	AET	V. Ashok kumar
17) M. Venu	M.E.T	M. Venu

Name	Inter group	Signature
18) P. Venkatesh.	A.E.T. (Automobile)	~~P. Venkatesh~~

ance Register of Year Class 2017-18 Subject

Bridge COURSE.

Name of the Student	Month	June	June	June	July	July	July										
	Date	28	29	30	1	3	4										
	Signature of Lecturer																
	No. of Lecturer	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	M. Santosh Kumar	1	2	3	4	5	6										
2	B. Pulla Rao.	1	2	3	3	4	5										
3	K. Sunil Kumar	1	2	3	4	5	6										
4	M. Ladmudu.	1	2	3	4	4	5										
5	D. Laxmi Prasanna	1	2	3	4	5	6										
6	M. Ramudu.	1	2	3	4	5	6										
7	K. Anusha	0	1	2	3	4	5										
8	G. Roja.	1	2	3	4	5	6										
9	D. Ganesh.	1	2	3	4	4	5										
10	B. Naveen.	1	2	2	3	4	5										
11	D. Suman	1	2	3	4	5	6										
12	G. Johny	0	1	2	3	4	5										
13	M. Vijay Chandran	1	2	3	4	5	6										
14	J. Sandeep	1	2	3	4	5	6										
15	J. Raju kumar	1	2	3	4	4	5										
16	V. Ashok Kumar	1	2	3	4	5	6										
17	M. Veny	1	2	3	4	5	6										
18	P. Venkatesh	0	1	2	3	4	5										

SR&BGNR GOVT ARTS AND SCIENCE COLLEGE

(AUTONOMOUS) KHAMMAM

BRIDGE COURSE

2017-2018

2018-2019

2019-2020

2021-2022

DEPARTMENT OF MICROBIOLOGY

SR&BGNR GOVT.COLLEGE

SR & BGNR GOVT. ARTS & SCIENCE COLLEGE, KHAMMAM

DEPARTMENT OF MICROBIOLOGY

BRIDGE COURSE

A bridge course for newly admitted students is conducted every year before the commencement of the first semester classes. The main objective of the course is to bridge the gap between subjects studied at Intermediate college level and subjects they would be studying in Graduation.

Objectives:

- Give students the confidence and skills to successfully transition to college and new curriculum.
- To provide adequate time for the transition to hardcore of degree courses.
- To enable the students to learn the basic terminology in Microbiology.
- To provide sufficient time to the students for the adjustment needed to settle in graduate course.
- To give a summary of the program outcomes, program specific outcomes and course outcomes.
- To give an opportunity to students to know about the teacher, course, syllabus and teaching methodology.
- An intermingling of students from different backgrounds.
- To bridge the gap between previous knowledge and the course opted.

SR & BGNR GOVT. ARTS & SCIENCE COLLEGE, KHAMMAM

DEPARTMENT OF MICROBIOLOGY

Bridge Course -Academic (For 1st year new students)

Year	Subject	Date	No of periods	Name of the lecturer	No of students attended	Remarks
2017-2018	Industrial Microbiology	10/07/2017 to 15/07/2017	07	Dr.T.Sujatha	25	Completed
2018-2019	Microbiology	16/07/2018 to 21/07/2018	07	Dr.T.Sujatha	30	Completed
2019-2020	Microbiology	15/07/2019 to 20/07/2019	07	J.Anitha kumari	15	Completed
2021-2022	Microbiology	25/10/2021 to 30/10/2021		J.Anitha kumari	23	Completed

Signature of the HOD

Signature of the Principal

SR & BGNR GOVT. ARTS & SCIENCE COLLEGE, KHAMMAM
DEPARTMENT OF MICROBIOLOGY
List of Students for Bridge Course 2017-2018

Batch-I B.Sc IMB.B.C

s.no	Roll No	Student name	Inter Group	Signature of the student
1.	DOSTID79045643896734	BHOOKYA INDRA BHAVANI	BPC	B. Indrabhavani
2.	DOSTID307253482613594	BHUKYA NAVEEN	BPC	B- Naveen
3.	DOSTID813330817917107	BODDU RAMYA	BPC	B. Ramya
4.	DOSTID363532278122751	BUDURU THIRUPATHI RAO	BPC	B. Thirupathi
5.	DOSTID693111072822549	CHATLA MAMATHA	BPC	Mamatha
6.	DOSTID445494393546955	CHINNAKESI GOPI	BPC	C-Gopi
7.	DOSTID205765339019091	BADAVATH NARESH	BPC	B. Naresh
8.	DOSTID651193895898917	DONAKONDA MANOHAR	BPC	D. Manohar
9.	DOSTID202743700332971	GUDISE VAMSI BHARGAVA KISHORE	BPC	G.V.B. Kishore
10.	DOSTID655034551114481	GUGULOTH ASHOK	BPC	G. Ashok
11.	DOSTID216536731985759	JATOTH SANTOSH KUMAR	BPC	J. Santhosh
12.	DOSTID704452098947418	JINUKUNTLA PRASANTH	BPC	J. Prasanth
13.	DOSTID427885400126047	KOTHAPALLI PRAVEEN	BPC	K. praveen
14.	DOSTID876072807190343	MAHAMMAD REENA ANJUM	Crop Production and Management	MD. Reena Anjum
15.	DOSTID224279926988159	MESSU VASANTHA RAO	BPC	M. Vasantha Rao
16.	DOSTID938810365172467	MONDRI KEERTHI	BPC	M. Keerthi
17.	DOSTID518308805293985	NALLAGATLA PRAVALIKA	BPC	N. Pravalika
18.	DOSTID264919787696770	NANNEBOINA GOPI	BPC	N. Gopi
19.		RENTALA RAVI TEJA	BPC	R. Ravi Teja
20.	DOSTID280269404808640	SALE SHANTHI SOUNDARYA PRABHA	BPC	S. S. Prabha
21.	DOSTID392243966304594	THOKALA SWATHI	Dairying	T. Swathi
22.		THUPPATI HARI KRISHNA	BPC	T. Harikrishna
23.		UPPUNUTHULA DHIKSHITHA	BPC	U. Dhishitha
24.		URUGONDA SHIVA KRISHNA	Dairying	U. Shivakrishna
25.	DOSTID409302360216825	VEMULA SAI PRASANNA	Dairying	V. Sai Prasanna

SR & BGNR GOVT. ARTS & SCIENCE COLLEGE, KHAMMAM
DEPARTMENT OF MICROBIOLOGY
List of Students for Bridge Course 2018-2019

Batch-I B.Sc MB.Z.C & MB.B.C

s.no	Roll No	Student name	Inter Group	Signature of the student
1.	TI1743218935	BHANU TEJA SAMPASALA	BPC	B.Tejasampasala
2.	TI1844310109	BODA ASHOK	BPC	B.Ashok
3.	TI1743221224	BOJJA SATHISH	BPC	Sathish
4.	TI1843214638	BOMMAKANTI TEJANVESH	BPC	B.Tejanvesh
5.	TI1843312634	BURRA JYOTHI CHANDANA	BPC	B.Jyothi Chandana
6.	BCB184836854	BVS YASAWINI	BPC	BVS Yasu
7.	TI1751213827	DAMALLA ABHISHEK	BPC	D.Abhishek
8.	TI1843218425	DESHABATHINI MEGHANA	BPC	D.Meghana
9.	TI1743219410	JADI SANDHYA	BPC	J.Sandhya
10.	TI1519224287	MEDARA RAMYA	BPC	M.Ramya
11.	TI1744213999	MEKALA SAI KUMAR	BPC	Saikumar
12.	TI1843311697	MOHAMMAD NAZEERUDDIN	BPC	M.Nazir
13.	TI1519217334	PAGADALA HEMANTH	BPC	P.Hemanth
14.	TI1843210978	VEMULA UDAYASREE	BPC	
15.	TI1843216462	YEDLA SAMATHA	BPC	Y.SAMATHA
16.	TI1843511854	ACHANTI LAVANYA	Crop Production and Management	A.Lavanya
17.	TI1843221493	AMBALA SAI	BPC	A.Sai
18.	TI1743224996	AMGOTHU ANJALI	BPC	A.Anjali
19.	TI1844216433	BHUKYA AJAY	BPC	B.Ajay
20.	TI1743210245	DHARANAGARI MEENAKSHI BAI	BPC	D.Meenakshi
21.	TI1744210363	DORNALA AKHIL	BPC	D.Akhil
22.	TI1852216415	GAYAM VENU GOPAL REDDY	BPC	G.V.G.Reddy
23.	TI1843511876	KAMATALA MOUNIKA	Dairying	Mounika
24.	TI1744212753	KOLA VENKATESWARLU	BPC	Kola
25.	TI1843221018	POLEBOINA SOWMYA	BPC	Sowmya
26.	TI1843511880	SHAIK ARIFPASHA	Dairying	Arifpasha
27.	TI1843511877	SHAIK KHUSHEED PASHA	Dairying	Khushi
28.	TI1843219687	THATIKONDA KEERTHI	BPC	T.Keerthi
29.	TI1843214544	VEMPATI SAHITHI	BPC	Sahithi
30.	TI1843221938	VERASANGI SHYAMALA	BPC	Shyamala

SR & BGNR GOVT. ARTS & SCIENCE COLLEGE, KHAMMAM
DEPARTMENT OF MICROBIOLOGY
List of Students for Bridge Course 2019-2020

Batch-I B.Sc IMB.Z.C, MB.B.C & MB.B.Z

s.no	Roll No	Student name	Inter Group	Signature of the student
1.	TI1944221045	IRRI RAJU	BPC	I Raju
2.	TI1943225207	KARAM SAIGANESH	BPC	K Saiganesh
3.	TI1943225147	BANOTH SAI	BPC	B. Sai
4.	TI1944211685	BHATTU DHEERAJ	BPC	B. Dheeraj
5.	TI1740212147	SHAIK RAFEEQ	BPC	[illegible]
6.	TI1952217191	TEJAVATH NAGAMANI	BPC	Nagamani
7.	TI1940213443	BHUPATHI PRASHANTH	BPC	B. Prashanth
8.	TI1744211966	BHUKYA RAJESH	BPC	Rajesh
9.	TI1843217704	BOLLEDDU ANUSHA	BPC	B. Anusha
10.	TI1619218667	KAKARLA AKHILSAI CHANDRA CHOWDARY	BPC	A.kw
11.	TI1943219055	MEESALA HARISH KUMAR	BPC	Harish
12.	TI1852218177	MUSKU INDRA REDDY	BPC	Indrareddy
13.	TI1940213297	PADIRA SATHISH	BPC	P. Sathish
14.	TI1943228614	VALLAPATLA VAMSHI	BPC	Vamshi
15.	TI1943217842	YASA HEMANTH	BPC	Y Hemanth

SR & BGNR GOVT. ARTS & SCIENCE COLLEGE, KHAMMAM

DEPARTMENT OF MICROBIOLOGY

List of Students for Bridge Course 2021-2022

Batch-I B.Sc IMB.Z.C

s.no	Roll No	Student name	Inter Group	Signature of the student
1.	TI2143500591	THALLURI TRINESH ACHARYA	BPC	T. Trinesh Acharya
2.	BCB194651115	ALLIPURAPU PRUDHVI REDDY	BPC	A. Prudhvi Reddy
3.	TI2140500740	BANOTH JAYANTH NAYAK	BPC	B. Jayanth Nayak
4.	TI1943510547	BOLLA JITHENDRA	BPC	B. Jithendra
5.	TI2143211374	CHINTHAMALA JASWANTH	BPC	C. Jaswanth
6.	TI2143220322	CHODAVARAPU SHIVARAMA KRISHNA	BPC	C. Shivarama Krishna
7.	TI2144207147	GADDALA SUVARNA BABU	BPC	G. Suvarna Babu
8.	TI2143217051	GARLAPATI SANNI	BPC	G. Sanni
9.	TI2144502537	GUNDEPOGU RAVI KUMAR	BPC	G. Ravikumar
10.	TI2143206254	JANGAM SANDEEP	BPC	J. Sandeep
11.	BAI171725221202	JILLEPALLI AKHIL KUMAR	BPC	J. Akhil Kumar
12.	TI2144502536	KONDAMEEDI SUMANTH	BPC	K. Sumanth
13.	TI2144206299	KOTHAPALLI JAYASURYA	BPC	K. Jayasurya
14.	TI2143220869	KUKKALA ARAVIND	BPC	K. Aravind
15.	TI2140206521	NAGESH BHUKYA	BPC	N. Bhukya
16.	TI2143209556	NUKALA MUKESH	BPC	N. Mukesh
17.	TI2140500945	NUKALA NAGESH	BPC	N. Nagesh
18.	TI2058216491	PALTHYA CHANDANA	BPC	P. Chandana
19.	TI2152204405	SANNAILA SUNIL	BPC	S. Sunil
20.	TI2143206922	SINGARAPU UGANDER	BPC	S. Ugander
21.	TI2143203217	SREERAM KIRAN TEJA	BPC	S. Kiran Teja
22.	TI2144502550	SUREPALLI ABHILASH	BPC	S. Abhilash
23.	TI2144204070	THOTAPALLI NANIP KUMAR	BPC	T. Nanipkumar

SR & BGNR GOVT. ARTS & SCIENCE DEGREE COLLEGE (A), KHAMMAM

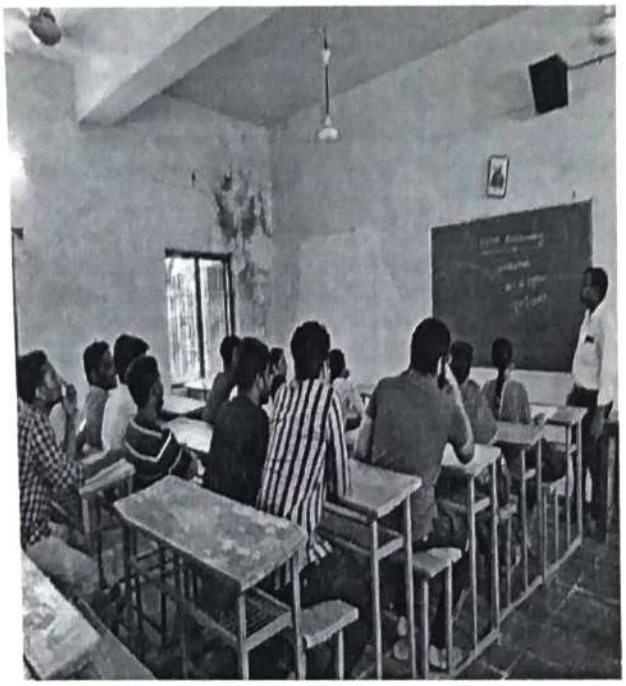
DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS

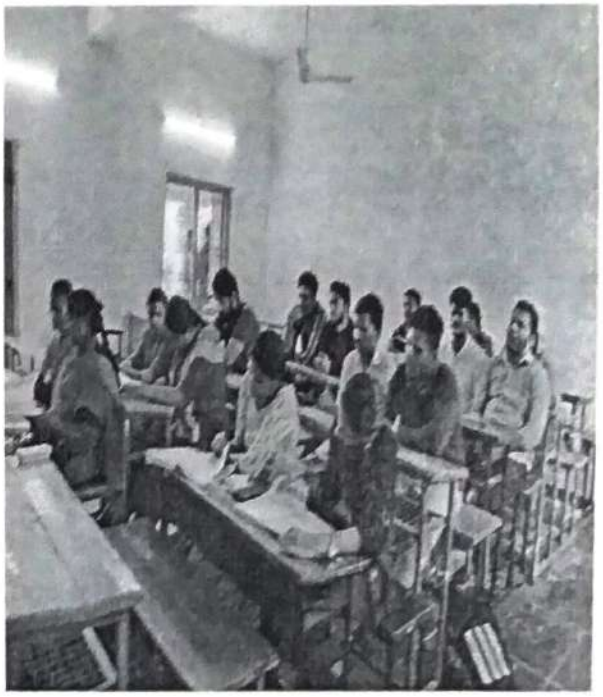
AWARENESS ON TRENDS AND TECHNOLOGY

2021-2022

Awareness on Trends and Technology

Year:	2022
Date:	10-6-2022 to 15-6-2022
Topic:	Cyber security
Presented By:	J.Gulabsingh Lecturer in Computer Science & Application





Overview of Cyber Security

Abstract : Cyber security are techniques generally set forth in published materials that attempt to safeguard the cyber environment of a user or organization. It manages the set of techniques used to save the integrity of networks, programs and data from unauthorized access. It refers to the body of technologies, processes, and it may also be referred to as information technology security. The field is of growing importance due to increasing reliance on computer systems, including smart phones, televisions and the various tiny devices that constitute the Internet of Things.

Keywords: IT security, Internet of things (IOT)

I. INTRODUCTION

The internet has made the world smaller in many ways but it has also opened us up to influences that have never before been so varied and so challenging. As fast as security grew, the hacking world grew faster. There are two ways of looking at the issue of cyber security. One is that the companies that provide cloud computing do that and only that so these companies will be extremely well secured with the latest in cutting edge encryption technology.

II. WHAT IS CYBER SECURITY ?

Its being protected by internet-connected systems, including hardware, software and data, from cyber attacks. In a computing context, security comprises cyber security and physical security both are used by enterprises to safe against unauthorized access to data centre and other computerized systems. The security, which is designed to maintain the confidentiality, integrity and availability of data, is a subset of cyber security.

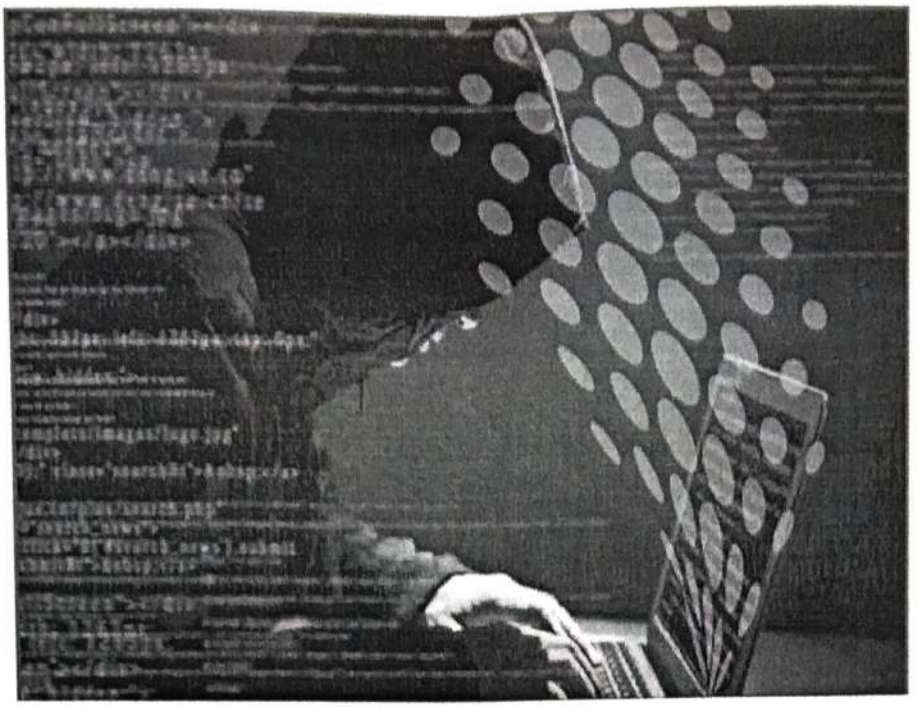
III. WHY DO WE NEED CYBER SECURITY ?

The range of operations of cyber security involves protecting information and systems from major cyber threats. These threats take many forms. As a result, keeping pace with cyber security strategy and operations can be a challenge, particularly in government and enterprise networks where, in their most innovative form, cyber threats often take aim at secret, political and military assets of a nation, or its people. Some of the common threats are :

- ✓ **Cyber terrorism** It is the innovative use of information technology by terrorist groups to further their political agenda. It took the form of attacks on networks, computer systems and telecommuni cation infrastructures.
- ✓ **Cyber warfare** It involves nation-states using information technology to go through something another nation"s networks to cause damage. In the U.S. and many other people live in a society, cyber warfare has been acknowledged as the fifth domain of warfare. Cyber warfare attacks are primarily executed by hackers who are well-trained in use of benefit the quality of details computer networks, and operate under the favourable and support of nation-states. Rather than closing a target"s key networks, a cyber-warfare attack may forced to put into a situation into networks to compromise valuable data, degrade communications, impair such infrastructural services as transportation and medical services, or interrupt commerce.
- ✓ **Cyber spionage** It is the practice of using information technology to obtain secret information without permission from its owners or holders. It is the most often used to gain strategic, economic, military advantage, and is conducted using cracking techniques and malware.

Who are Cyber Criminals ?

It involves such activities as child printed sexual organs or activity; credit card fraud; cyber stalking; defaming another online; gaining unauthorized access to computer systems; ignoring copyright, software licensing and trademark safe to protect; overriding encryption to make illegal copies; software piracy and stealing another"s identity to perform criminal acts. Cybercriminals are those who conduct such acts. They can be categorized into three groups that reflect their motivation.



Type 1: Cybercriminals – hungry for recognition:

- ✓ Hobby hackers;
- ✓ IT professionals (social engineering is one of the biggest threat);
- ✓ Politically motivated hackers;
- ✓ Terrorist organizations.

Type 2: Cybercriminals – not interested in recognition:

- ✓ Psychological prevents;
- ✓ Financially motivated hackers (corporate espionage);
- ✓ State – sponsored hacking (national espionage, sabotage);
- ✓ Organized criminals.

Type 3: Cybercriminals – the insiders:

- ✓ former employees seeking revenge;
- ✓ Competing companies using employees to gain economic advantage through damage and/or theft.

How To Maintain Efffective Cyber Security

Historically, organizations and governments have taken a reactive, "point product" approach to combating cyber threats, produce something together individual security technologies – one on top of another to safe their networks and the valuable data within them. Not only is this method expensive and complex, but news of damaging cyber breaches continues to dominate headlines, rendering this method ineffective. In fact, given the area of group of people of data breaches, the topic of cyber security has launched to the top of the priority list for boards of directors, which they seeked as far as less risky way. Instead, organizations can consider a natively integrated, automated Next-Generation Security Platform that is specifically designed to provide consistent, prevention-based protection – on the endpoint, in the data centre, on the network, in public and private clouds, and across Saabs environments. By focusing on prevention, organizations can prevent cyber threats from impacting the network in the first place, and less overall cyber security risk to a manageable degree.

What Cyber Security Can Prevent

The use of cyber security can help prevent cyber-attacks, data breaches and identity theft and can aid in risk management. When an organization has a strong sense of network security and an effective incident response plan, it is better able to prevent and serious of these attacks. For example, end user protection defends information and guards against loss or theft while also scanning computers for malicious code.

Types of Cyber Security Threats : The use of keeping up with new technologies, security trends and threat intelligence is a challenging their task. However, it should be in order to protect information and other assets from cyber threats, which take many forms.

- ✓ **Ransom ware** is a type of malware that involves an attacker locking the victim's computer system files typically through encryption and demanding a payment to decrypt and unlock them.
- ✓ **Malware** is any file or program used to harm a computer user, such as worms, computer viruses, Trojan horses and spyware.

- ✓ **Social engineering** is an attack that relies on human interaction to trick users into breaking security procedures in order to gain sensitive information that is typically protected.
- ✓ **Phishing** is a form of fraud where fraudulent emails are sent that resemble emails from reputable sources; however, the intention of these emails is to steal sensitive data, such as credit card or login information.

What does a security analyst do ?

An information security analysts protects to safe the company"s systems and networks by planning and carrying out measures of security. They create disruptive solutions to prevent critical information from being stolen, damaged, or compromised. Their primary responsibility is to keep a business or organizations data, clients, employees, and any virtual stored information safe from cyber attacks or hacking of any sort.

What are the consequences of cyber attack ?

Cyber-attacks will cause more damage financially and reputational even to the most withstand organisation. The organisation which suffers cyber-attack, have to face the losing assets, business reputation and potentially the organisation have to face regulatory fines and taking legal action and the costs of remediation. A survey taken by UK government about cyber security in 2017, found that the average cost for a large business is £19,600 and for a small to medium-sized business is £1,570.

IV. HACKING TOOLS

There are various tools are the modes of attack. And the malware are used for the totality of these tools. Examples are viruses and worms. Computer programs that reproduce the functional copies of themselves with varying effects ranging from emphasize and inconvenience to compromise of the confidentiality or integrity of information, and Trojan horses, destructive programs that pretence as benign applications but set up a back door so that the hacker can return later and enter the system. Often system intrusion is the main goal of system intrusion is more advanced attacks. If the intruder gains full system control, or „root" access, he has unrestricted access to the inner workings of the system .Due to the characteristics of digitally stored information the person with criminal intent will delay, disrupt, corrupt, exploit, destroy, steal, and modify information. The value of the information or the importance of the application will be depended, which the information are required and that such actions will have different effect with varying degrees of gravity.

V. THE LEVEL OF CYBER RISK

There are some additional reasons for that threat is overrated. First, as combating cyber-threats has become a highly politicized issue, official statements about the level of threat must also be seen in the context of different bureaucratic entities that compete against each other for resources and influence. This is usually done by stating an urgent need for action (which they should take) and describing the overall threat as big and rising. Second, psychological research has shown that risk perception is highly dependent on intuition and emotions, as well as the perceptions of experts (Gregory and Mendelsohn 1993). Cyber-risks, especially in their more extreme form, fit the risk profile of so-called „dread risks", which appear uncontrollable, catastrophic, fatal, and unknown. There is an inclination to be afraid of low probability risks, which translates into pressure for serving an action with all sorts of willingness to bear high costs of uncertain benefit. Only the system attacks sufficiently destructive or disruptive need the attention of the traditional national security apparatus. Attacks that interrupt the services or that cost mainly a nuisance to the computer.

VI. REDUCING CYBER – IN - SECURITY

The three different debates have been taken over the many concepts and counter measures have been produced with their focus. The computer network which owns a entities have a common practice to take a responsible for protecting it. However, there are some assets considered so crucial in the private sector to the functioning of society and governments have to take additional measures to ensure the level of protection. These efforts are usually included under the label of critical (information). Information assurance is guide for the infrastructure protection and to the management of risk, which is essentially about accepting that one is (or remains) insecure: the level of risk can never be reduced to zero. This means that minor and probably also major cyber-incidents are bound to happen because they simply cannot be avoided even with perfect risk management.

CONCLUSION

Depending on their (potential) severity, however, disruptive incidents in the future will continue to fuel the military discourse, and with it fears of strategic cyber-war. Certainly, thinking about (and planning for) worst-case scenarios is a legitimate task of the national security apparatus. However, for the favour of more plausible and more likely problems they should not to get more attention Therefore, there is no way to study the „actual" level of cyber-risk in any sound way because it only exists in and through the representations of various actors in the political domain.

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Cybersecurity and data protection can be confusing. There's a wealth of information out there, but what's good advice and what's bad? And how do you get started once you know what you need to do? At CyberSmart, we believe that Cyber Security should be accessible and easy for everyone. So, we've put together a set of simple guides to help you get started. this time we're talking user access control.

WHAT IS USER ACCESS CONTROL?

Companies implement user access policies to regulate who can access the companies information or IT systems and outline the associated access privileges for users. The purpose of these policies/procedures is to prevent unauthorised access to your companies information and systems. Makes sense, right?
In reality, lots of companies don't have formal user access policies or guidelines in place. Why? Because they don't know what to do and where to start.
We at CyberSmart like to use a new starter as a reference point to make sure we cover everything in the user account lifecycle from the initial set up to changing job roles and ultimately, leaving the company.

REGISTRATION

Once a new starter joins, you will likely create a new user profile for his workstation, email account, data storage programs, cloud software, applications, etc. The best question to ask at this point is: What access does the user need to perform her day to day job?
Uncontrolled access to everything can be handy. We have seen many companies where everyone has access to everything, meaning that the risk is much higher to suffer a data breach because information can get lost, misused or get into the wrong hands.
Therefore, it is recommended to give your new starter less access to information initially. Over time you will both figure out what they need to do their job, and it is always easier to give more access later on than to review and remove access rights – think of shared Dropbox folders.

USER IDENTIFICATION

Every user should access your system with a unique user ID (such as email address or username) and a unique password. It is not recommended to have shared accounts as there is a lack of transparency and traceability in case of a data breach. If you have a business case for shared user credentials, we recommend using a password manager that stores login details and can be used by the entire team.
Once you have created new profiles, encourage your user to change the password to a strong password. A strong password is at least eight characters long, difficult to guess and consists of a combination of upper and lower case letters, numbers and special characters, like "2;u{DNG7Gbp".
A difficult password to guess is also a difficult password to remember. Again, using a password manager solves this problem.

ONGOING USER ACCESS MANAGEMENT

An admin/founder/team leader should review your companies users and their access rights on a regular basis, ideally every six months or when a significant change to the business occurs. A simple spreadsheet or list is useful to have an overview and track users and their rights. In your CyberSmart Admin dashboard, you can see all your users and their rights, to make your job easier.
It is your user's responsibility to prevent their user ID and password from being misused, which means that you should communicate that:

- Users should not share their credentials
- Users should store passwords in a secure place like a password manager and not on a sticky note on the screen
- Change passwords when they believe they may have been compromised
- Not give external parties access to your companies systems

The Best Free Google Chrome Extensions

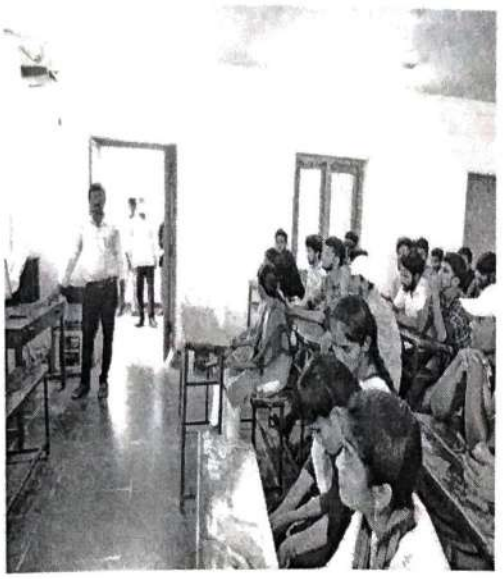
Extensions let you customize your web-browsing experience by adding functionality with the click of a mouse. We tried scores and scores of tools that expand Chrome's capabilities to deliver 100 of the most useful extensions in 9 important categories.

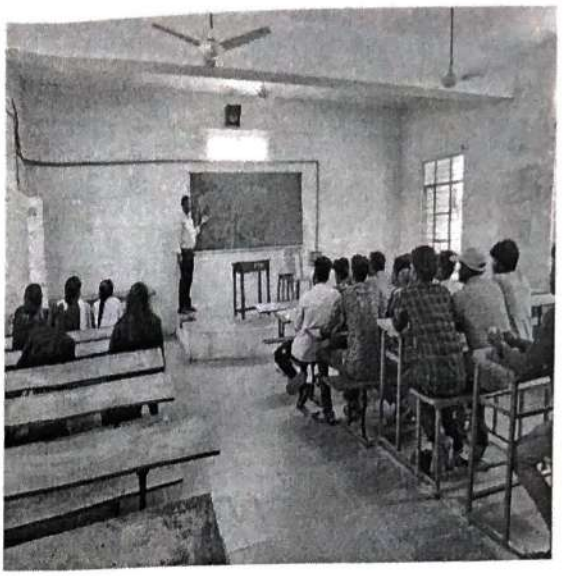
When we wrote the first version of this story in January 2015, Chrome owned about 22.65% of the desktop computer browser market worldwide. As of December 2020, it was at 56.84%, according to Statista(Opens in a new window)—and higher if you count mobile devices.

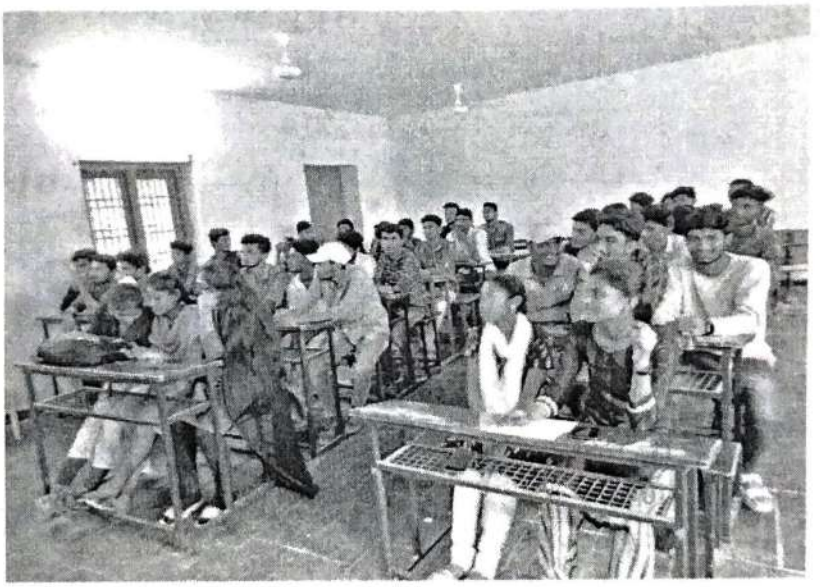
There's no denying Chrome's popularity. Plus, like Firefox, it supports extensions that make it even better. Its library of extras, found at the Chrome Web Store(Opens in a new window), has rivaled Firefox's for years, and provides quick access to just about every web-based app imaginable.

Recognizing how popular Chrome is, Microsoft rebuilt its Edge browser as a Chromium version so it now supports all Chrome extensions natively while still supporting its own Edge extensions from the Microsoft Store. Windows 10 users are getting the Chromium version automatically.

Rather than have you stumble blindly through the Chrome Web Store to find the best extensions, we've compiled a list of several dozen you should consider. Some are unique to Google and its services (such as Gmail), but most extensions work across operating systems, so you can try them on any desktop platform (especially on Chromebooks); there may be some versions that work on the mobile Chrome, too.







DEPARTMENT OF COMPUTER SCIENCE/APPLICATIONS

ACTIVITY NAME: Awareness on cyber security GROUP: II MSCS

DATE: 10/06/2022 LECTURER NAME: J. Gulabsingh

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9	26214619	K. Saisam	K. Saisam
10.	26214620	M. Mounika	M. Mounika
11.	26214621	M. shiva krishna.	M. shiva krishna.
12	26214622	M. Tharun	M. Tharun
13	26214623	M. Suresh	M. Suresh
14	26214626	N. Akhila	N. Akhila
15	26214627	P. Vinay	P. Vinay
16.	26214628	P. Venusagar	P. Venusagar
17.	26214630	P. Sachin	[illegible]
18	26214631	P. satyanarayana	P. satyanarayana
19.	26214632	P. Ranjith	P. Ranjith
20	26214633	R. Nikhil	R. Nikhil.
21.	26214636	S. Akhil	S. Akhil
22.	26214639	T. vamshi	T. vamshi
23.	26214640	V. VENKATESH	V. venkatesh.

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ACTIVITY NAME: Awareness on Trends of Technology GROUP: II MPCS.

DATE: 10/06/2022 LECTURER NAME: J. Gulabsingh

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05	26214232	B. Mohan	B. Mohan
06	26214233	B. Vijay kumar	B. Vijay kumar
07	26214234	B. sai Kiran	B. sai Kiran
08	26214235	B. Vijay Rakesh Babu	B. V.R.B.
09	26214236	B. Harish.	B. Harish.
10	26214247	CH. Rajesh.	CH. [illegible]
11	26214237	B. Daniel	B. Daniel
12	26214246	Ch. Vasista	Ch. Vasista
13	26214245	Ch. Laxman	Ch. Laxman
14)	26214244	Ch. SamPath	Ch. SamPath
15)	26214243	ch. sai Ram	ch. sai Ram
16)	26214242	ch. Rohith kumar	Ch. Rohith kumar
17)	26214240	Ch Sravani	Ch. Sravani
18.	26214239	B. Hemanth Kumar Dora	B. Hemanth Kr
19.	26214252	Ch. Ramesh	Ch. Ramesh

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ACTIVITY NAME: Awareness on Trends of Technology GROUP: II MPCS

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5.	26214366	P. Srikanth	P. Srikanth
6.	26214367	P. Tejesh	P. Tejesh
7.	26214368	P. Dharma	P. Dharma
8.	26214379	P. Dileep	P. Dileep
9.	26214376	P. Karthik	[illegible]
10.	26214374	P. Babu.	P. Babu..
11.	26214373	P. Ravinder	P. Ravinder
12.	26214371	P. Rakesh	P. Rakesh
13.	26214370	P. Varunkumar	P. Varunkumar
14)	26214384	R. Harinadh.	R. Harinadh.
15)	26214383	R. SANDHYA	R. Sandhya.
16)	26214386	R. Arunchand	R. Arunchand
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18)	26214391	S. Blessy	S. Blessy
19)	26214392	S. Revanth	S. Revanth
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05	26214270	D. Gopichand	D. [illegible]
06	26214271	D. Akshay Kumar	[illegible]
07	26214273	E. Prashanth	E. [illegible]
08	26214274	G. Naveen	G. [illegible]
09	26214275	G. Sai kumar	G. Sai kumar
10	26214278	G. Sakesh	G. [illegible]
11)	26214281	G. mahesh	G. mahesh
12)	26214282	G. Nagendra babu	G. [illegible]
13)	26214283	G. Tharunsai	G. Tharunsai
14.	26214286	G. Chalapathi	G. Chalapathi
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17	26214310	J. Lokesh	J. Lokesh
18.	26214309	J. Mounika	J. Mounika
19.	26214306	J. Sandhya	J. [illegible]

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3.	26214403	SK. Shakeera.	SK. Shakeera
4.	26214388	S. Sreeja	S. Sreeja
5.	26214385	R. Sravani	R. Sravani
6.	26214382	R. Mahesh	[illegible]
7.	26214381	R. Krishna teja	[illegible]
8.	26214380	P. Tharuni	P. Tharuni
9.	26214378	P. Nagarupendar Reddy	[illegible]
10.	26214372	P. uma maheswari	P. [illegible]
11	26214377	Perla Laxman	P. Laxman

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7	26214359	M Siva Rama Krishna	M. Shiva
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9)	26214363	N. Naresh	N. Naresh
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DATE: 13/06/2022 LECTURER NAME: J. Gulabsingh

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5	26214345	M. Bhaskar	M. Bhaskar
6	26214347	M. RAKESH	M. Rakesh
7	26214352	M. shiva kumar	M. shiva kumar
8	26214353	M. Nithin	M. Nithin
9.	26214354	M. Gopi	Gopi
10.	26214355	M. Chinna Anjaiah	M. Chinna
11.	26214328	K. Chandu	K. Chandu
12.	26214329	K. Vamsi	K. Vamsi
13.	26214330	K. Karthik	K. Karthik
	26214331	K. Sireesha	K. Sireesha

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ACTIVITY NAME: Awareness on Trends & Technology GROUP: II MPCS

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1.	26214312	K. krishna Vamshi	K.krishnavamshi
2)	26214315	K. Nithin	K. Nithin
3)	26214316	K. Mahesh	K. Mahesh.
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5)	26214319	K. NagaRatna kumar	K. NagaRatna kumar
6)	26214321	K. Anil	K. Anil
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8)	26214324	K. Vinay kumar	K. Vinay kumar
9)	26214325	K. Vishnu	K. Vishnu.
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12)	26214337	L. kalyan	L. kalyan
13)	26214336	L. Rajkumar	L. Rajkumar
14)	26214334	L. Shashi kiran	L. Shiray
15)	26214333	K. Rahul.	K. Rahul.
16)	26214332	K. Mahesh	K. Mahesh
17)			
18)			
19)			

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4.	2621-4399	Sk. John pasha	Sk. John pasha
5.	2621-4404	Sk. vazeed pasha.	Sk. vazeed pasha.
6.	2621-4407	S. Sandeep	S. Sandeep
7.	2621-4409	Syed Afreed	Syed Afreed
8.	2621-4410	T. Vijaykumar	T. Vijaykumar
9.	2621-4414	U. Rakesh Reddy	U. Rakesh
10.	2621-4416	Vanam Rakesh	V. Rakesh
11.	2621-4417	Vanguri Vamshi	V. Vamshi
12.	2621-4418	V. Kumar Raja	V. Kumar Raja
13.	2621-4422	Y. Romi	Y. Romi

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04	26214224	B. Vijender	B. Vijender
05	26214238	B. Sruthi	B. Sruthi
06	26214248	Ch. Manasa	Ch. Manasa
07	26214257	Ch. Venu	Ch. Venu
08	26214262	D. Nikhith	D. Nikhith
09	26214272	E. Aneel babu	E. Aneel babu
10.	26214277	G. Rakesh	G. Rakesh
11.	26214208	A. Sai nikhil	A. Sai nikhil
12	26214307	J. Tarun	J. Tarun
13	26214297	Islavath. Rajesh	I. Rajesh
14	26214296	D. sangamithra	D. Sangamithra
15	26214294	G. Mohith kumar	G. Mohith
16	26214290	G. Bindhu	G. Bindhu
17	26214287	G. Sujith	G. Sujith
18.	26214285	G. Vikash	G. Vikash
19	26214284	G. Triveni	G. Triveni

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4	2621-4205	Ammanaboina Abhilash	A. Abhilash
5	2621-4206	ANAREDDY THARUN SAI	A. Tharun Sai
6	2621-4207	ANKOLU ANVESH KUMAR	A. Anvesh kumar
7.	2621-4215	Baroth Anil	Anil
8.	2621-4216	Baroth Ganesh	B. Ganesh
9.	2621-4220	Banoth Sridhar	B. Sri
10.	2621-4221	Banoth Srilal	B. Srilal
11	2621-4223	Baroth. vidya Sree	B. vidya Sree

Year:	2020-2021
Date:	25-2-2021 to 20-3-2021
Topic:	Python programming
Presented By:	Mrs.dk.jamunaRani Lecturer in Computer Science & Application
Students Participated	

DEPARTMENT OF COMPUTER SCIENCE/APPLICATIONS

ACTIVITY NAME: Awareness on python programming GROUP: III MPCS

DATE: 25/02/2021 to 20-03-2021 LECTURER NAME: Ch. Jamuna Rani

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3	2620-4279	K. Sunitha	K. Sunitha
4.	2620-2776	K. Sumanth	K. Sumanth.
5	2620-2777	K. Manoj	K. Manoj
6.	2620-2778	K. Satish	K. Satish
7.	2620-2779	K. Naga Sandheep	[illegible]
8.	2620-2784	K. Sagar.	Sagar
9)	2620-4296	M. Mahesh	M. Mahesh
10	2620-4297	M. Sathish	M. Sathish
11.	2620-2763	K. Kumar	K. Kumar
12.	2620-4298	M. Sai Kiran	Sai Kiran
13.	2620-2785	K. Renuka.	Renuka.
14.	2620-4281	K. Venkata Ramana	K.V. Ramana
15	2620-2787	K. Srinivas	[illegible]
16.	2620-4288	K. Tejakiran	[illegible]
17.	2620-4287	K. Mahesh	K. Mahesh
18	2620-4284	K. Uday kiran	[illegible]
19	2620-2792	K. Laxmi Narayana	[illegible]

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ACTIVITY NAME: Awareness on python programming GROUP: III MSCS

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	2620-4620	P. Venkateswarlu	P. Venkateswarlu
	2620-4623	R. Shashi kumar	R. Shashi
	2620-4630	Y. Rambabu	Y. Rambabu
	2620-4629	V. Pradeep	V. Pradeep
	2620-4605	Ch. Ajay	[illegible]
	2620-4606	Ch. Vijaya Lakshmi	[illegible]
	2620-4607	D. Vivekananda	[illegible]
	2620-4608	D. Sai Naveen Kumar	[illegible]
	2620-4610	G. Kartik	[illegible]
	2620-4612	G. Surya Venkata krishna	G. [illegible]
	2620-4613	J. Kalyan	[illegible]
	2620-4615	K. Krishna Vamshi	K. Krishna Vamshi
	2620-4616	K. Venkatesh	K. Venkatesh
	2620-4617	K. Lavanya	K. Lavanya
	2620-4627	T. Pavan Kumar	T. [illegible]
	2620-4625	Sk. Rasheed Pasha	[illegible]
	2620-4622	P. Sagar	[illegible]
	2620-4624	S. Sai	S. Sai
	2620-4604	B. Rajendhar	[illegible]
	2620-4603	B. Venkata praveen	[illegible]

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ACTIVITY NAME: Awareness on python programming GROUP: III BCA

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UNIT – I

Introduction to Python and installation:

Python is a widely used general-purpose, high level programming language. It was initially designed by **Guido van Rossum in 1991** and developed by Python Software Foundation. It was mainly developed for emphasis on code readability, and its syntax allows programmers to express concepts in fewer lines of code.

Python is a programming language that lets you work quickly and integrate systems more efficiently.

There are two major Python versions- **Python 2 and Python 3**.

- On 16 October 2000, Python 2.0 was released with many new features.
- On 3rd December 2008, Python 3.0 was released with more testing and includes new features.

Beginning with Python programming:

1) Finding an Interpreter:

Before we start Python programming, we need to have an interpreter to interpret and run our programs. There are certain online interpreters like **https://ide.geeksforgeeks.org/**, http://ideone.com/ or http://codepad.org/ that can be used to start Python without installing an interpreter.

Windows: There are many interpreters available freely to run Python scripts like IDLE (Integrated Development Environment) which is installed when you install the python software from **http://python.org/downloads/**

2) Writing first program:

```
# Script Begins
    Statement1
Statement2

Statement3

# Script Ends
```

Differences between scripting language and programming language:

Why to use Python:

The following are the primary factors to use python in day-to-day life:

SCRIPTING LANGUAGE	PROGRAMMING LANGUAGE
A programming language that supports scripts/ programs written for a special run-time environment that automate the execution of tasks	A formal language, which comprises a set of instructions used to produce various kinds of output
Execution speed is slow	Compiler-based languages are executed much faster while interpreter-based languages are executed slower
Can be divided into client-side scripting languages and server-side scripting languages	Can be divided into high-level, low-level languages or compiler-based or interpreter-based languages
Easier to learn	Not as easy to learn
Ex: JavaScript, Perl, PHP, Python and Ruby	Ex: C, C++, and Assembly
Mostly used for web development	Used to develop various applications such as desktop, web, mobile, etc.

1. **Python is object-oriented**
   Structure supports such concepts as polymorphism, operation overloading and multiple inheritance.
2. **Indentation**
   Indentation is one of the greatest feature in python
3. **It's free (open source)**
   Downloading python and installing python is free and easy

4. **It's free (open source)**
   Downloading python and installing python is free and easy
5. **It's Powerful**
   - Dynamic typing
   - Built-in types and tools
   - Library utilities
   - Third party utilities (e.g. Numeric, NumPy, sciPy)
   - Automatic memory management
6. **It's Portable**
   - Python runs virtually every major platform used today
   - As long as you have a compaitable python interpreter installed, python programs will run in exactly the same manner, irrespective of platform.
7. **It's easy to use and learn**
   - No intermediate compile
   - Python Programs are compiled automatically to an intermediate form called byte code, which the interpreter then reads.
   - This gives python the development speed of an interpreter without the performance loss inherent in purely interpreted languages.
   - Structure and syntax are pretty intuitive and easy to grasp.
8. **Interpreted Language**
   Python is processed at runtime by python Interpreter
9. **Interactive Programming Language**
   Users can interact with the python interpreter directly for writing the programs
10. **Straight forward syntax**
    The formation of python syntax is simple and straight forward which also makes it popular.

Installation:

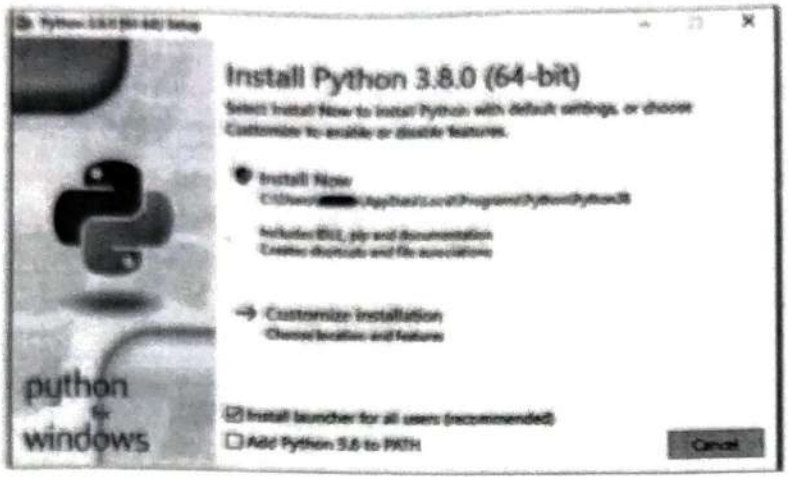
There are many interpreters available freely to run Python scripts like IDLE (Integrated Developmen Environment) which is installed when you install the python software fron http://python.org/downloads/

Steps to be followed and remembered:

Step 1: Select Version of Python to Install. Step 2: Download Python Executable Installer. Step 3: Run Executable Installer.
Step 4: Verify Python Was Installed On Windows.

Step 5: Verify Pip Was Installed.

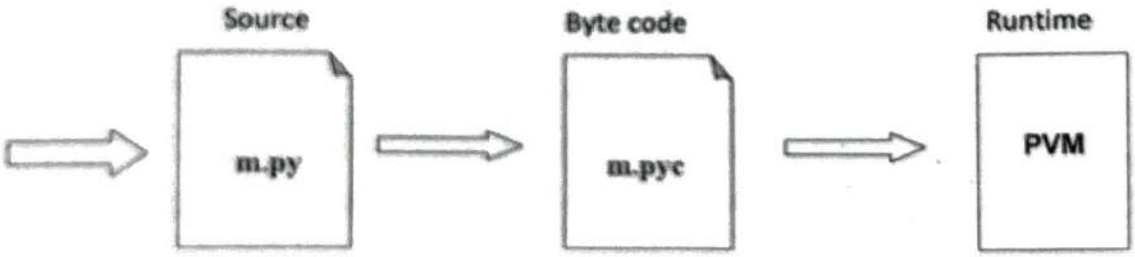
Step 6: Add Python Path to Environment Variables (Optional)



Working with Python Python

Code Execution:

Python's traditional runtime execution model: Source code you type is translated to byte code, which is then run by the Python Virtual Machine (PVM). Your code is automatically compiled, but then it is interpreted.



Source code extension is .py
Byte code extension is .pyc (Compiled python code)

There are two modes for using the Python interpreter:

- *Interactive Mode*
- *Script Mode*

Running Python in interactive mode:

Without passing python script file to the interpreter, directly execute code to Python prompt. Once you're inside the python interpreter, then you can start.

```
>>> print("hello world")

hello world

# Relevant output is displayed on subsequent lines without the >>> symbol
>>> x=[0,1,2]
# Quantities stored in memory are not displayed by default.
>>> x
#If a quantity is stored in memory, typing its name will display it. [0, 1, 2]

>>> 2+3
5
```

The chevron at the beginning of the 1st line, i.e., the symbol >>> is a prompt the python interpreter uses to indicate that it is ready. If the programmer types 2+6, the interpreter replies 8.

Running Python in script mode:

Alternatively, programmers can store Python script source code in a file with the .py extension, and use the interpreter to execute the contents of the file. To execute the script by the interpreter, you have to tell the interpreter the name of the file. For example, if you have a script name MyFile.py and you're working on Unix, to run the script you have to type:

python MyFile.py

Data types:

The data stored in memory can be of many types.d as alphanumeric characters. Python has various standard data types that are used to define the operations possible on them and the storage method for each of them.

Int:

Int, or integer, is a whole number, positive or negative, without decimals, of unlimited length.

```
>>> print(20)
20
>>> a=10
>>> print(a)
10
```

Float:

Float, or "floating point number" is a number, positive or negative, containing one or more decimals. Float can also be scientific numbers with an "e" to indicate the power of 10.

```
>>> y=2.8
>>> y
2.8
```

Boolean:

Objects of Boolean type may have one of two values, True or False:

```
>>> type(True)
<class 'bool'>
>>> type(False)
<class 'bool'>
```

String:

1. Strings in Python are identified as a contiguous set of characters represented in the quotation marks. Python allows for either pairs of single or double quotes.

- 'hello' is the same as "hello".C
- Strings can be output to screen using the print function. **For example: print("hello").**

```
>>> print("RJC college") RJC
college
>>> " "
''
```

If you want to include either type of quote character within the string, the simplest way is to delimit the string with the other type. If a string is to contain a single quote, delimit it with double quotes and vice versa:

```
>>> print("RJC is a degree (') college")

RJC is a degree (') college
```

Suppressing Special Character:

Specifying a backslash (\) in front of the quote character in a string "escapes" it and causes Python to suppress its usual special meaning. It is then interpreted simply as a literal single quote character:

```
>>> print('RJC is a (\") college')

RJC is a(") college
```

The following is a table of escape sequences which cause Python to suppress the usual special interpretation of a character in a string:

Escape Sequence	Usual Interpretation of Character(s) After Backslash	"Escaped" Interpretation
\'	Terminates string with single quote opening delimiter	Literal single quote (') character
\"	Terminates string with double quote opening delimiter	Literal double quote (") character
\newline	Terminates input line	Newline is ignored
\\	Introduces escape sequence	Literal backslash (\) character

In Python (and almost all other common computer languages), a tab character can be specified by the escape sequence \t:

```
>>> print("a\tb") a
        b
```

List:

- It is a general purpose most widely used in data structures
- List is a collection which is ordered and changeable and allows duplicate members. (Grow and shrink as needed, sequence type, sortable).
- To use a list, you must declare it first. Do this using square brackets and separate values with commas.
- We can construct / create list in many ways. Ex:

```
>>> list1=[1,2,3,'A','B',7,8,[10,11]]
>>> print(list1)
[1, 2, 3, 'A', 'B', 7, 8, [10, 11]]
```

```
>>> x=list()
>>> x
[]
```

```
>>> tuple1=(1,2,3,4)
>>> x=list(tuple1)
>>> x
[1, 2, 3, 4]
```

Variables:

Variables are nothing but reserved memory locations to store values. This means that when you create a variable you reserve some space in memory.

Based on the data type of a variable, the interpreter allocates memory and decides what can be stored in the reserved memory. Therefore, by assigning different data types to variables, you can store integers, decimals or characters in these variables.

Rules for Python variables:

- A variable name must start with a letter or the underscore character
- A variable name cannot start with a number
- A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and _)
- Variable names are case-sensitive (age, Age and AGE are three different variables)

Assigning Values to Variables:

Python variables do not need explicit declaration to reserve memory space. The declaration happens automatically when you assign a value to a variable. The equal sign (=) is used to assign values to variables.

The operand to the left of the = operator is the name of the variable and the operand to the right of the = operator is the value stored in the variable.

For example –

```
a= 100          # An integer assignment b =
1000.0          # A floating point
c = "John"      # A string
print (a)
print (b)
print (c)
```

This produces the following result –

100
1000.0
John

Multiple Assignment:

For example –

a,b,c = 1,2,"xyz"

Here, two integer objects with values 1 and 2 are assigned to variables a and b respectively, and one string object with the value "john" is assigned to the variable c.

Output Variables:

The Python print statement is often used to output variables.

Variables do not need to be declared with any particular type and can even change type after they have been set.

```
x = 5           # x is of type int
x = "xy "       # x is now of type str
print(x)
```

Output: xy

To combine both text and a variable, Python uses the **"+"** character:

Example

```
x = "awesome"
print("Python is " + x)
```

Output

Python is awesome

You can also use the + character to add a variable to another variable:

Example

x = "Python is " y
= "awesome" z = x
+ y print(z)

Output:

Python is awesome

Expressions:

An expression is a combination of values, variables, and operators. An expression is evaluated using assignment operator.

Examples: Y=x + 17

```
>>> x=10
>>> z=x+20
>>> z

30
```

Identifiers: Any name that is used to define a class, function, variable module, or object is an identifier.

Literals: These are language-independent terms in Python and should exist independently in any programming language. In Python, there are the string literals, byte literals, integer literals, floating point literals, and imaginary literals.

Operators: In Python you can implement the following operations using the corresponding tokens.

Operator	Token
add	+
subtract	-
multiply	*
Integer Division	/
remainder	%
Binary left shift	<<
Binary right shift	>>
and	&
or	\
Less than	<
Greater than	>
Less than or equal to	<=
Greater than or equal to	>=
Check equality	==
Check not equal	!=

Conditional expression:

Syntax: true_value if Condition else false_value

```
>>> x = "1" if True else "2"
>>> x

'1'
```

Statements:

A statement is an instruction that the Python interpreter can execute. We have normally two basic statements, the assignment statement and the print statement. Some other kinds of statements that are if statements, while statements, and for statements generally called as control flows.

Examples:

An assignment statement creates new variables and gives them values:

```
>>> x=10
```

An print statement is something which is an input from the user, to be printed / displayed on to the screen (or) monitor.

```
>>> print("rjc colege")

rjc college
```

Precedence of Operators:

Operator precedence affects how an expression is evaluated.

For example, x = 7 + 3 * 2; here, x is assigned 13, not 20 because operator * has higher precedence than +, so it first multiplies 3*2 and then adds into 7.

Example 1:

```
>>> 3+4*2

11
```

Multiplication gets evaluated before the addition operation

```
>>> (10+10)*2 40
```

Parentheses () overriding the precedence of the arithmetic operators

Comments:

Single-line comments begins with a hash(#) symbol and is useful in mentioning that the whole line should be considered as a comment until the end of line.

A Multi line comment is useful when we need to comment on many lines. In python, triple double quote(" " ") and single quote(' ' ')are used for multi-line commenting.

Example:

comm.py - C:/Users/MRCET/AppData/Local/Programs/Python/Python38-32/pyyy/comm.py...

File Edit Format Run Options Window Help

```
# Write a python program to add numbers
a=10  #assigning value to variable a
b=20  #assigning value to variable b
""" print the value of a and b using a new variable """
''' print the value of a and b using a new variable '''
c=a+b
print(c)
```

Output:

C:/Users/RJC/AppData/Local/Programs/Python/Python38-32/pyyy/comm.py 30

CONTROL FLOW, LOOPS

Conditionals: Boolean values and operators, conditional (if), alternative (if-else), chained conditional (if-elif-else); Iteration: while, for, break, continue.

Control Flow, Loops:

Boolean Values and Operators:

A boolean expression is an expression that is either true or false. The following examples use the operator ==, which compares two operands and produces True if they are equal and False otherwise:

```
>>> 5 == 5
True
>>> 5 == 6
False
```

Conditional (if):

The if statement contains a logical expression using which data is compared and a decision is made based on the result of the comparison.

Syntax:

```
if expression:
    statement(s)
```

If the boolean expression evaluates to TRUE, then the block of statement(s) inside the if statement is executed. If boolean expression evaluates to FALSE, then the first set of code after the end of the if statement(s) is executed.

If Statement Flowchart:

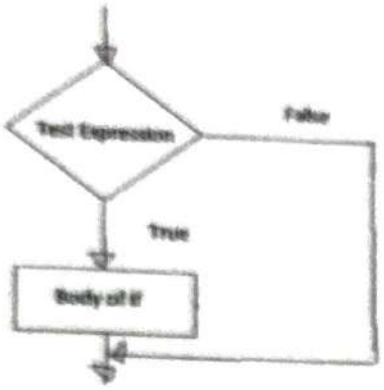


Fig: Operation of if statement

```
a=10
if a>9:
    print("A is Greater than 9")
```

Output:

C:/Users/rjc/AppData/Local/Programs/Python/Python38-32/pyyy/if2.py A is Greater than

9

Alternative if (If-Else):

An else statement can be combined with an if statement. An else statement contains the block of code (false block) that executes if the conditional expression in the if statement resolves to 0 or a FALSE value.

The else statement is an optional statement and there could be at most only one else Statement following if.

Syntax of if - else :

```
if test expression:
        Body of if stmts
else:
        Body of else stmts
```

If - else Flowchart :

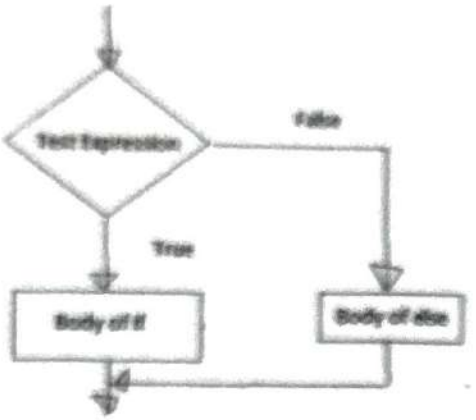


Fig: Operation of if – else statement

Example of if - else:

```
a=int(input('enter the number')) if
a>5:
   print("a is greater")
else:
   print("a is smaller than the input given")
```

Output:

C:/Users/rjc/AppData/Local/Programs/Python/Python38-32/pyyy/ifelse.py enter the number 2

a is smaller than the input given

Chained Conditional: (If-elif-else):

The elif statement allows us to check multiple expressions for TRUE and execute a block of code as soon as one of the conditions evaluates to TRUE. Similar to the else, the elif statement is optional. However, unlike else, for which there can be at most one statement, there can be an arbitrary number of elif statements following an if.

Syntax of if – elif - else :

```
If test expression:
        Body of if stmts
elif test expression:
        Body of elif stmts
```

else:

Body of else stmts.

Flowchart of if – elif - else:

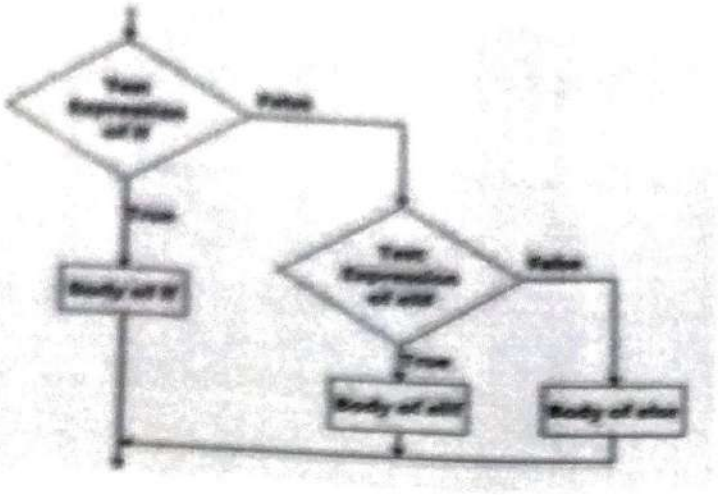


Fig: Operation of if – elif - else statement

Example of if - elif – else:

```
a=int(input('enter the number'))
b=int(input('enter the number'))
c=int(input('enter the number')) if
a>b:

   print("a is greater")
elif b>c:
   print("b is greater")
else:
   print("c is greater")
```

Output:

C:/Users/rjc/AppData/Local/Programs/Python/Python38-32/pyyy/Ifelse.py enter enter the number5
enter the number2
enter the number9 c
is greater

LOOPING STATEMETNTS (Iteration):

A loop statement allows us to execute a statement or group of statements multiple times as long as the condition is true. Repeated execution of a set of statements with the help of loops is called iteration. Loops statements are used when we need to run same code again and again, each time with a different

value.

Statements:

In Python Iteration (Loops) statements are of three types:

1. While Loop
2. For Loop
3. Nested For Loops

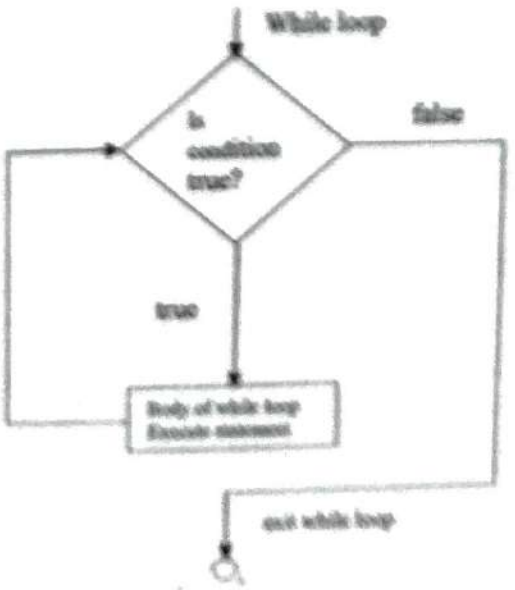
While loop:

- Loops are either infinite or conditional. Python while loop keeps reiterating a block of code defined inside it until the desired condition is met.
- The while loop contains a boolean expression and the code inside the loop is repeatedly executed as long as the boolean expression is true.
- The statements that are executed inside while can be a single line of code or a block of multiple statements.

Syntax:

```
while(expression):
        Statement(s)
```

Flowchart:



Example Programs:

1.

```
i=1
while i<=6:
        print("RJC college") i=i+1
```

output:

```
C:/Users/RJC/AppData/Local/Programs/Python/Python38-32/pyyy/wh1.py
RJC college RJC
college     RJC
college     RJC
college     RJC
college     RJC
college
```

For loop:

Python **for loop** is used for repeated execution of a group of statements for the desired number of times. It iterates over the items of lists, tuples, strings, the dictionaries and other iterable objects

Syntax: for var in sequence:

Statement(s)

A sequence of values assigned to var in each iteration Holds the value of item in sequence in each iteration

Sample Program:

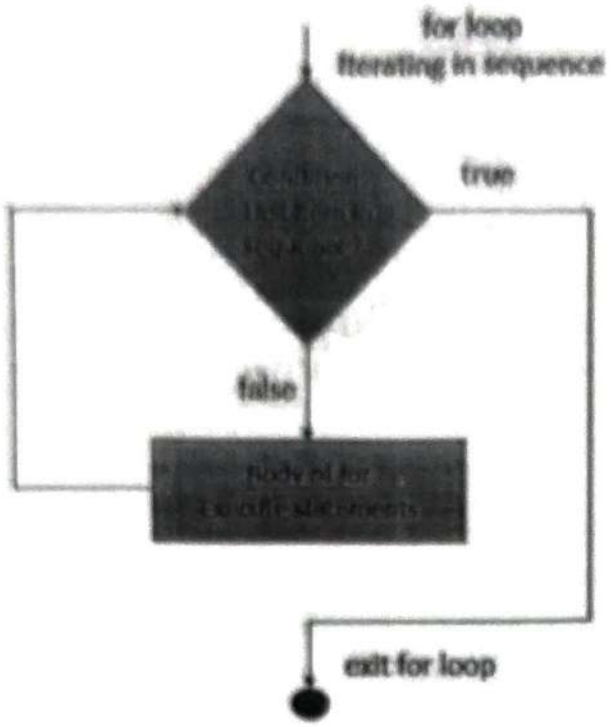
```
numbers = [1, 2, 4, 6, 11, 20]
seq=0
for val in numbers:
   seq=val*val
   print(seq)
```

Output:

```
C:/Users/RJC/AppData/Local/Programs/Python/Python38-32/fr.py
1
4
16
```

56
121
400

Flowchart:



When one Loop defined within another Loop is called Nested Loops.

Syntax:

```
for val in sequence:
        for val in sequence:


        statements
statements
```

 # Example 1 of Nested For Loops (Pattern Programs)

```
for i in range(1,6): for j
  in range(0,i):
    print(i, end=" ")
```

```
print('')
```

Output:

```
C:/Users/RJC/AppData/Local/Programs/Python/Python38-32/pyyy/nesforr.py

1

2 2

3 3 3

4 4 4 4

5 5 5 5 5

-----------------
```

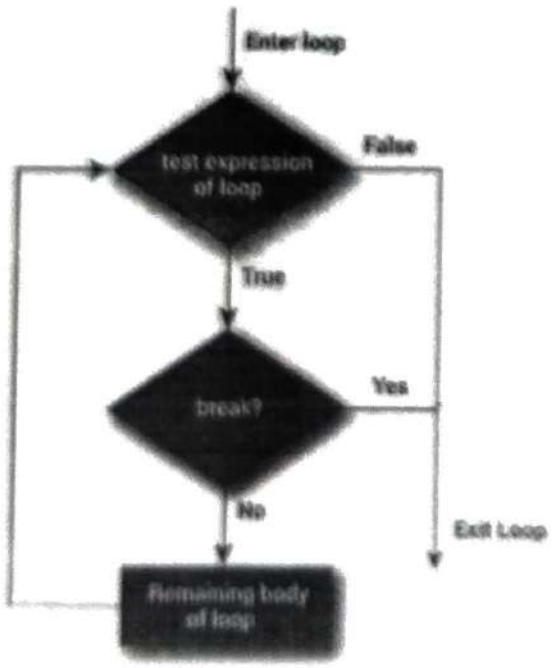
Break and continue:

In Python, **break and continue** statements can alter the flow of a normal loop. Sometimes we wish to terminate the current iteration or even the whole loop without checking test expression. The break and continue statements are used in these cases.

Break:

The break statement terminates the loop containing it and control of the program flows to the statement immediately after the body of the loop. If break statement is inside a nested loop (loop inside another loop), break will terminate the innermost loop.

Flowchart



The following shows the working of break statement in for and while loop:

```
for var in sequence:
        # code inside for loop If
        condition:
                break (if break condition satisfies it jumps to outside loop) # code
        inside for loop
# code outside for loop


while test expression

        # code inside while loop If
        condition:
                break (if break condition satisfies it jumps to outside loop) # code
        inside while loop
# code outside while loop
```

Example:

```
for val in "RJC COLLEGE":

   if val == " ":
      break
   print(val)

print("The end")
```

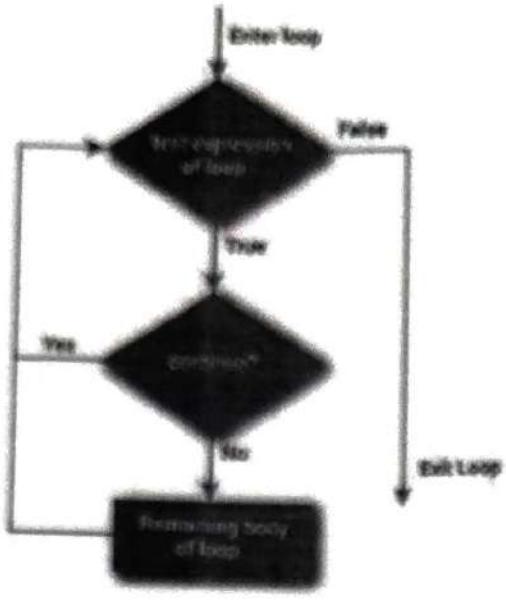
Output:

```
R
J
C
The end
```

Continue:

The continue statement is used to skip the rest of the code inside a loop for the current iteration only. Loop does not terminate but continues on with the next iteration.

Flowchart:



The following shows the working of break statement in for and while loop:

```
for var in sequence:
        # code inside for loop If
        condition:
                continue (if break condition satisfies it jumps to outside loop) # code
        inside for loop
# code outside for loop


while test expression

        # code inside while loop If
        condition:
                continue(if break condition satisfies it jumps to outside loop) # code
        inside while loop
# code outside while loop
```

Example:

Program to show the use of continue statement inside loops

```
for val in "string": if
val == "i": continue
  print(val)

print("The end")
```

Output:

```
C:/Users/RJC/AppData/Local/Programs/Python/Python38-32/pyyy/cont.py
s
t
r
n
g
The end
```

Pass:

In Python programming, pass is a null statement. The difference between a comment and pass statement in Python is that, while the interpreter ignores a comment entirely, pass is not ignored. pass is just a placeholder for functionality to be added later.

Example:

```
sequence = {'p', 'a', 's', 's'} for
val in sequence:
  pass
```

Output:

```
:/Users/RJC/AppData/Local/Programs/Python/Python38-32/pyyy/f1.y.py
```

LISTS, TUPLES, DICTIONARIES

Lists: list operations, list slices, list methods, list loop, mutability, aliasing, cloning lists, list parameters, list comprehension; Tuples: tuple assignment, tuple as return value, tuple comprehension; Dictionaries: operations and methods, comprehension;

Lists, Tuples, Dictionaries:

List:

- It is a general purpose most widely used in data structures
- List is a collection which is ordered and changeable and allows duplicate members. (Grow and shrink as needed, sequence type, sortable).
- To use a list, you must declare it first. Do this using square brackets and separate values with commas.
- We can construct / create list in many ways. Ex:

```
>>> list1=[1,2,3,'A','B',7,8,[10,11]]
>>> print(list1)
[1, 2, 3, 'A', 'B', 7, 8, [10, 11]]
```

```
>>> x=list()
>>> x
[]
```

```
>>> tuple1=(1,2,3,4)

>>> x=list(tuple1)
>>> x
[1, 2, 3, 4]
```

List operations:

These operations include indexing, slicing, adding, multiplying, and checking for membership

Basic List Operations:

Lists respond to the + and * operators much like strings. they mean concatenation and repetition here too, except that the result is a new list, not a string.

Python Expression	Results	Description
len([1, 2, 3])	3	Length
[1, 2, 3] + [4, 5, 6]	[1, 2, 3, 4, 5, 6]	Concatenation
['Hi!'] * 4	['Hi!', 'Hi!', 'Hi!', 'Hi!']	Repetition
3 in [1, 2, 3]	True	Membership
for x in [1, 2, 3]: print x,	1 2 3	Iteration

Indexing, Slicing, and Matrixes

Because lists are sequences, indexing and slicing work the same way for lists as they do for strings.

Assuming following input –

L = ['RJC 'college', RJC!']

Python Expression	Results	Description
L[2]	RJC	Offsets start at zero
L[-2]	College	Negative: count from the right
L[1:]	['college', 'RJC!']	Slicing fetches sections

List slices:

```
>>> list1=range(1,6)
>>> list1
range(1, 6)
>>> print(list1)
range(1, 6)
>>> list1=[1,2,3,4,5,6,7,8,9,10]
>>> list1[1:]
[2, 3, 4, 5, 6, 7, 8, 9, 10]
>>> list1[:1]
[1]
>>> list1[2:5] [3,
4, 5]
```

List methods:

The list data type has some more methods. Here are all of the methods of list objects:

- Del()
- Append()
- Extend()
- Insert()
- Pop()
- Remove()
- Reverse()
- Sort()

Delete: Delete a list or an item from a list

```
>>> x=[5,3,8,6]
>>> del(x[1])          #deletes the index position 1 in a list
>>> x [5,
8, 6]
```

```
>>> del(x)
>>> x                    # complete list gets deleted
```

Append: Append an item to a list

```
>>> x=[1,5,6,4]
>>> x.append(10)
>>> x
[1, 5, 6, 4, 10]
```

Extend: Append a sequence to a list.

```
>>> x=[1,2,3,4]
>>> y=[3,6,9,1]
>>> x.extend(y)
>>> x
[1, 2, 3, 4, 3, 6, 9, 1]
```

Insert: To add an item at the specified index, use the insert () method:

```
>>> x=[1,2,4,6,7]

>>> x.insert(2,10)        #insert(index no, item to be inserted)
>>> x
[1, 2, 10, 4, 6, 7]
>>>>>>>>>>>>>>>>>>

>>> x.insert(4,['a',11])
>>> x
[1, 2, 10, 4, ['a', 11], 6, 7]
```

Pop: The pop() method removes the specified index, (or the last item if index is not specified) or simply pops the last item of list and returns the item.

```
>>> x=[1, 2, 10, 4, 6, 7]
>>> x.pop() 7
>>> x
[1, 2, 10, 4, 6]
```

```
>>> x=[1, 2, 10, 4, 6]
>>> x.pop(2) 10
>>> x
[1, 2, 4, 6]
```

Remove: The **remove()** method removes the specified item from a given list.

```
>>> x=[1,33,2,10,4,6]
>>> x.remove(33)
>>> x

[1, 2, 10, 4, 6]
>>> x.remove(4)
>>> x
[1, 2, 10, 6]
```

Reverse: Reverse the order of a given list.

```
>>> x=[1,2,3,4,5,6,7]
>>> x.reverse()
>>> x
[7, 6, 5, 4, 3, 2, 1]
```

Sort: Sorts the elements in ascending order

```
>>> x=[7, 6, 5, 4, 3, 2, 1]
>>> x.sort()
```

```
>>> x
[1, 2, 3, 4, 5, 6, 7]
```

```
>>> a=[10,1,5,3,8,7]
>>> a.sort()
>>> a
[1, 3, 5, 7, 8, 10]
```

Cloning Lists:

If we want to modify a list and also keep a copy of the original, we need to be able to make a copy of the list itself, not just the reference. This process is sometimes called cloning, to avoid the ambiguity of the word copy.

The easiest way to clone a list is to use the slice operator. Taking any slice of a creates a new list. In this case the slice happens to consist of the whole list.

Example:

```
a = [81, 82, 83]
b = a[:]        # make a clone using slice
print(a == b)
print(a is b)
b[0] = 5
print(a)
print(b)
```

Output:

C:/Users/RJC/AppData/Local/Programs/Python/Python38-32/pyyy/clo.py

```
True
False
[81, 82, 83]
[5, 82, 83]
Now we are free to make changes to b without worrying about a
```

UNIT-II

Tuples:

A tuple is a collection which is ordered and unchangeable. In Python tuples are written with round brackets.

- Supports all operations for sequences.
- Immutable, but member objects may be mutable.
- If the contents of a list shouldn't change, use a tuple to prevent items from

  accidently being added, changed, or deleted.
- Tuples are more efficient than list due to python's implementation.

We can construct tuple in many ways: X=()

#no item tuple

X=(1,2,3)

X=tuple(list1)

X=1,2,3,4

Example:

```
>>> x=(1,2,3)
>>> print(x) (1,
2, 3)
>>> x (1,
2, 3)
```

Some of the operations of tuple are:

- Access tuple items
- Change tuple items
- Loop through a tuple
- Count()
- Index()
- Length()

Access tuple items: Access tuple items by referring to the index number, inside square brackets

```
>>> x=('a','b','c','g')
>>> print(x[2]) c
```

Change tuple Items: Once a tuple is created, you cannot change its values. Tuples are unchangeable.

```
>>> x=(2,5,7,'4',8)
>>> x[1]=10
```

Loop through a tuple: We can loop the values of tuple using for loop

```
>>> x=4,5,6,7,2,'aa'
>>> for i in x:
        print(i)

4
5
6
7
2
aa
```

Count (): Returns the number of times a specified value occurs in a tuple

```
>>> x=(1,2,3,4,5,6,2,10,2,11,12,2)
>>> x.count(2) 4
```

Index (): Searches the tuple for a specified value and returns the position of where it was found

```
>>> x=(1,2,3,4,5,6,2,10,2,11,12,2)
>>> x.index(2) 1
```

Length (): To know the number of items or values present in a tuple, we use len().

```
>>> x=(1,2,3,4,5,6,2,10,2,11,12,2)
>>> y=len(x)
>>> print(y)
12
```

String slices:

A segment of a string is called a slice. Selecting a slice is similar to selecting a character:

Subsets of strings can be taken using the slice operator (**[ ] and [:]**) with indexes starting at 0 in the beginning of the string and working their way from -1 at the end.

Slice out substrings, sub lists, sub Tuples using index.

- String will start from index and will go up to stop in step of steps
- Default value of start is 0,

- Stop is last index of list
- And for step default is 1

Example 2:

```
>>> x='computer'
>>> x[1:4]
'omp'
>>> x[1:6:2]
'opt'
>>> x[3:]

'puter'
>>> x[:5]
'compu'
>>> x[-1]
'r'
>>> x[-3:]
'ter'
>>> x[:-2]
'comput'
>>> x[::-2]
'rtpo'
>>> x[::-1]
'retupmoc'
```

```
>>> greeting = 'Hello, world!'
>>> new_greeting = 'J' + greeting[1:]
>>> new_greeting
'Jello, world!'
```

Note: The plus **(+)** sign is the string concatenation operator and the asterisk **(*)** is the repetition operator

String functions and methods:

There are many methods to operate on String.

S.no	Method name	Description
1.	isalnum()	Returns true if string has at least 1 character and all characters are alphanumeric and false otherwise.
2.	isalpha()	Returns true if string has at least 1 character and all characters are alphabetic and false otherwise.
3.	isdigit()	Returns true if string contains only digits and false otherwise.
4.	islower()	Returns true if string has at least 1 cased character and all cased characters are in lowercase and false otherwise.
5.	isnumeric()	Returns true if a string contains only numeric characters and false otherwise.
6.	isspace()	Returns true if string contains only whitespace characters and false otherwise.
7.	istitle()	Returns true if string is properly "titlecased" and false otherwise.
8.	isupper()	Returns true if string has at least one cased character and all cased characters are in uppercase and false otherwise.
9.	replace(old, new [, max])	Replaces all occurrences of old in string with new or at most max occurrences if max given.
10.	split()	Splits string according to delimiter str (space if not provided) and returns list of substrings;
11.	count()	Occurrence of a string in another string
12.	find()	Finding the index of the first occurrence of a string in another string
13.	swapcase()	Converts lowercase letters in a string to uppercase and viceversa
14.	startswith(str, beg=0,end=len(string))	Determines if string or a substring of string (if starting index beg and ending index end are given) starts with substring str; returns true if so and false otherwise

Note:
All the string methods will be returning either true or false as the result

1. isalnum():

Isalnum() method returns true if string has at least 1 character and all characters are alphanumeric and false otherwise.

Syntax:
String.isalnum()

Example:
```
>>> string="123alpha"
>>> string.isalnum() True
```

1. isalpha():

isalpha() method returns true if string has at least 1 character and all characters are alphabetic and false otherwise.

Syntax:
String.isalpha()

Example:
```
>>> string="nikhil"
>>> string.isalpha()
True
```

2. isdigit():

isdigit() returns true if string contains only digits and false otherwise.

Syntax:
String.isdigit()

Example:
```
>>> string="123456789"
>>> string.isdigit()
True
```

3. islower():

islower() returns true if string has characters that are in lowercase and false otherwise.

Syntax:

String.islower()

Example:

```
>>> string="nikhil"
>>> string.islower()
True
```

1. isnumeric():

isnumeric() method returns true if a string contains only numeric characters and false otherwise.

Syntax:

String.isnumeric()

Example:

```
>>> string="123456789"
>>> string.isnumeric()
True
```

2. isspace():

isspace() returns true if string contains only whitespace characters and false otherwise.

Syntax:

String.isspace()

Example:

```
>>> string=" "
>>> string.isspace()
True
```

3. isupper()

isupper() returns true if string has characters that are in uppercase and false otherwise.

Syntax:

String.isupper()

Example:

```
>>> string="HELLO"
>>> string.isupper()
True
```

4. replace()

replace() method replaces all occurrences of old in string with new or at most max occurrences if max given.

Syntax:
String.replace()

Example:
```
>>> string="Nikhil Is Learning"
>>> string.replace('Nikhil','Neha')
'Neha Is Learning'
```

1. split()

split() method splits the string according to delimiter str (space if not provided)

Syntax:
String.split()

Example:
```
>>> string="Nikhil Is Learning"
>>> string.split()

['Nikhil', 'Is', 'Learning']
```

1. count()

count() method counts the occurrence of a string in another string Syntax:
String.count()

Example:
```
>>> string='Nikhil Is Learning'
>>> string.count('i') 3
```

2. find()

Find() method is used for finding the index of the first occurrence of a string in another string

Syntax:
String.find(,string[])

Example:
```
>>> string="Nikhil Is Learning'
>>> string.find('k') 2
```

Operations and methods:

Methods that are available with dictionary are tabulated below. Some of them have already been used in the above examples.

Method	Description
clear()	Remove all items form the dictionary.

copy()	Return a shallow copy of the dictionary.
fromkeys(seq[, v])	Return a new dictionary with keys from seq and value equal to v (defaults to None).
get(key[,d])	Return the value of key. If key doesnot exit, return d (defaults to None).
items()	Return a new view of the dictionary's items (key, value).
keys()	Return a new view of the dictionary's keys.
pop(key[,d])	Remove the item with key and return its value or d if key is not found. If d is not provided and key is not found, raises KeyError.
popitem()	Remove and return an arbitary item (key, value). Raises KeyError if the dictionary is empty.
setdefault(key[,d])	If key is in the dictionary, return its value. If not, insert key with a value of d and return d (defaults to None).
update([other])	Update the dictionary with the key/value pairs from other, overwriting existing keys.
values()	Return a new view of the dictionary's values

Below are some dictionary operations:

To access specific value of a dictionary, we must pass its key.

```
>>> dict1 = {"brand":"RJC","model":"college","year":2004}
>>> x=dict1["brand"]
>>> x
'RJC'
```

Some more operations like:

- Add/change
- Remove
- Length
- Delete

Add/change values: You can change the value of a specific item by referring to its key name

```
>>> dict1 = {"brand":"RJC","model":"college","year":2004}
>>> dict1["year"]=2005
>>> dict1
{'brand': 'RJC', 'model': 'college', 'year': 2005}
```

Remove(): It removes or pop the specific item of dictionary.

```
>>> dict1 = {"brand":"RJC","model":"college","year":2004}
>>> print(dict1.pop("model"))
college
>>> dict1
{'brand': 'RJC', 'year': 2005}
```

Delete: Deletes a particular item.

```
>>> x = {1:1, 2:4, 3:9, 4:16, 5:25}
>>> del x[5]
>>> x
```

Length: we use len() method to get the length of dictionary.

```
>>>{1: 1, 2: 4, 3: 9, 4: 16}
{1: 1, 2: 4, 3: 9, 4: 16}
>>> y=len(x)
>>> y 4
```

Functions:

Functions and its use: Function is a group of related statements that perform a specific task. Functions help break our program into smaller and modular chunks. As our program grows larger and larger, functions make it more organized and manageable. It avoids repetition and makes code reusable.

Basically, we can divide functions into the following two types:

1. **Built-in functions** - Functions that are built into Python. Ex:

   abs(),all(),avail(),bool()……so on…

   integer = -20

   print("Absolute value of -20 is:", abs(integer))

   Output:

   Absolute value of -20 is: 20

2. **User-defined functions** - Functions defined by the users themselves. def

```
add_numbers(x,y):
  sum = x + y
  return sum

print("The sum is", add_numbers(5, 20))
```

   Output:

   The sum is 25

Flow of Execution:

1. The order in which statements are executed is called the flow of execution
2. Execution always begins at the first statement of the program.
3. Statements are executed one at a time, in order, from top to bottom.
4. Function definitions do not alter the flow of execution of the program, but remember that statements inside the function are not executed until the function is called.
5. Function calls are like a bypass in the flow of execution. Instead of going to the next statement, the flow jumps to the first line of the called function, executes all the statements there, and then comes back to pick up where it left off.

Note: When you read a program, don't read from top to bottom. Instead, follow the flow of execution. This means that you will read the def statements as you are scanning from top to bottom, but you should skip the statements of the function definition until you reach a point where that function is called.

Parameters and arguments:

Parameters are passed during the definition of function while Arguments are passed during the function call.

Example:

```
#here a and b are parameters

def add(a,b): #//function definition
 return a+b

#12 and 13 are arguments
#function call
result=add(12,13)
print(result)
```

Output:

C:/Users/RJC/AppData/Local/Programs/Python/Python38-32/pyyy/paraarg.py 25

There are three types of Python function arguments using which we can call a function.

1. **Default Arguments**
2. **Keyword Arguments**
3. **Variable-length Arguments**

Syntax:

```
def functionname():


    statements

      .
      .
      .
functionname()
```

Function definition consists of following components:

1. Keyword **def** indicates the start of function header.
2. A function name to uniquely identify it. Function naming follows the same rules of writing identifiers in

Python.

3. Parameters (arguments) through which we pass values to a function. They are optional.
4. A colon (:) to mark the end of function header.
5. Optional documentation string (docstring) to describe what the function does.
6. One or more valid python statements that make up the function body. Statements must have same indentation level (usually 4 spaces).
7. An optional return statement to return a value from the function.

Example:

```
def hf():

    hello world

hf()
```

In the above example we are just trying to execute the program by calling the function. So it will not display any error and no output on to the screen but gets executed.

To get the statements of function need to be use print().

#calling function in python:

```
def hf():

    print("hello world")

hf()
```

Output:

```
hello world
```

```
def add_sub(x,y):

    c=x+y

d=x-y

    return c,d

print(add_sub(10,5))
```

Output:

```
(15, 5)
```

The **return** statement is used to exit a function and go back to the place from where it was called. This statement can contain expression which gets evaluated and the value is returned. If there is no expression in the statement or the return statement itself is not present inside a function, then the function will return the **None** object.

#Keyword Arguments

When we call a function with some values, these values get assigned to the arguments according to their position.

Python allows functions to be called using keyword arguments. When we call functions in this way, the order (position) of the arguments can be changed.

(Or)

If you have some functions with many parameters and you want to specify only some of them, then you can give values for such parameters by naming them - this is called **keyword arguments** - we use the name (keyword) instead of the position (which we have been using all along) to specify the arguments to the function.

There are two *advantages* - one, using the function is easier since we do not need to worry about the order of the arguments. Two, we can give values to only those parameters which we want, provided that the other parameters have default argument values.

```
def func(a, b=5, c=10):
        print 'a is', a, 'and b is', b, 'and c is', c


func(3, 7) func(25,
c=24) func(c=50,
a=100)
```

Output:

```
a is 3 and b is 7 and c is 10 a is 25
and b is 5 and c is 24
a is 100 and b is 5 and c is 50
```

#Default Arguments

Function arguments can have default values in Python.

We can provide a default value to an argument by using the assignment operator (=) def

hello(wish,name='you'):

```
    return '{},{}'.format(wish,name)

print(hello("good morning")) Output:

good morning,you
```

Variable-length arguments

Sometimes you may need more arguments to process function then you mentioned in the definition. If we don't know in advance about the arguments needed in function, we can use variable-length arguments also called arbitrary arguments.

For this an asterisk (*) is placed before a parameter in function definition which can hold non-keyworded variable-length arguments and a double asterisk (**) is placed before a parameter in function which can hold keyworded variable-length arguments.

If we use one asterisk (*) like *var, then all the positional arguments from that point till the end are collected as a tuple called 'var' and if we use two asterisks (**) before a variable like **var, then all the positional arguments from that point till the end are collected as a dictionary called 'var'.

#program to find biggest of two numbers using functions.

```
def biggest(a,b): if
   a>b :
      return a
   else :
      return b

a=int(input("Enter    a    value"))
b=int(input("Enter    b    value"))
#function call
big=   biggest(a,b)   print("big
number= ",big)
```

Output:

```
C:/Users/RJC/AppData/Local/Programs/Python/Python38-32/pyyy/fu1.py Enter a value 5
Enter b value-2
big number=  5
```

FILES, EXCEPTIONS files, reading and writing files, command line arguments, errors and exceptions, handling exceptions, modules (datetime, time, OS , calendar, math module), Explore packages.

A file is some information or data which stays in the computer storage devices. Python gives you easy ways to manipulate these files. Generally files divide in two categories, text file and binary file. Text files are simple text where as the binary files contain binary data which is only readable by computer.

- **Text files:** In this type of file, Each line of text is terminated with a special character called EOL (End of Line), which is the new line character ('\n') in python by default.
- **Binary files:** In this type of file, there is no terminator for a line and the data is stored after converting it into machine understandable binary language.

An exception is an event, which occurs during the execution of a program that disrupts the normal flow of the program's instructions. In general, when a Python script encounters a situation that it cannot cope with, it raises an exception. An exception is a Python object that represents an error.

Text files:

We can create the text files by using the syntax:

Variable name=open ("file.txt", file mode) For ex:

f= open ("hello.txt","w+")

- We declared the variable f to open a file named hello.txt. **Open** takes 2 arguments, the file that we want to open and a string that represents the kinds of permission or operation we want to do on the file
- Here we used "w" letter in our argument, which indicates write and the plus sign that means it will create a file if it does not exist in library
- The available option beside "w" are "r" for read and "a" for append and plus sign means if it is not there then create it

File Modes in Python:

Mode	Description
'r'	This is the default mode. It Opens file for reading.
'w'	This Mode Opens file for writing. If file does not exist, it creates a new file. If file exists it truncates the file.
'x'	Creates a new file. If file already exists, the operation fails.
'a'	Open file in append mode. If file does not exist, it creates a new file.
't'	This is the default mode. It opens in text mode.
'b'	This opens in binary mode.
'+'	This will open a file for reading and writing (updating)

Reading and Writing files:

 # Write a python program to open and read a file

```
a=open("one.txt","r")
print(a.read())
a.close()
```

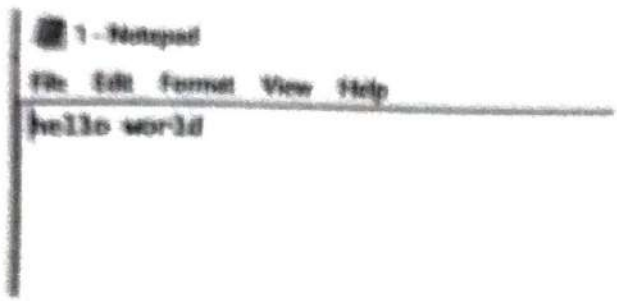
Output:

C:/Users/RJC/AppData/Local/Programs/Python/Python38-32/files/f1.py welcome to python programming

 # Write a python program to open and write "hello world" into a file?

```
f=open("1.txt","a")
f.write("hello world")
f.close()
```

Output:



Errors and Exceptions:

Python Errors and Built-in Exceptions: Python (interpreter) raises exceptions when it encounters errors. When writing a program, we, more often than not, will encounter errors. Error caused by not following the proper structure (syntax) of the language is called syntax error or parsing error

ZeroDivisionError:

ZeroDivisionError in Python indicates that the second argument used in a division (or modulo) operation was zero.

OverflowError:

OverflowError in Python indicates that an arithmetic operation has exceeded the limits of the current Python runtime. This is typically due to excessively large float values, as integer values that are too big will opt to raise memory errors instead.

Different types of exceptions:

- ArrayIndexOutOfBoundException.
- ClassNotFoundException
- FileNotFoundException

- IOException.
- InterruptedException.
- NoSuchFieldException.
- NoSuchMethodException

Handling Exceptions:

The cause of an exception is often external to the program itself. For example, an incorrect input, a malfunctioning IO device etc. Because the program abruptly terminates on encountering an exception, it may cause damage to system resources, such as files. Hence, the exceptions should be properly handled so that an abrupt termination of the program is prevented.

Python uses try and except keywords to handle exceptions. Both keywords are followed by indented blocks.

Syntax:

```
try :
    #statements in try block
except :
    #executed when error in try block
```

Typically we see, most of the times

- **Syntactical errors** (wrong spelling, colon (:) missing ....), At developer level and compile level it gives errors.

- **Logical errors** (2+2=4, instead if we get output as 3 i.e., wrong output .....), As a developer we test the application, during that time logical error may obtained.

- **Run time error** (In this case, if the user doesn't know to give input, 5/6 is ok but if the user say 6 and 0 i.e.,6/0 (shows error a number cannot be divided by zero))
  This is not easy compared to the above two errors because it is not done by the system, it is (mistake) done by the user.

The things we need to observe are:

1. You should be able to understand the mistakes; the error might be done by user, DB connection or server
2. Whenever there is an error execution should not stop. Ex: Banking Transaction
3. The aim is execution should not stop even though an error occurs

SR & BGNR ARTS AND SCIENCE COLLEGE (A)

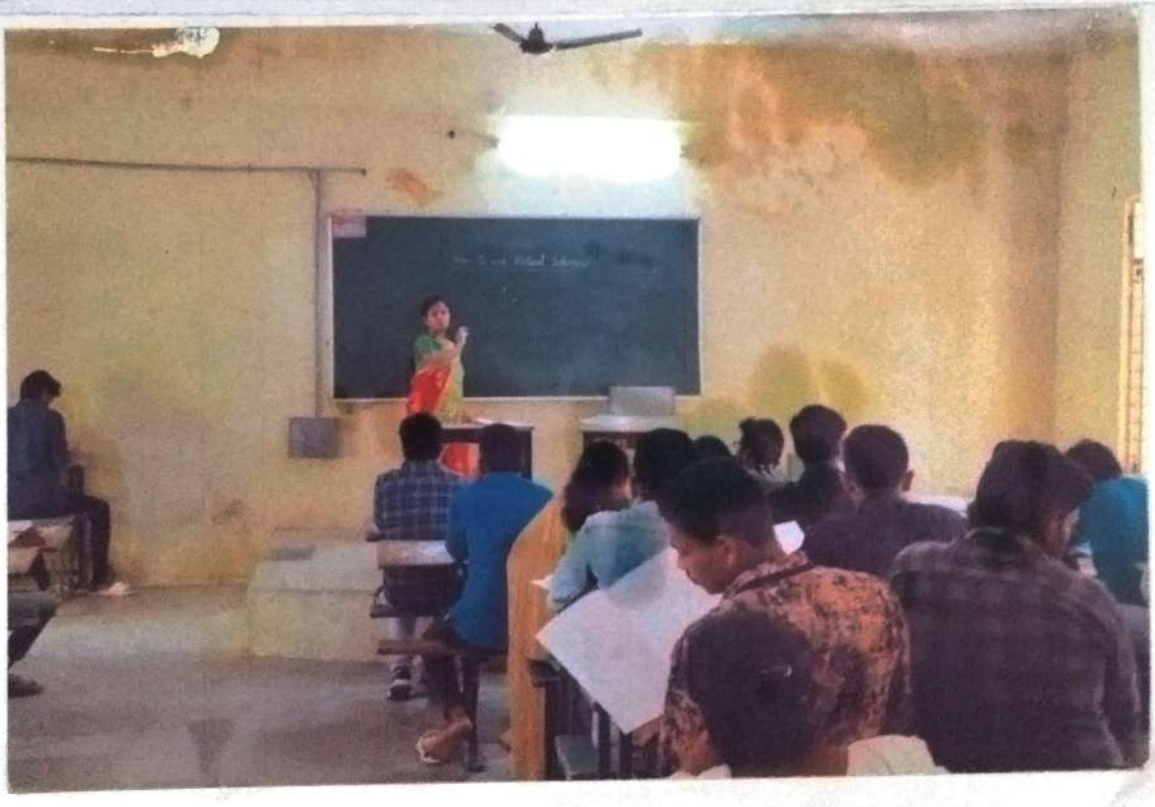
KHAMMAM

BRIDGE COURSE

Computer Science and Applications

BRIDGE COURSE

Year:	2021-2022
Date:	07-02-2022 to 05-3-2022
Topic:	Introduction to Python
Presented By:	**Mrs.K.Usha Pavani** Lecturer in Computer Science & Application
Students Participated:	



SR & BGNR ARTS AND SCIENCE COLLEGE (A)

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BRIDGE COURSE-

FACULTY NAME: K. Ushapavani

TOPIC: python DATE: 05/03/22

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4	4004	A. Vineeth Kumar	MPC	~~A. Ramesh~~ A. Vineeth
5	4005	A. Ramesh	MPC	A. Ramesh
6	4006	A. Bhavani	MPC	A. Bhavani
7	4007	A. Ramu	MPC	Ramu
8	4008	A. Rohit	MPC	A. Rohit
9	4009	A. Sai kumar	MPC	A. Sai kumar
10	4010	B. Sandeep	MPC	B. Sandeep
11	4011	B. Aravind	MPC	B. Aravind
12	4012	B. Laskar	MPC	B. Laskar
13	4014	B. Raja	MPC	B. Raja
14	4015	B. Shivashankar	MPC	B. Shivashankar
15	4016	B. Suresh	MPC	B. Suresh.
16	4017	B. Anil	MPC	B. Anil
17	4018	B. Hari Babu	MPC	B. Hari Babu
18	4019	B. Kittu	MPC	B. Kittu
19	4020	B. Rakesh	MPC	B. Rakesh.

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SNO	HTNO	STUDENT NAME	GROUP	SINATURE
20	4035	E. Lokesh	MPC	E. Lokesh
21	4036	G. Anil	MPC	G. Anil
22	4037	G. Srihari. kumar	MPC	G. Srihari kumar
23	4038	G. Kiran	MPC	Kiran
24	4039	G. Eshwari	MPC	G. Eshwari
25	4040	G. Shyam Sundar	MPC	G. Shyam Sundar
26	4041	G. Suresh	MPC	Suresh
27	4043	G. Veera Nagi Reddy	MPC	G. Veera Nagi Reddy
28	4044	G. Narasimha Rao	MPC	G. Narasimha Rao
29	4045	I. Pavan kalyan	MPC	I. Pavan kalyan
30	4047	J. Suresh	MPC	J. Suresh
31	4048	J. Nagarjuna	MPC	Nagarjuna
32	4049	J. Santhosh kumar	MPC	J. Santhosh
33	4050	J. Sharon	MPC	J. Sharon
34	4051	K. Yashwanth	MPC	K. Yashwanth
35	4052	K. Bhargavi	MPC	K. Bhargavi
36	4053	K. Mareswara Rao	MPC	K. Mareswara Rao
37	4054	K. Ashok	MPC	K. Ashok
38	4055	K. Minchajuddin	MPC	K. Minchajuddin
39	4056	K. Sandeep	MPC	Sandeep
40	4057	K. Srikanth	MPC	K. Srikanth
41	4058	K. Jagadeesh	MPC	K. Jagadish.
42	4059	K. Ashok	MPC	Ashok
43	4061	K. Shivakumar	MPC	K. Shivakumar.
44	4063	M. Supriya	MPC	M. Supriya
45	4064	M. Veerababu	MPC	M. Veerababu

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SNO	HTNO	STUDENT NAME	GROUP	SINATURE
46	4065	M. Jagadeesh	MPC	M. Jagadeesh
47	4066	M. Prem Singh	MPC	Prem Singh
48	4067	M. Yesu Babu	MPC	M. Yesu Babu
49	4068	M. Devendar	MPC	Devendar
50	4069	M. Rajashekar	MPC	M. Rajashekar

SR & BGNR ARTS AND SCIENCE COLLEGE (A)

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TOPIC: control structures DATE: 05/03/2024

LECTURENAME: K. Ushapavani GROUP: BZC

SNO	HTNO	STUDENT NAME	GROUP	SIGNATURE OF STUDENT
1.	26203121	Banoth Naveen	BZC	Naveen
2.	26203122	Neeludu sowmyasri	BZC	Sowmyasri
3.	26203123	Nimmakayala uday kiran	BZC	Udaykiran
4.	26203124	Nimmakuri Gopinath	BZC	Gopinath
5.	26203125	Nukala sandeep.	BZC	Sandeep
6.	3126	Nukapangu Nagaraju	BZC	Naga Raju
7.	3127	Nunavath prashanth	BZC	Prashanth
8.	3128	Nuravath vinay	BZC	Vinay
9.	3129	ponnaganti venkateshwarlu	BZC	P. ~~jaipal~~ venkakshu.
10.	3130	peddipaka. jaipal	BZC	jaipal
11.	3131	perabathini Dhanesh	BZC	Dhanesh
12.	3132	pittala Manikanta	BZC	Manikanth
13.	3133	posani Teja	BZC	Teja
14.	3134	Polepaka. Naresh	BZC	Naresh
15.	3135	puliyala Kishore.	BZC	P. Kishore.
16.	3136	pula Ramakrishna	BZC	P. Rama Krishna
17.	3137	Rachabanti prashanth	BZC	Prashanth
18.	3138.	Rachakonda vamshi	BZC	Vamshi
19.	3139	Samparalu pavan	BZC	Pavan
20.	31401	Shaik Ashabee	BZC	Pavan
21.	3142	shaik karishma	BZC	SK. Karishma
22.	3143	shaik Nazeer	BZC	Nazeer

SNO	HTNO	STUDENT NAME	GROUP	SINATURE
23.	3145	Shaik. Raheem Baba	BZC	Sk. Raheembaba
24.	3146	Shaik Reehana	BZC	Sk. Reehana
25.	3148	Shaik Shubani	BZC	Sk. Shubani
26.	3149	Siddula Gopi	BZC	Gopi
27.	3151	Soyam Anil Kumar	BZC	Anil kumar
28.	3152	Soyam. pothiraju	BZC	S. Ranith kumar
29.	3153	Jejavath. Ranith kumar	BZC	J. Ranithkumar
30.	3154	Tellam Janaki	BZC	Janaki
31.	3155	Tellam sairam	BZC	SaiRam
32.	3156	Tadem srinath	BZC	T. Srinath
33.	3157	Talari sai	BZC	Sai
34.	3158	Thalmri Harish	BZC	[illegible]
35.	3159	Thangellu. Laxmanndu	BZC	T. Laxmanndu
36.	3160	Thangellu Ramudu	BZC	T. Ramudu
37.	3161	Tharaka. Bharath.	BZC	Bharath
38.	3162.	Thirku. saivamsi	BZC	SaiVamsi
39.	3163.	Uppalinala saisrinivas	BZC	U. saisrinivas
40.	3164	usikala uday kiran	BZC	Uday kiran
41.	3165.	Usse. Bheema Rao	BZC	U. Bheem
42.	3166	vagaboina Bhavani	BZC	Bhavani
43.	3167	Valadasu srinivas	BZC	V. Srinivas
44.	3168.	vallaka Madhuri	BZC	madhuri
45.	3169	Vallepu Thirupati rao	BZC	V. Thirupathi Rao
46.	3171	vankayala Ramesh	BZC	V. Ramesh
47.	3172	Vankudoth. premchand	BZC	V. Premchand
48.	3173.	Vankudoth santhosh kumar	BZC	Santhosh Kumar

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SNO	HTNO	STUDENT NAME	GROUP	SINATURE
49.	3174	Vampati Mohan kumar	B.ZC	V. Mohan Kumar
50.	3177	Vistranadula ushasri	B.ZC	V. usha sri
51.	3179	yanamala vivek	B.ZC	Y. vivek.
52.	3180.	yadelli Aakash	B.ZC	Y. Aakash
53.	3181.	yesupongu. chandra rao.	B.ZC	Y. chandra Rao
54.	3182	yesupongu Naresh.	B.ZC	Y. Naresh

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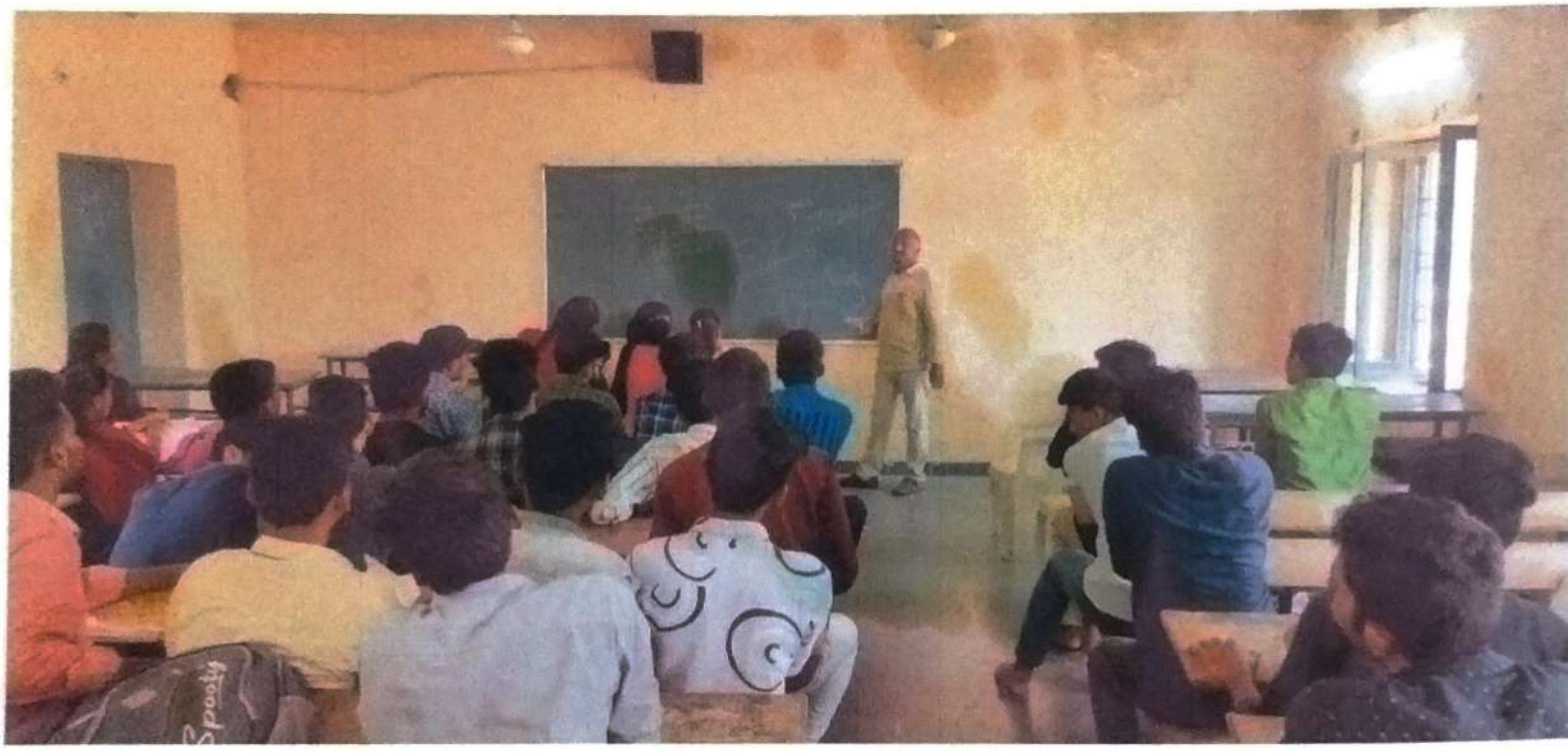
BRIDGE COURSE

Year:	2018-2019
Date:	25-82018 to 04-9-2018
Topic:	Fundamentals of Computers & Microsoft Word
Presented By:	**Mr.M.Srinivas Rao** Lecturer in Computer Science & Application
Students Participated:	



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BRIDGE COURSE-

TOPIC: ms office DATE: 25/08/2018

FACULTY NAME: M. Srinivas Rao

SNO	HTNO	STUDENT NAME	GROUP	SIGNATURE OF STUDENT
01	26182101	B. Hussain	MPC	Hussain
02	2102	B. venugopal	MPC	B. Venugopal
03	2103	B. Rajendar	MPC	Rajender
04	2104	B. Srinivas	MPC	B. Srinivas
05	2105	B. pavan kalyan	MPC	B. Pavan kalyan
06	2107	B. Naveen	MPC	B. Naveen
07	2109	G. Veera prasad	MPC	G. Veera prasad
08	2110	G. Gopi	MPC	G. Gopi
09	2111	J. Venkatesh	MPC	venkatesh
10	2112	K. Naresh	MPC	Naresh
11	2113	K. Sandhya	MPC	K. Sandhya
12	2114	M. Venkatesh	MPC	M. venkatesh
13	2115	N. Nagaraju	MPC	Nagaraju.
14	2117	P. Rama Krishna	MPC	P. Ramakrishna
15	2118	S. ~~Kanth~~ P. Shirisha	MPC	Shirisha
16	2119	S. Kanthaiah	MPC	S. Kanthaiah
17	2120	S. Rama devi	MPC	S. Ramadevi

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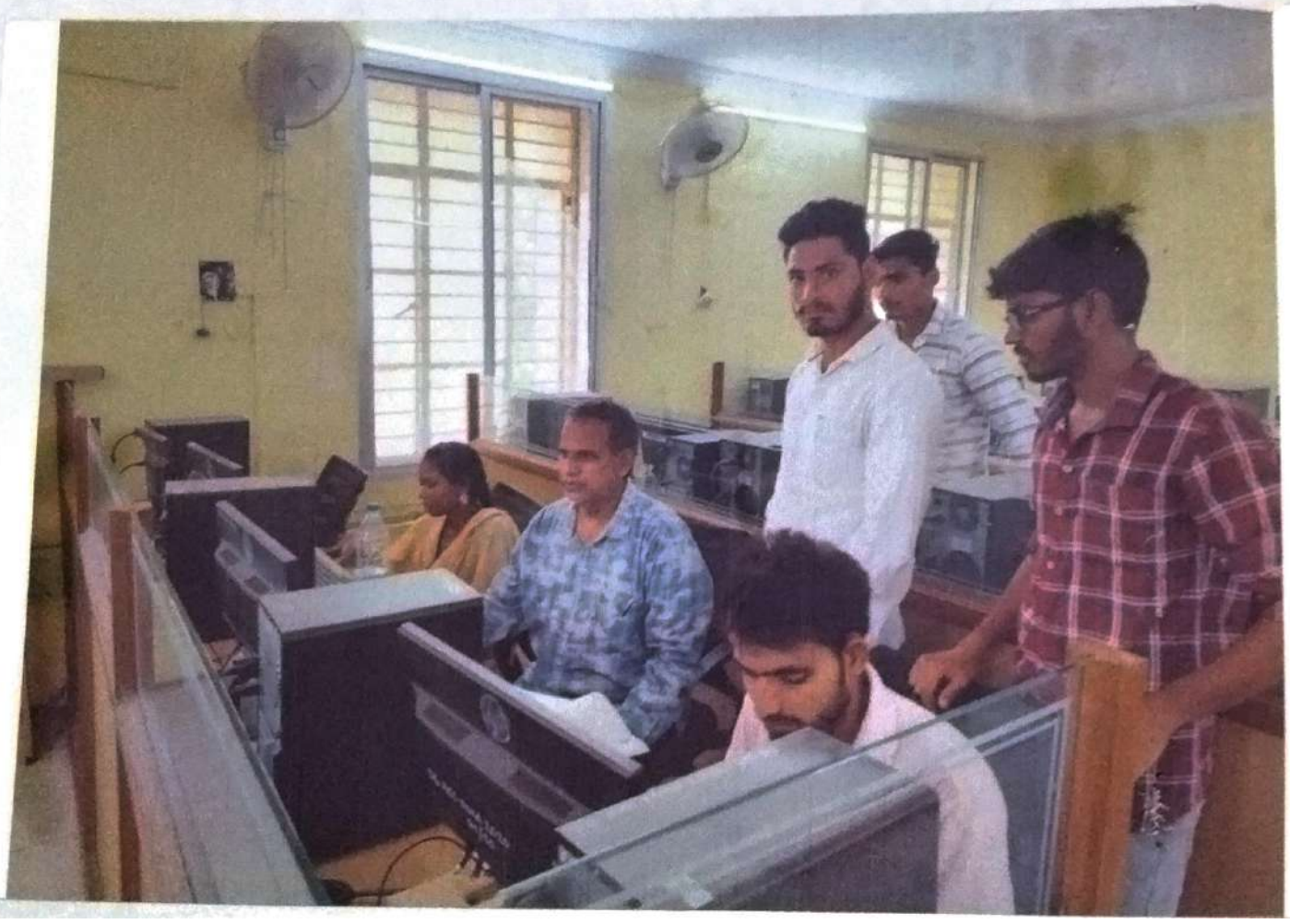
BRIDGE COURSE

Year:	2020-2021
Date:	02-3-2021 to 20-3-2021
Topic:	Basics of Computers & Power point
Presented By:	**Mr.N.Satyanarayana** Lecturer in Computer Science & Application
Students Participated:	



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BRIDGE COURSE-

TOPIC: ms word DATE: 02/03/2021

FACULTY NAME: N. Satyanarayana

SNO	HTNO	STUDENT NAME	GROUP	SIGNATURE OF STUDENT
01	26182001	A. Usha Rani	MPC	A. Usha Rani.
02	2002	A. Mahesh	MPC	A. Mahesh
03	2003	A. Mamatha	MPC	A. mamatha
04	2004	B. Naveen	MPC	B. NAveen
05	2005	B. Murali krishna	MPC	B. Murali
06	2006	B. Nikhitha	MPC	B. Nikhitha
07	2007	B. Sanjay	MPC	B. Sanjay
08	2008	B. Naresh	MPC	B. Naresh
09	2009	B. Naresh	MPC	B. Naresh.
10	2010	B. sravani	MPC	B. ~~Naresh~~ B. Sravani
11	2011	C. venkateswarlu	MPC	C. venkateswarlu.
12	2012	CH. Sailatha	MPC	CH. Sailatha
13	2013	D. opendar	MPC	D. Upendar.
14	2014	D. praveen	MPC	~~D. Kalyan~~ D. Praveen
15	2015	D. kalyan	MPC	D. Kalyan
16	2016	D. swapna	MPC	Swapna
17	2017	SK. Fayaz Ahamad	MPC	SK. Fayaz

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BRIDGE COURSE

TOPIC: Hard disk

DATE: 20-7-21

LECTURENAME: N. satya narayana

GROUP: BZC

SNO	HTNO	STUDENT NAME	GROUP	SIGNATURE OF STUDENT
1	26-19 3001	M. Srikanth	BZC	Sri kanth
2	3002	A. Sunil	BZC	A. Sunil
3	3003	A. Vinod	BZC	Vinod
4	3004	A. Trivenî	BZC	T.V.
5	3005	A. Chanti	BZC	A. Chanti
6	3007	A. mounika	BZC	A. mounika
7	3012	B. prakash	BZC	Prakash
8	3014	B. Roshini	BZC	B. Roshini
9	3016	B. Ganesh	BZC	Ganesh.
10	3018	B. Siddu	BZC	Siddu
11	3019	B. Ganesh	BZC	B. Ganesh
12	3020	B. satyavathî	BZC	Satya Vanti
13	3021	B. vinod kumar	BZC	B. vinod kumar
14	3022	B. Jyothi Laxmi	BZC	Jy-th.
15	3023	B. Ravi kumar	BZC	B Ravi kumar
16	3026	Ch. saisree	BZC	SaiSree
17	3027	Ch. Krishnaveni	BZC	Krishna Veni
18	3028	Ch. majusri	BZC	Kaushik
19	3029	Ch. karthik	BZC	Ch. Karthik
20	3030	D. Nagendrababy	BZC	Nagendra
21	3032	D. Lavanya	BZC	Lavanya
22	3033	D. Sanjeetha	BZC	Sanj

SNO	HTNO	STUDENT NAME	GROUP	SINATURE
23	3035	E. Sai	BZC	E. Sai
24	3037	E- NagaRaju	BZC	E. Nagaraju
25	3038	G. Saikumar	BZC	G. Saikumar
26	3039	G. Sanjeevrao	BZC	G. Sanjeevrao
27	3040	G. yokesh	BZC	G. Yokesh
28	3041	G. Sathishkumar	BZC	G. Sathish Kumar
29	3042	G. prasad	BZC	G. Prasath
30	3043	H. murali	BZC	H Murali

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TOPIC: Hardisk & memory DATE: 02/07/2021

LECTURENAME: N. Satyanarayana GROUP: MPC

SNO	HTNO	STUDENT NAME	GROUP	SIGNATURE OF STUDENT
1	2019 4001	J. maheshbabu	mpc	Maheshbabu
2	4002	M. Anjaneyulu	MPC	M. Anjaneyulu
3	4003	A. Umesh	MPC	A. Umesh
4	4004	A. Ganesh	MPC	A. Ganesh
5	4005	A. Vijay Kumar	MPC	Vijay Kumar
6	4007	A. Ganesh	MPC	A. Ganesh
7	4008	A. prudhvi Raj	MPC	A. Prudhvi Raj
8	4009	B. Ganesh	MPC	B. Ganesh
9	4010	B. Baskar	MPC	B. Baskar
10	4012	B. Harish	MPC	Harish
11	4013	B. Kalyani	MPC	Kalyani
12	4014	B. Srikanth	MPC	B. Srikanth
13	4017	B. Kishore	MPC	B. Kishore
14	4018	B. Vinay	MPC	Vinay B
15	4019	B. srikanth	MPC	B. Srikanth
16	4020	B. Gopa Raju	MPC	B. Gopa
17	4021	E. Naveen	MPC	E. Naveen
18	4022	B. Ganesh	MPC	B. Ganesh
19	4023	B. Sairam	MPC	B. Sairam
20	4024	B. srinadh	MPC	B. Srinadh
21	4026	B. Rajesh	MPC	B. Rajesh.
22	4027	B. Shyamala	MPC.	Shyamala

SNO	HTNO	STUDENT NAME	GROUP	SINATURE
23	4029	B. Shyamala	MPC	B. Shyamala
24	4030	ch. Varshini	MPC	Ch. Varshini
25	4031	Ch. Thulasi Raju	MPC	Ch. Thulasi Raju
26	4033	D. Kavya	MPC	D. Kavya
27	4034	D. Nagaraju	MPC	D. Nagaraju
28	4036	N. Gouri	MPC	N. Gouri
29	4037	D. prasad	MPC	D. prasad
30	4038	D. vennela	MPC	D. Vennela
31	4041	E. Sruthi	MPC	E. Sruthi
32				

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Year:	2019-2020
Date:	18-7-2019 to 17-8-2019
Topic:	Applications of Microsoft Word & Excel
Presented By:	**Mrs.ch.JamunaRani** Lecturer in Computer Science & Application
Students Participated:	

BRIDGE COURSE

BRIDGE COURSE

Year:	2017-2018
Date:	03-07-2017 to 29-07-2017
Topic:	Introduction to computers & Microsoft Office
Presented By:	**Mr.K.NageswarRao** Lecturer in Computer Science & Application
Students Participated:	

SR & BGNR ARTS AND SCIENCE COLLEGE (A)

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BRIDGE COURSE-

TOPIC: K. Nageswar Rao

DATE: 29-07-2019

FACULTY NAME: Secondary devices

SNO	HTNO	STUDENT NAME	GROUP	SIGNATURE OF STUDENT
1	26172501	V. Venkata Sivaram	B2C	Venkata Sivaram
2	2502	D. Deepthi	B2C	D. Deepthi
3	2505	Ch. Nikhil	B2C	ch. Nikhil.
4	2506	B. praveen	B2C	B. praveen
5	2507	D. Srikanth	B2C	D. Srikanth.
6	2508	S. Naveen	B2C	S. Naveen
7	2509	K. Nagamani	B2C	K. Naramani
8	2510	G, Bheem Sagar	B2C	Bheem Sagar
9	2511	B, prabhu teja	B2C	Prabhu teja
10	2512	B, Vishnu Vardhan	B2C	B. vishnu vardan
11	2514	E, Sunil	B2C	E. Sunil
12	2515	S, Srinivasa Rao	B2C	S. Srinivasa Rao
13	2516	U. Nagaraju	B2C	U. Nagaraju
14	2518	K, Koteswara Rao	B2C	K Koteswar Rao
15	2519	V. pavan Kalyan	B2C	Pavan kalyan
16	2521	M. Navya		M. Navya
17	2525	J. Nav		J. Naveen

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SNO	HTNO	STUDENT NAME	GROUP	SINATURE
18	2527	K. Sravanthi	B.ZC	K. Sravanthi
19	2528	B. Srinivas	B.ZC	B. Srinivas
20	2529	S. Nagaraju	B.ZC	S. Nagaraju
21	2531	ch. shiva	B.ZC	Ch. Shiva
22	2532	Md. Sana Nakshab	B.ZC	Md. Sana Nakshab
23	2534	Md. Haseena	B.ZC	Md. Haseena
24	2535	K. pawan Kumar	B.ZC	Kpawan Kumar

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FACULTY NAME: K. Nageswar Rao

TOPIC: Input /output devices DATE: 12-07-2019

SNO	HTNO	STUDENT NAME	GROUP	SIGNATURE OF STUDENT
01	2617 2101	B. Rangilal	M.PC	B Rangilal
02	2102	B. prashanth	MPC	B.prashanth
03	2104	K. Naresh	MPC	K.Naresh
04	2105	B. Arun	MPC	Arun
05	2106	P. Ashok	MPC	P. Ashok
06	2107	B. shankar	MPC	B. Shankar
07	2108	A. Srinu	MPC	A.Srinu
08	2109	P. upendar	MPC	P.Upendar
09	2110	B. vijay	MPC	B.vijay
10	2111	T. Sai	MPC	T. Sai
11	2112	G. Ranjith kumar	MPC	G. Ranjith
12	2114	T. priyanka	MPC	T. priyanka
13	2115	S. vanitha	MPC	S.Vanitha
14	2116	G. vineeth	MPC	Vinu
15	2118	T. Papa rao	MPC	T. Papa rao
16	2119	Gowri Nagasai	MPC	[illegible]
17	2121	R. Anil	MPC	R.Anil
18	2122	B. lakshman	MPC	B. Lakshman
19	2123	C. venkateswarlu	MPC	C.venkateswarlu

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SR & BGNR ARTS AND SCIENCE COLLEGE (A)

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BRIDGE COURSE-

FACULTY NAME: K. Nageswar Rao

TOPIC: about memory DATE: 03/07/2019

SNO	HTNO	STUDENT NAME	GROUP	SIGNATURE OF STUDENT
01	2616-2601	CH. Navya	B.Z.C	Navya
02	2602	D. Nagaraju	B.Z.C	Nagaraju.
03	2603	V. Teja Sri	B.Z.C	V. Tejasri
04	2605	K. Nagalaxmi	B.Z.C	K. Nagalaxmi
05	2606	V. Uma Maheswari	BZC	uma maheswari.
06.	2607	R. Anusha.	BZC.	R. Anusha.
07	2608	M. Venkateswarlu	B.Z.C	Venkateswarlu
08	2609	B. Leelamanohar	B.Z.C	leelamanohar.
09.	2612	Y. Naga Laxmi.	B.Z.C.	Nagelaxmi
10	2613	P. Sri Kanth	B.Z.C	P. Srikanth
11.	2614	Y. Susheela	B.Z.C.	Y. Susheela
12.	2617	M. Satyanarayana	B.Z.C	M. Satyanarayana
13.	2618.	B. NaGesh.	B.Z.C	B. Nagesh.
14.	2619.	G. Mohan.	BZC.	G. Mohan.
15.	2620	P. Venkata Ramana	B.Z.C	Venkata Ramana
16.	2623	T. Parimala	BZ.C	Parimala.
17.	2626	K. Sudha Rani	B.Z.C	K. Sudha Rani
18.	2627	V. Radhika	B.Z.C	V. Radhika
19.	2632	G. Ganesh	B.Z.C	G. Ganesh

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SNO	HTNO	STUDENT NAME	GROUP	SINATURE
20	2616-2634	K. Prem Kumar	B.Z.C	K.Prem kumar
21.	2616-2636	P. Laxmaiah.	B.Z.C	Laxmaiah.
22	2637	K. venkatesh	BZC	K.venkatesh.
23.	2643	E. Asha Shini	BZC	E. Asha Shini
24	2645	E. Rama Krishna	B.Z.C	E. Rama Krishna
25.	2646	B. syam prasad Babu	B.Z.C	Syam prasad babu.
26	2650	B. Shirisha	B.Z.C	B. Sirisha
27	2651	B. Rajani	B.Z.C	B. Rajani
28.	2652	Renuka.	B.Z.C.	Renuka
29.	2654	K. Laxmi Prasanna	B.Z.C	Laxmi Prasanna
30.	2655	P. sandeep.	BZC	P. sandeep.
31	2657	D. Jeevan Kumar	B.Z.C	Jeevan Kumar
32.	2658	P. Sisndri	B.Z.C	P. Sindri
33.	2659	S. Sheshagiri	B.Z.C	S. Sheshagiri
34.	2661	A. Supriya	B.Z.C.	Supriya.
35	2662	B. Sandhya Rani	B.Z.C	B. Sandhya rani
36.	2663	M. Shiva	B.Z.C	M. Shiva.
37.	2664.	V. Vamsi	B.Z.C	V. Vamsi
38	2665	B. Bhanu Prakash	B.Z.C	Bhanu Prakash

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SR & BGNR ARTS AND SCIENCE COLLEGE (A)

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BRIDGE COURSE-

FACULTY NAME: K. Nageswarrao

TOPIC: Introduction to computers DATE: 05/7/2018

SNO	HTNO	STUDENT NAME	GROUP	SIGNATURE OF STUDENT
01	2617 2602	K. Vinod kumar	B.Z.C	K. Vinod kumar
02	2603	Prashanth	B.Z.C	Prashanth
03	2604	A. Sripriya	B.Z.C	Sripriya.
04	2605	S. kumaraswamy	B.Z.C	S. kumaraswami
05	2606	V. Venkatesh	B.Z.C	V. Venkatesh
06.	2607	N. vijaya Babu	BZC	N. vijaya Babu.
07	2608	Prashanth Raj	BZC	Prashanth Raj.
08.	2609	D. mounika	BZC	mounika
09.	2610	B. Ramu	B.Z.C	B. Ramu
10.	2611	M. pavan krishna	B.Z.C	pavan krishna
11.	2612	Swathi	B.Z.C	Swathi
12	2613	K. pujitha	B.Z.C	K. pujitha.
13.	2614.	D. Rachana	B.Z.C	D. Rachana
14	2616	G. Saidulu	B.Z.C	G. Saidulu
15.	2618	B. Nagamani	B.Z.C	B. Nagamani
16	2619	Tharun	B.Z.C	Tharun.
17.	2620	C. sai kumar.	BZC	sai kumar.
18.	2622	K. Upendra	B.Z.C	Upendra
19.	2623	P. Thaseena Begam	B.Z.C	P. Thaseena Begam

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Dept. of Computers
S.R.&B.G.N.R. Govt. College
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SR & BGNR ARTS AND SCIENCE COLLEGE (A)

KHAMMAM

BRIDGE COURSE-

FACULTY NAME: K. Nageswar Rao

TOPIC: ms office DATE: 29/07/2019

SNO	HTNO	STUDENT NAME	GROUP	SIGNATURE OF STUDENT
01	2616-12101	B. Kalyan	M.P.C	B. Kalyan
02	2102	M Bhavatingh	M.P.C	M. Bhavtingh
03	2104	D. Gopalakrishna	MPC	Gopalakrishna.
04	2107	B. Mohan	MPC	B. Mohan.
05	2110	T. Ravi	MPC	T. Ravi
06	2112	N. Prashanth	MPC	N. Prashanth
07	2113	K. Praveen kumar	M.P.C	K. Praveenkumar
08	2115	V. mamatha	M.P.C	V. Mamatha.
08	2116	B. Jeevan	M.P.C	B. Jeevan
09.	2117	G. Suresh	M.P.C	G. Suresh.
10	2119.	V. Sireesha	MPC.	V. Sireesha.
11	2120	G. Pradeep kumar	MPC	Pradeep Kumar
12	2121	S. Pokathan	MPC	S. Pokathan
13	2122	G. Ashok kumar	MPC	G. Ashok kumar
14	2123	R. Vinod kumar	MPC	R. Vinod kumar
15.	2124	G. Nagendra kumar	MPC	G. Nagendra kumar.
16.	2126	V. vamshi	MPC	V. vamshi
17	2127	G. Sai kumar	MPC	G. Sai kumar.
18.	2129	K. Bhagyalakshmi	MPC	K. Bhagyalakshmi.

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SNO	HTNO	STUDENT NAME	GROUP	SINATURE
19.	2130	V. Venu Kumar	M.P.C	V. Venu Kumar
20.	2131	K. Nagaraju	M.P.C	K. Nagaraju
21	2132	B. Shiva Krishna	MPC	Shiva krishna
22.	2133	G. Vinod Kumar.	M.P.C	G. Vinod kumar
23	2135	Ch. Vandan	MPC	Ch. Vandan
24.	2136	T. Nagendra Babu	MPC	T. [illegible]
25.	2138	K. Ramu	MPC	K. Ramu.
26	2139	V. Yamuna.	MPC.	V. Yamuna.
27	2140	M. Masin Baig	MPC	M. Masin Baig
28	2141	P. Srikanth	M.P.C	P. Srikanth
29	2142	S. Kotesharao Rao	MPC	S. Kotesharao Rao.
30	2144	A. Kumar	MPC	Kumar
31.	2146	G. Nagesh	MPC	G. Nagesh
32.	2148	T. Venkatesh	M.P.C	T. Venkatesh
33.	2149	B. Raj Kumar	M.P.C	B. Raj Kumar
34.	2150	M. Uma Rani	MPC	M. Uma Rani
35	2151	M. Umesh	MPC	M. Umesh.
36	2152	G. Ravinder	MPC	G. Ravinder.
37	2616-2001	K. Suresh kumar	MPC	Suresh Kumar
38	2004	B. pratap	MPC	B. pratap.
39.	2005	B. Sisindri	MP.C	B. Sisindri
40.	2034	E. Srinu.	M.P.C.	E. Srinu
41.	2007	K. Prem kumar	M.P.C	K. Prem Kumar,
42	2017	K. Pawan kalyan.	MPC	Pawan kalyan.
43.	2026	N. Sandeep	MPC	N. sandeep.

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Dept. of Mathematics
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Syllabus

Bridge Course : Introduction to computers

Introduction:

Introduction to computers – Generations of computers – An overview of computer system – Types of computers – Input & Output Devices

Hardware: Basic Components of a computer System – Control Unit – ALU – Input/Output functions – Memory – RAM – ROM – EPROM – PROM and other types of memory.

Operating System

Meaning – Definition & Functions – Types of OS – Booting process – DOS – Commands (internal & External) – Wild card characters

Windows : Using the Start Menu – Control Panel – Using multiple windows Customizing the Desktop – Windows accessories.

Word Processing:

Application of Word Processing – Menus & Tool Bars – Word processor – Creating – Entering – Saving &printing the document – Editing & formatting Text – Mail and Macros

BRIDGE COURSE : B.Sc I Mpcs, B.A E.pca, B.Com Computers

FUNDAMENTALS OF COMPUTER

Computer: A Computer is a truly amazing machine that performs specified sequences of operations as per the set of instructions given on a set of data to generate desired information.

" A computer is an electronic device which is used to perform fast computations and to store the large amount of data".

" A computer is a digital device which accepts the input from input devices as per the requirement of user and produce the desired output".

Data: Raw facts or A pieces of information is called data

For ex : **Student data**

Roll number	: 02614-4301
Name of the student	:G.Sindhu
Marks in computers	: 70

Book Data

Book number (Isbn)	:7345
Book name	:Let us C
Author name	: Balaguruswamy
Cost	:150Rs
Abstract	: It is very useful for learners.

Processing: The computer performs all processing by "calculating", "Comparing" and "Copying" the data stored in its memory(RAM).

Information : Processed data

Calculate: The computer can perform any mathematical operation on data by adding, subtracting, multiplying and dividing one set with another.

Compare: the computer can analyze and evaluate data by matching it with set of known data that are included in the program.

Copy: The computer can move data around to create any kind of report or listing in any order.

Program: A set of instructions that perform a particular task is called a program. Or Software Program.

Software: The instructions that tell it what to do are called "software".

Hardware: Physical components of computer system is called "Hardware". The computer and all equipments attached to it are called hardware.

Input: The computer can selectively retrieve data into its main memory(RAM) from any peripheral device(terminal, disk, tape) connected to it.

Output: After processing the data internally, the computer can send a copy of the results from its memory out to any peripheral device(Printer, Scanner).

Software: Software is a general term to describe all the forms of programs associated with computer

Software is two types 1, System Software 2. Application Software

System Software: Set of programs supplied by manufacturer to make the computer work. For ex: MSDOS Operating System

MS-Windows Operating System

Unix, Linux Operating System

These Operating Systems Programs are in-built into the computer resources such as processors, memory and input/output devices. The Operating System

act as an interface between the user's programs and the computer like a supervisor controlling the performance of the computer.

Application Software: Application programs are user written programs to perform certain specific jobs. They are unique, Many such application programs have been made commercially available as packages. Packages are playing very important role in large scale industries or organizations.
Package: Predefined Application software.
For ex : Ms-office
Language: We have to communicate with the computer in the language, which it can understand. Through these computer understandable languages we tell the computer to perform various jobs.
For ex : C, c++ ,Java

High level Languages: A Programming language such as c, c++, COBOL, Java that enables a programmer to write programs. That are more or less independent of a particular type of computer. They are easier to read, write and maintain.
Assembly Language: Low level computer programming closely related to a computer's internal codes. Assembly code is used by programmers who need to write very fact or efficient programs.
For ex: JMP means 'jump'
LDA means load accumulator
ADD Addition
SUBTRACT Subtraction
MULTIPLY Multiplication
DIVIDE Division
Machine Language: Machine language is the low-level language and machine dependent language. It consisting of a string of 0s and 1s. A program written in high level language that must be converted to machine language prior to execution. This is done via a compiler or assembler.
Translators are three types
Interpreter: An interpreter is a computer program that executes other programs. Interpreter executes the line by line instruction of the program.
Compiler: A Compiler is a computer program that translates test written in a computer language into another computer language. Compiler converts source program into object program at once.
Window: The window has various elements. This is a screen shot of My Documents on My Computer. Some of the elements have been modified from the original windows defaults(including the appearance of the folders).
Desktop: Refers to the background of your screen on which the various programs run .
Icons: Small pictures on the desktop and inside folders that represent various programs(folders).
Folders: That can contain icons, programs, data or other sub-folders.

Title Bar: Refers to the bar at the top of an open window that will tell you what window is contains the minimize, maximize, close buttons.
Cursor: It is an electronic spot light on the screen. It is a graphic movement.
Cursor indication is Arrow -→to select the commands, folders or any icons
Cursor indication is Double Arrow -→to resizing the window.
Cursor indication is I Beam → You are selecting text in a document.

- **Large storage capacity**

  A computer has large storage capacity. It can store large volume of data. We can store any kind of data in computer's storage. This data can be text, picture, sound, video etc.

- **Versatility**

  A computer is a versatile machine. It can perform a number of jobs depending upon the instructions fed to it. Like a computer can be used to write a letter to a friend in a word processor and at the same time listen to various songs through a media player. The same machine (computer) works in different fields with different applications to perform various tasks. This property of computer is called versatility.

- **Reliability**

  Computerized storage of data is much more reliable than the manual storage. We can store the data in computer's storage for a long period of time except until any kind of system failure occurs.

- **Diligence**

  Unlike human beings, the computer can work continuously without getting tired. It can perform the same task repeatedly with same processing speed. Without the lack of concentration they help us in doing a number of jobs that require a great accuracy.

- **Automatic**

  A machine that works itself without any human involvement is said to be an automatic machine. Computers are automatic machines; they can work on any given job automatically till it gets finished without any human interference.

- **Source of Entertainment**

  Today, computer has become a great source of entertainment. We can play video games, enjoy music and watch movies or various satellite channels through computer. We can also communicate with each other through computer by means of text messages, audio/video messages.

- **Cost effectiveness**

  Computers reduce the amount of paperwork and human effort, thereby reducing costs. For example: we can create and edit student reports easily using a computer. We can send electronic reports to management via e-mail.

- **No Intelligence**

  A computer has no intelligence of its own. It depends upon user's instructions for any kind of task. Now days, some artificial intelligence (AI) has been introduced that helps the computer to take some decisions on its own. *Robots* are the example of such AI systems.

> ✓ *Prolonged or improper computer use can lead to injuries or disorders of the hands, wrists, elbows, eyes, necks, and back. Computer users can protect themselves from these health risks through proper workplace design, good posture while at the computer, and appropriately spaced work breaks.*

1.4 GENERATIONS OF COMPUTERS

"Generation" in computer talk is a step in technology. It provides a framework (structure) for the growth of computer industry. It was used to distinguish between various hardware and software technologies in the development of computer i.e. due to technological advancement; different changes have come in the computer system.

Till today, there are five computer generations. The following segment discusses the main characteristics of each generation one by one.

✓ First Generation (1942 – 1955) - Vacuum Tubes

The characteristics of first generation computers were:

1. This generation computers used *Vacuum tubes* as the main electronic component responsible for processing of data.
2. These computers were physically large in size and required large rooms for installation.
3. Magnetic Drums were used for memory.
4. These computers produced large amount of heat due to large consumptions of electricity. Therefore, these computers required continuous maintenance and proper cooling with the help of large Air-conditioners.
5. They were relatively unreliable as they could produce inaccurate results sometimes.
6. Input was based on punched cards and paper tape.
7. They performed slow input-output operations.
8. Limited programming capabilities. Only machine and assembly languages were used.
9. These computers had limited commercial use.
10. The UNIVAC and ENIAC computers are examples of first-generation computing devices.

Fig. 1.2 (Vacuum Tube)

✓ Second Generation (1955 – 1964) - Transistors

The characteristics of second-generation computers were:

1. This generation computers used *Transistors* in place of vacuum tubes.
2. They were much smaller in size and required lesser space for installation.
3. Magnetic tapes were used as secondary storage.
4. They consumed lesser power and therefore lesser amount of heat was generated as compared to first generation computers, but still air conditioning was required.
5. They were highly reliable and lesser prone to hardware failures as compared to first generation computers.
6. They were about 10 times faster than the first generation computers.
7. High-level languages were used to instruct the computers for performing various tasks.
8. These computers were more versatile than first generation computers.
9. High Input/Output operations speed than first generation computers.
10. The commercial production of second-generation computers was limited and costly.

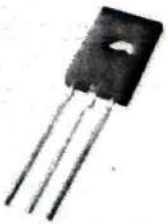

Fig. 1.3 (Transistor)

✓ Third Generation (1964 – 1975) - Integrated Circuits

The characteristics of third generation computers were:

1. *Integrated Circuits (IC's)* were used instead of Vacuum tubes and Transistors.
2. The size of these computers was smaller than the earlier computers.
3. Magnetic disk used for external storage and storage space available in these computers was much more than earlier computers.

4. They consumed less power than second-generation computers, but still air-conditioning was required.
5. They were more reliable and lesser prone to errors than earlier computers.
6. They had high processing speed than second-generation computers.
7. Monitors and keyboards were used for Input and Output.
8. Development of standardized High-level languages like PASCAL, BASIC etc.
9. Maintenance cost of these computers was very less as compared to earlier computers.
10. They were general-purpose machines suitable for both scientific and commercial applications.

Fig. 1.4 (Integrated Circuit)

✓ **Fourth Generation (1975 – 1989) - Microprocessors**

The characteristics of fourth generation computers were:

1. High Speed *Microprocessors* were used. Millions of electronic components were integrated on a single microprocessor chip.
2. They were much smaller and cheaper than third generation computers.
3. They consumed less power than third generation computers.
4. They were more reliable and less prone to hardware failures than third generation computers and therefore their maintenance cost is negligible.
5. They had faster and larger primary and secondary storage as compared to third generation computers.
6. Graphical User Interface (GUI) enabled new users to quickly learn how to use computers.
7. Use of standard high-level languages allowed program to be transferred from one computer to another.
8. Supports more Input and Output devices or other terminals than previous generations computers.
9. Network of computers enabled sharing of resources like disks, printers etc. among multiple computers and users.
10. They were general-purpose machines used in application development.

Fig. 1.5 (Microprocessor)

✓ **Fifth Generation (1989 – Present) - Artificial Intelligence**

The characteristics of fifth generation computers are:

1. Fifth generation computers, based on *Artificial Intelligence (AI)* are still in development. Artificial Intelligence is a branch of computer science concerned with making computers behave like humans.
2. Portable computers (called notebook computers) are much smaller and handy than fourth generation computers.

Fig. 1.6 (Artificial Intelligence – (ROBOT))

3. Fifth generation computers are several times more powerful than fourth generation computers.
4. They consume less power than earlier computers.
5. They are much more reliable and less prone to hardware failures than previous generation computers.
6. They have faster and larger primary and secondary storage as compared to previous generation computers.
7. More user-friendly interfaces with multimedia features make the systems easier to learn and use by anyone, including children.
8. The goal of fifth generation computing is to develop devices that respond to natural language input (i.e. Human languages like English, Hindi, and French etc.) and are capable of learning.

1.5 BASIC TERMINOLOGY

Being a data processing system, computer has importance in providing in-depth knowledge of whatever is involved in processing the data. But before looking into that, we require to define some of the basic terms associated with it.

Input

Input refers to the ***data*** and ***instructions*** given to the computer. Where ***data*** is a raw set of facts and figures associated with an individual, an entity, or an event. It is basically a collection of unorganized facts or concepts that does not convey any meaning. Data can be represented in various forms i.e. in figures, characters, symbols, pictures, audio, video etc.

Some examples of data are phone numbers, weights, prices, costs, addresses, product name, age or name of a person etc.

Instruction specifies how the data is to be manipulated. It is basically a command given to computer to carry out a particular operation on the data. In simple, instruction specifies what to do with the data.

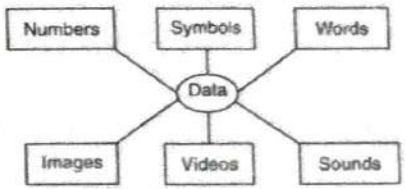

Fig. 1.7 (Data)

Example:

2 + 3 (Here 2 and 3 are the data, and the instruction is addition operation (+))

Process

It is the actual interpretation and execution of the instruction on data, which is carried out by the computer's processing unit (microprocessor) to obtain the required result.

Example:

2 + 3 – 4 (Here 2, 3 and 4 is the data, and the process to be carried out is to first take out the sum of 2 and 3, and from the result of the summing process subtract the value of 4).

Output

The result obtained from the process is called as an output. Computer processes the data according to the instructions fed into it and produce the required results. This result is known as output.

Example:

In the

4. They consumed less power than second-generation computers, for all air conditioning was required.
5. They were more reliable and lesser prone to errors than earlier computers.
6. They had high processing speed than second-generation computers.
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2. Portable computers (called notebook computers) are much smaller and handy than fourth generation computers.

Fig. 1.6 (Artificial Intelligence – (ROBOT))

ay) screens and pointing sensors. Today, Laptop computers are D (Light Emitting Diodes) screens also.

al Computers (PC)

are the most widely used computers in the world.

normally placed on the top of the desk, so they are also computers.

uipped with huge volumes of main and secondary

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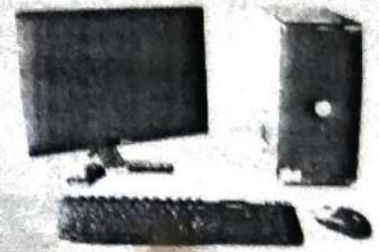

Fig. 1.14 (Desktop or Personal Computer)

1.5 BASIC TERMINOLOGY

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knowledge of whatever
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Input

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raw set of facts and figures associated
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symbols, pictures, audio, video etc.

Some examples of data are phone
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Example:

2 + 3 (Here 2 and 3 are

Process

It is the actual interp
carried out by the comp
result.

Example:

2 + 3 – 4 (Here 2, 3 and 4
take out the sum of 2 and
the value of 4).

Output

The result obtained from the proc
data according to the instructions
result is known as output.

Example:

In the above example stated for process

➢ Information

Meaningful output is information. When we apply some process on data, we get some result. This result is called output. But if that output is meaningful for someone, then it becomes information for him/her.

Example:

The average performance of a class is derived as an output from the process of summing up all the marks of the class, and dividing it by the number of students. This output would be meaningful to the class teacher, but maybe not to the peon of the school. The output derived is information for the class teacher but not to the peon.

1.6 DATA VS. INFORMATION

Data	Information
• Data is raw fact and figures. For example: 32 is data.	• Information is a processed form of data. For example: Age 32.
• Data is not significant to a business.	• Information is significant to a business.
• Data are atomic level pieces of information. It can be in the form of numbers, characters, symbols, or even pictures.	• Information is a collection of data. For example: Age and 32 collected together to form information (Age 32).
• Data does not help in decision making.	• Information helps in decision making.
• Observations and recordings are done to obtain data.	• Analysis is done to obtain information.
• Input to any system may be treated as data.	• Output after processing the system is information.
• Difficult to understand properly.	• Easy to understand.
• Data must be processed to understand.	• Information is already in understandable form, it may be processed further to make it more understandable.
• Data may not be in the order.	• Information should be in the order.

1.7 TYPES OF COMPUTERS

There are various methods on which the computers can be classified. The classification may depend on size, technology, area of application, type of data processed etc.

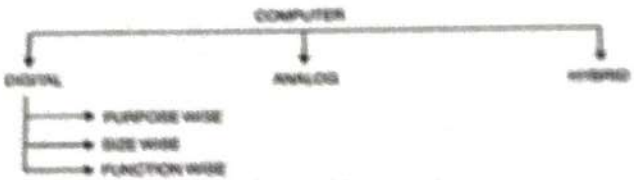


Fig. 1.8 (Types of Computers)

The above figure shows that the computer can be divided into digital, analog and hybrid computers, where digital computers can be further divided into purpose wise, size wise and function wise computers.

➢ DIGITAL COMPUTERS

- Digital Computers are the computers that work on discontinuous or discrete data.

- These computers convert the inputs into binary language of 0's & 1's.
- They carry out operations on binary data at a very fast rate and generate output in user understandable language.
- These computers basically work by counting and adding the binary digits.
- These computers are more accurate, faster and reliable than analog computers.
- They are the most commonly used computers in homes and offices.
- The real life example of a digital computer is a digital watch. Now days, computer used for the purpose of business and education are also example of digital computers.
- In digital computers, data flows in the form of clock pulses as shown below:

Fig. 1.9 (Clock Pulses)

Digital computers can be further classified into following classifications:

(i) Classification by purpose
(ii) Classification by size
(iii) Classification by function

(i) Classification by purpose

There are some needs that are specific to a particular environment or a particular user. Depending upon the purpose of use, the computers can be special purpose or general purpose.

(a) Special Purpose Computers

- These computers are specially designed to perform a specific task of a specific environment. That's why these computers are not versatile.
- The instructions used by these computers are permanently stored in the machine.
- These computers are generally embedded in various automatic devices. For example: A computer that has been designed to count the telephone call pulses and display the amount payable can only serve this purpose. It cannot be used for other purposes.

(b) General Purpose Computers

- These computers can be used for all general needs of all environments & users.
- These are the versatile computers that can perform a variety of jobs for a variety of environments i.e. general-purpose computers can be used anywhere to solve any problem. For example: A general purpose computer can be used to calculate accounts, data, writing letters, drawing pictures, playing games, listening music, watching movies and accessing internet etc.

(ii) Classification by size

Computers can be classified by their physical size and appearance. By size we can classify them into following types:

(a) Micro Computers

- A microcomputer is a small, relatively inexpensive computer with a microprocessor as its central processing unit.

- This is the smallest category of digital computers, in which a single microprocessor performs the function of *ALU (Arithmetic logic unit)* and *Control unit*.
- In micro computers, microprocessor is connected with primary memory (RAM & ROM), input, output and secondary storage devices.
- Microcomputers are supported by single user operating systems.
- Home computers and personal computers are the best examples of Microcomputers.

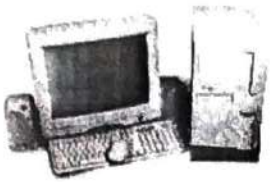


Fig. 1.10 (Micro Computer)

(b) Mini Computers

- Mini Computers are general purpose computers, which are more expensive than the microcomputers.
- They also use 16 bit or 32-bit microprocessor as their main CPU. Intel80386, 80486 and Pentium are some processors of these computers.
- The capabilities of mini computers lie somewhat between the mainframes and personal computers.
- They can support multiple input-output devices.
- They contain less memory and processing capabilities than a mainframe.
- A large number of computers can be connected to a network with a mini computer acting as a server.
- Mini Computers can be used for systems like- ticket reservation or banking.
- Most commonly used operating system on such computers is UNIX.

Fig. 1.11 (Mini Computer)

(c) Programmable Computers

- Programmable computers are the smallest computers that can be programmed by the user.
- Personal Digits Assistants (PDA), latest mobiles and address books fall under this category.
- These computers have capabilities of keeping track of appointments, meetings, call lists, SMS, image & video capturing etc.
- They also contain accessories like calculator, notepad, MP3 players, Bluetooth communication etc.

Fig. 1.12 (PDA – A Programmable Computer)

(d) Laptop

- Laptop computers are so small that they can be placed on our lap.
- These computers can work while traveling and even without any power connection.
- These computers are commonly used at homes or offices to perform commonly used operations like word processing, spreadsheets and presentations.
- These computers are light in weight and compact in size.
- They contain all features of desktops or personal computers.
- Laptop computers generally have LCD (Liquefied Crystal Display) screens and pointing sensors. Today, Laptop computers are coming with LED (Light Emitting Diodes) screens also.

Fig. 1.13 (Laptop)

(e) Desktop or Personal Computers (PC)

- Personal Computers are the most widely used computers in the world.
- These computers are normally placed on the top of the desk, so they are also known as the *Desktop computers*.
- These computers are equipped with huge volumes of main and secondary memories.
- They are mainly used for managing personal data of a company or an individual, that's why they are called *Personal computers*.
- Number of softwares can be installed on these computers to perform various kinds of data processing operations.
- We can manage accounts, design graphics or images, surf internet, write letters and listen to music or watch movies on these computers.
- The size of desktop computers is greater than laptops.

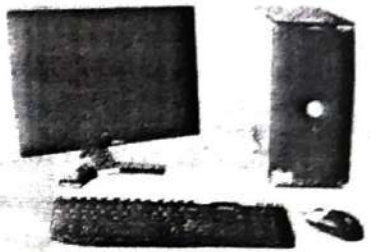


Fig. 1.14 (Desktop or Personal Computer)

(f) Mainframe Computers

- A mainframe computer is a very large size computer capable of handling and processing very large amounts of data quickly.
- Mainframe computers have more main and secondary storage and contain multiple processing units (CPUs).
- These computers are generally used in large organizations like government agencies, banks, flight scheduling, ticket reservations and insurance companies where a large number of people need frequent access to the same data which is usually organized into one or more huge databases.
- In a mainframe, several computer terminals which basically contain keyboard and monitor are plugged into a single mainframe. These terminals act as an input/output device to the mainframe.
- Mainframe computers occupy a lot of space and require proper air-conditioning.
- Mainframes are so called because the earliest ones were housed in large metal frames.
- A typical mainframe system can support hundreds of users at the same time.
- With the technological advances in personal computers, the need for mainframe computing has significantly reduced over the years. The computing power of a typical desktop computer today is greater than that of a mainframe system.

Fig. 1.15 (Mainframe Computer)

(g) Super Computers

- Super Computers are the most powerful computers typically used for scientific and engineering applications that must handle very large databases or do a great amount of computation.

- Super computers are the fastest and most expensive computers ever built by humans.
- These computers contain multiple processors that work together to solve a single problem at a time.
- The size of these computers is hundreds of times bigger than a personal computer.
- These computers have huge main memories and secondary storage.
- These computers cost in millions of dollars and owned by countries or very large business organizations.

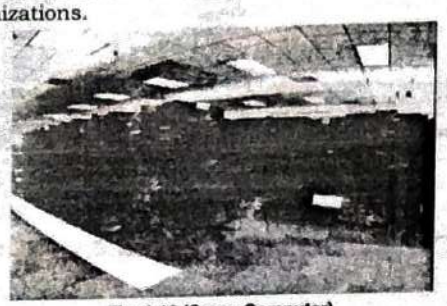


Fig. 1.16 (Super Computer)

- Supercomputers are used for very complex jobs such as nuclear research or forecasting weather patterns.
- The major difference between a supercomputer and a mainframe is that a supercomputer channels all its power into executing a few programs as fast as possible, whereas a mainframe uses its power to execute many programs concurrently.

(iii) Classification by function

Computers can be classified into following four basic categories based on the functions it can perform:

(a) Server

- Server refers to a computer that is dedicated to provide some services to the other computers (called clients).
- Some servers are committed to a specific task; often referred to as dedicated. As a result, there are a number of dedicated server categories, like database servers, file servers and print servers.
- Servers are named depending on the type of service they offer. For example, a computer dedicated to a database may be called a "database server". A computer manages a large collection of computer files may be called a "File server".
- As servers are commonly used to deliver services that are required constantly, so most of the servers are never turned off.
- They are bit different because high performing servers are set-up with high configuration hardwares and softwares.

(b) Workstation

- A workstation is a computer intended for individual use i.e. primarily to be used by one person at a time.
- A high-performance computer typically used for software development, audio/video editing and scientific applications.

- It is mainly designed for business or professional use rather than home use.
- A workstation has advanced graphics capabilities, large storage capacity, and a powerful microprocessor.
- Workstations are commonly connected to a local area network and run multi-user operating systems.
- In terms of computing power, workstations lie between personal computers and minicomputers.

(c) Embedded Computers

- Embedded computers are fixed inside various electronic devices to automate and control their working.
- Various modern electronic devices like Microwave, washing machine, televisions and many other devices contain embedded computers. For example - A small computer fitted in a digital washing machine controls the washing cycle of the machine.
- The user could not program these computers. The manufacturer of these computers programs them.
- The central processing units (CPUs) used in embedded computers are often sufficient only for the computational requirements of the specific application and may be slower and cheaper than CPUs found in a personal computer.

(d) Information Appliances

- Information appliances are easy-to-use portable computing devices which are designed to perform a limited set of tasks like basic calculations, playing multimedia, browsing internet, photography, editing text etc.
- Many information appliances will be connected to service providers that provide various services for a monthly subscriber fee.
- They are generally referred as the mobile devices having limited functionality.

➢ ANALOG COMPUTERS

- Analog computers are the computers that work on continuous data.
- Analog computers are used to measure the physical quantities like pressure, temperature, speed etc.
- These computers accept input data in the form of signals and convert them to numeric values. For example: A thermometer does not perform any calculations but measures the temperature of the body.
- Analog computers are mainly used for scientific and engineering purposes, because they deal with quantities that vary constantly.
- Analog computers are faster than digital computers but they are not as accurate as digital computers. That's why they are less commonly used.
- The representation of flow of data in analog computer is shown as:

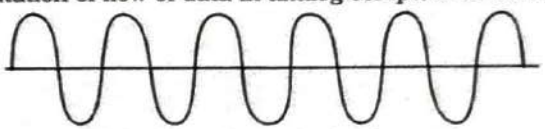


Fig. 1.17 (Data Flow in Analog Computer)

➢ HYBRID COMPUTERS

- Hybrid computers employ both the features of digital and analog computers i.e. can work [illegible] well

(ii) Hardware

All the tangible components of the computer system are known as hardware. Tangible components mean all the physical components of the computer system, which we can touch and can freely move from one place to another.

Example:

CPU (Microprocessor), Monitor, Keyboard, Mouse, Speakers, Printer, Scanner etc.

(iii) Firmware

Firmware can be defined as a group of software and hardware. Because in computer system, without hardware components, software have no meaning and without software components, hardware have no meaning i.e. both of these components (software & hardware) are mutually dependent. Both of them must work together in order to make computer produce some useful output. This group is called a *Firmware.*

Example:

All the software applications or programs are installed in the hard disk, which is a hardware component. This combination of software and hardware is firmware.

(iv) Humanware

User or an operator, who uses the computer machine, is known as Humanware. Humanware can be a computer professional, a student, a novice user (beginner) or any other person, who operates this machine for completing his or her task.

1.10 BLOCK DIAGRAM OF COMPUTER

A typical computer system irrespective of its size, class or type consists of hardware and software, integrated and synchronized together to perform computational work or data processing.

Computer Anatomy is concerned with the way the various functional units operate and how they are connected together to form the computer system.

A computer system consists of the following functional units:

(i) Input Unit.
(ii) Memory / Storage Unit.
(iii) CPU (Central Processing Unit)
(iv) Output Unit

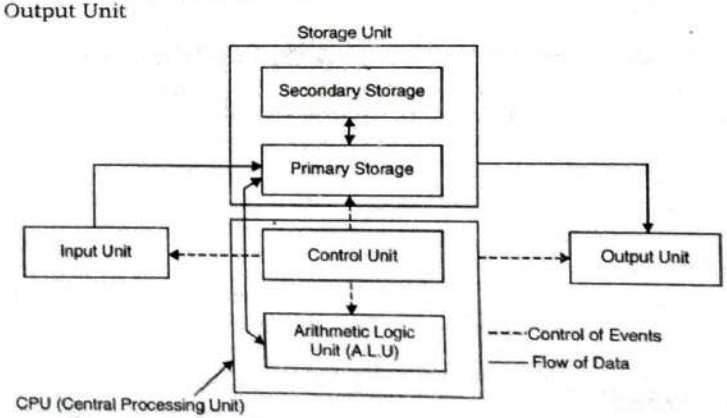


Fig. 1.18 (Block Diagram of Computer)

The block diagram of a computer system is shown in **Fig. 1.18** depicts the working of computer and its various functional units.

(i) Input Unit

As the computer process the data according to the instructions given to it and produces the results. The input unit is used to feed the data as well as instructions to the computer. The commonly used input devices are keyboard, mouse, scanner, joystick etc.

In brief, an input unit performs the following functions:

- It accepts or reads the list of data and instructions from the user.
- It converts these data and instructions in computer acceptable form.
- It supplies the converted data and instructions to the computer system for further processing.

(ii) Memory/Storage Unit

The basic function of this unit is to store the data, instructions and final results in the system so that it can deliver them on demand to the user or other computer units at a later time. The data and instructions are transferred to other computer units or devices from the main storage under the supervision of control unit. It also referred as the *primary storage.*

• Primary Storage

Primary storage is a direct access storage device, consisting of a number of storage locations. Each location in the storage has a unique number, called *Storage Address.* The system assigns a unique location to each data element. Once the data is assigned to the location, the system accesses it directly by means of the address of the particular storage locations.

The various types of primary storages are:

(a) RAM (Random Access Memory) (b) ROM (Read Only Memory)
(c) Cache Memory (d) Virtual Memory

• Secondary Storage

The data and instructions in primary storage (RAM) are temporary in nature and they are erased automatically as soon as the power is switched off. The secondary storage is used to store the data permanently. The user can access the data from secondary storage whenever required. Some commonly used secondary storage devices that are used to store the data permanently are:

(a) Floppy Disk (c) Compact Disk
(b) Hard Disk (d) Magnetic Tape

(iii) Central Processing Unit (CPU)

CPU is considered as the ***"Brain of the computer".*** It is also called as microprocessor. It is the fastest and costly unit of the computer system. All major calculations and comparisons are made inside the CPU. CPU converts all the supplied input into required output as per the instructions supplied by the user. The performance and the speed of the computer mainly depend upon the type of microprocessor installed in it.

Within CPU, there exists a temporary storage location known as ***Registers.*** These are used for storage of smaller data (up to 64 bits). Registers are being used for faster data supply to processor for processing. The number, size and capacity of register in a CPU can affect the processing power.

➢ **Components of CPU**

The CPU further contains two units:

(a) Control Unit (b) ALU (Arithmetic and Logical Unit)

(a) Control Unit

- A *Control unit* is a major component of the computer which helps in the functioning of the central processing unit and in turn runs the whole computer.
- Control Unit works as a supervisor or monitor in the system. It supervises or controls all the activities of various functional units of the computer.
- It fetches (transfers) the required instructions from the main memory, interprets them and then sends them to ALU for processing.
- It controls the execution of instructions in a sequential order.
- It works as a central nervous system for the computer. It controls the flow of data to and from the main memory.
- It sends and receives control signals from various peripheral devices.
- It ensures that data reaches the correct place at the correct time.

In brief, control unit acts as monitor that tells the other components what to do, when to do and how to do.

(b) ALU (Arithmetic & Logical Unit)

- The function of ALU is to perform the actual calculations in the computer. It performs arithmetic (addition, subtraction, multiplication & division) and logical (comparisons or decisions) calculations in the computer.
- Under the control of the control unit, the data and instructions stored in the primary storage are transferred to ALU for processing. ALU performs the calculations and sends intermediate and final results to the main memory i.e. no processing is done in the primary storage unit.
- In some computer processors, the ALU is divided into two distinct parts, the **AU** and the **LU.** The AU performs the arithmetic operations and the LU performs the logical operations.
- ALU has internally two temporary registers into which the incoming data from memory is loaded and then operated inside ALU.

(iv) Output Unit

During data processing, computer process the data according to the instructions applied to it and produce the result or output. The output unit is used to provide the results to the user. The commonly used output devices are monitor or VDU (Visual Display Unit), printer, plotter, speakers etc.

In brief, an output unit performs the following functions:

- It accepts the results produced by the computer that are in binary form.
- It converts these binary coded results to human acceptable form.
- Finally, it supplies the converted results to the user.
- It offers ample features to analyze data using charts, graphs, year-to-year comparisons and much more, with only the click of a button.

□□□□□

INPUT & OUTPUT DEVICES

UNIT 2

2.1 PERIPHERAL DEVICE

A peripheral device is a device attached to a host computer in order to expand its capabilities. More specifically the term is used to describe those computer devices that are optional in nature and are not required in principle.

Examples of some commonly used peripheral devices are Microphones, Cameras, Scanners, CD-ROM, DVD-ROM, Pen Drive, Modem, Network Card etc. The following section covers some of the basic peripheral devices used for input and output.

2.2 INPUT DEVICES

Input devices are those peripheral devices that are used to supply input to the computer. An input device converts input (data and instructions) into suitable binary form that can be accepted by the computer.

The data entered through the input devices can be text, graphical image/symbol, audio, video etc. Depending on the form of the data the various input devices are available.

Typical input devices are listed below:

- ❑ Keyboard
- ❑ Mouse
- ❑ Trackball
- ❑ Joystick
- ❑ Light Pen
- ❑ Touch Screen
- ❑ Optical Mark Reader (OMR)
- ❑ Magnetic Ink Character Recognition (MICR)
- ❑ Barcode Reader
- ❑ Scanner / Image Scanner
- ❑ Digital Camera
- ❑ Microphone
- ❑ Graphic Tablet/Digitizer

2.2.1 KEYBOARD

- Keyboard is the most common input device used for entering text data directly into a computer.
- A computer keyboard is similar to that of a typewriter, but it has additional keys as well.
- The most commonly available computer keyboard has 104 keys. Data is entered into a computer by pressing a set of keys available with the keyboard.
- Keyboard is the oldest input device, which is still being used with the modern computers. When user presses a key, the corresponding character appears on screen.
- Today, a *multimedia keyboard* contains various additional keys to perform functions like – *volume control, launching Internet explorer, changing song* and *video tracks, launching e-mail software* etc.
- *Wireless keyboards* are also available today, but at a higher price than wired keyboard. These keyboards do not have any wire attached to them.
- Wireless keyboard interacts with the computer through *Bluetooth* or *Infrared* technology.
- Wireless keyboard operates on battery power rather than using electricity from the user's computer.

6. **Automation:** Computers are automatic in operation. It means once the data and instructions are fed to a computer, human interventions are not required. The computers manipulate the data according to the instructions and continue doing so till the last instruction is executed.
7. **Power of Remembering:** Computer can store and recall any amount of information because of its secondary storage capability.

Limitations of Computer

Explain the limitations of computer.

A computer is an electronic device that accepts data (input) from the user, processes the data by performing calculations &operations, and generates the desired results (output).

The following are the limitations of computers:

1) **Zero IQ**: The computer systems have zero Intelligence Quotient (IQ). They are unable to see and think the actions to perform in a particular situation unless that situation is already programmed into them.

2) **Lack of common-sense:** This is one of the major limitations of computer systems. Computer systems do not have any common sense because no full-proof algorithm has been designed to programme logic into them. As computers function based on the stored programme(s), they simply lack common sense.

3)**Dependency**: It functions as per a user's instruction, so it is fully dependent on human being.

4)**Environment:** The operating environment of computer should be dust free and suitable.

5)**Lack of Decision-making:** The computer system does not have the ability to make decisions on their own because they do not possess all the essentials of decision-making.

Basic Computer Organization

Block Diagram of Computer

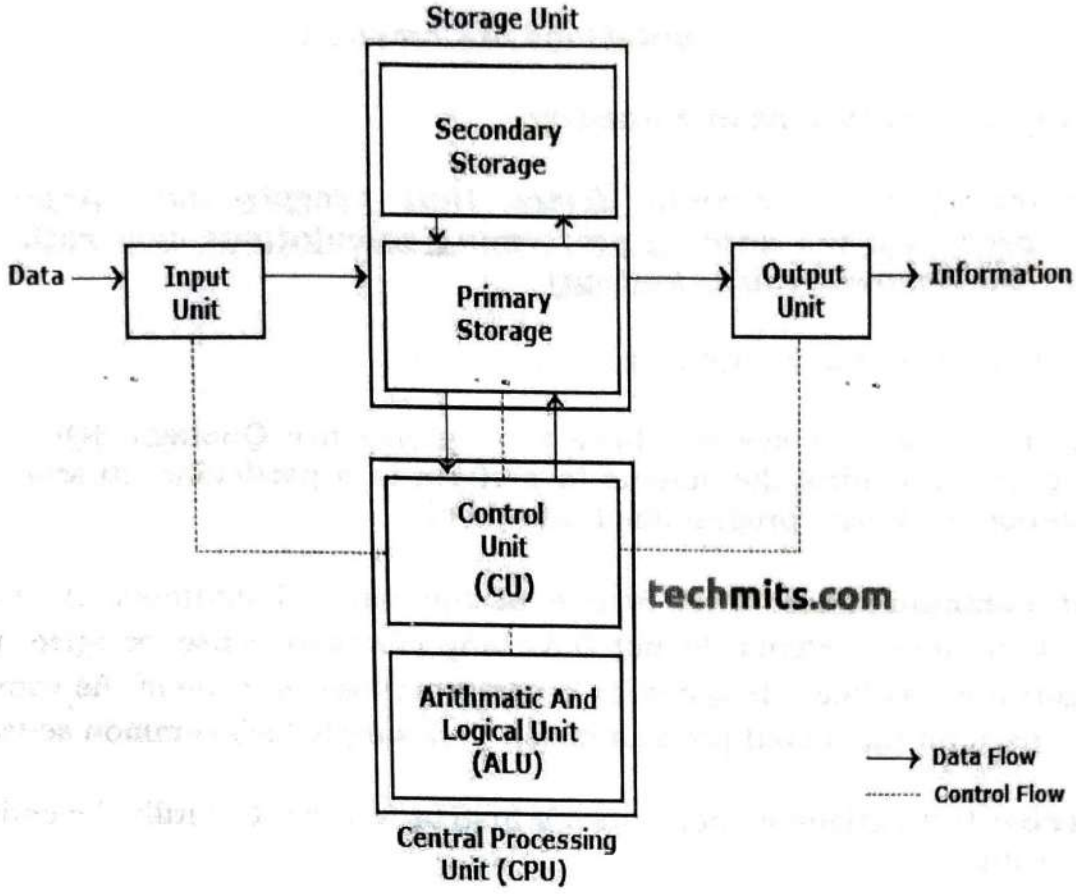
Explain the Block Diagram of computer. (Or)Explain the basic organization a computer system.

- ***A computer is an electronic device that accepts data (input) from the user, processes the data by performing calculations & operations, and generates the desired results (output).***

The block diagram of computer provides various functional units of the computer and functionality of those units. The computer system consists of the following functional units:

1) Input Unit
2) Central Processing Unit (CPU)
3) Memory/Storage Unit
4) Output Unit

The below diagram shows the block diagram of computer:



Block Diagram of Computer and its components

1. **Input Unit:** An input device is a hardware or peripheral device used to send data to a computer. An input unit of a computer system performs the following functions:

- It accepts (or reads) instructions and data from the user.
- It converts these instructions and data in computer acceptable form.
- It supplies the converted instructions and data to the computer system for further processing
- ✓ Examples of Input Devices: Keyboard, Mouse, Scanner, Joystick etc.

2. **Central Processing Unit (CPU):**

- **CPU stands for** Central Processing Unit (CPU).
- The Central Processing unit is also called as brain of a computer.
- The CPU is an electronic hardware device which carries or performs out all the operation such as arithmetic and logic operation.
- The CPU in another term is also called as "PROCESSOR".
- Every instruction given through the input devices such as keyboard or mouse is carried for processing and the user get our desired results through are output devices such as printers and monitors.

- The CPU is also responsible for controlling all the operations of the other units of the computer system.
- The CPU has two components:

  1. Control Unit (CU)
  2. Arithmetic Logic Unit (ALU)

Control Unit(CU):

- The control Unit or CU Controls or coordinates all activities performed in a computer system.
- It receives information or instruction from the main memory of computer.
- It tells the logic unit, memory, the input and output devices how to handle the program or instruction in proper order.
- When the control unit receives any set of information or instruction it converts them to control signals, then these signals are sent to the central processor for further processing.
- It understands which operation to execute and in which order.

Arithmetic and Logic Unit (ALU): ALU performs arithmetic and logical operations.

➢ **ALU consists of two units:**

1. Arithmetic Unit (AU)
2. Logic Unit (LU)

- Control unit characterized which sort of operation to Execute.
- Arithmetic operation are Addition, subtraction, division, multiplication.
- The logical unit operation are AND, OR, Equal, less than, greater then.
- The results generated by ALU are stored in primary memory.

3. **Memory Unit:** Memory is two types:
   1. Primary Memory
   2. Secondary Memory

1. **Primary Memory:**

- **Primary memory** is also known as **main memory** or may also refer to "*Internal memory*", Primary memory and primary storage.
- It is the only memory which is directly accessible to CPU.
- It allows a processor to access running programs and currently processed data that stored in a memory location.
- It has random access property.
- It is volatile.
- It is two types:
- 1. RAM 2. ROM

RAM (Random Access Memory):

- RAM stands for **Random Access Memory**.
- It is also called *"direct access memory"*.
- Random access means that each individual byte in entire memory can be access directly.
- RAM is used to store data and instructions temporarily.
- A program must be loaded into RAM before execution.

- RAM is volatile memory. It means that its contents are lost when the power is turned off.
- RAM is read/write memory. CPU can read data from RAM and write data to RAM.
- RAM is also called main memory or primary storage.
- The amount of data that can be stored in RAM is measured in bytes.
- Most desktop computers typically have 2 GB to 4 GM of RAM. It also allows the addition of more memory if needed.
- It is two types: 1. DRAM 2. SRAM

ROM (Read Only Memory) :

- Read-only memory (ROM) is a type of storage medium that permanently stores data.
- It contains the programming needed to start a PC, which is essential for boot-up.
- It is permanent and non-volatile, meaning it also holds its memory even when power is removed.

- It is 3 types: 1. PROM
  2. EPROM
  3. EEPROM

Secondary Memory:

- It is also known as External memory/Storage memory/Auxiliary memory/Backup memory.
- It is used for storing data and instructions permanently.
- It is also used for carrying data from one computer to another.
- Secondary memory is not directly accessible to CPU.
- It is slower and cheaper than primary memory.
- It is used for larger storage capacity.
- Example: Hard disk, CD, DVD, Pen drive, etc.

4.Output Unit: An output unit produce or generate results to the user.

- An output device is used to send results or output from to the user.
- An output unit of a computer system performs the following functions:
- 1.It accepts the results produced by the computer, which are in coded form
- 2. It converts these coded results to human acceptable (readable) form
- 3. It sends the converted results to the user.
- Examples of output devices are Monitors, Printers, Speakers and Plotters.

Generations of Computers

Explain the Generations of computer.

GENERATIONS OF COMPUTER: Generation in computer terminology is a ***change or improvement in technology*** a computer was being used.

The generation is used to distinguish between various hardware and software technologies. The following are the **five** generations of computer:

Following are the main five generations of computers:

1. First Generation: The period of first generation: 1940-1956. Vaccum tube based.
2. Second Generation: The period of second generation: 1957-1963. Transistor based.
3. Third Generation: The period of third generation: 1964-1971. Integrated Circuit based
4. Fourth Generation: The period of fourth generation: 1972-Present. VLSI microprocessor based.
5. Fifth Generation: The period of fifth generation: Present & Next. ULSI microprocessor based

First Generation of Computers(1940 -1956):

- These computers used **vacuum tubes**, as the main component.
- The Operating speed of these computers was in milliseconds.
- Machine language was used for Programming.
- Magnetic core was used as primary memory.
- Magnetic drum, Magnetic tape were used as Secondary memory.
- Punched cards were used as input device.
- Printer was used as output device.
- These computers are used in Simple mathematical calculations.
- These computers were very costly.
- These computers werenot reliable and constant maintenance is required.
- These computers were extremely large in size, weight was about 30 tones
- These commuters generated heat, and they required special cooling system.

EX: ENIAC, EDVAC, EDSAC, UNIVACI, IBM 701

Second Generation of Computers(1956 – 1963):

- **Transistors replace vacuum tubes in the second generation of computers.**
- Second generation computers used Transistors as the main component.
- Operation speed of these computers was in Microseconds.
- Assembly language was used for programming.
- Magnetic core was used as Primary memory.
- Magnetic drum, Magnetic tape were used as Secondary memory
- Punched card was used as input device.
- Printer was used as output device
- These Computers were used for complex scientific calculations.
- The size, cost, power requirement, heat generation decreased compared to first generation computers.
- Processing speed was increased.
- Storage capacity, use of the computer increased compared to first generation.

- Honeywell 400, IBM 7030, CDC 1604, UNIVAC LARC.
- ***Advantages of transistor over vacuum tube:***

  i) One transistor could replace one thousand vacuum tubes.
  ii) Size of a transistor is 1/200 th times of a vacuum tube.
  iii) The power requirement of a transistor is 1/20 th times of a vacuum tube.
  iv) Transistors are more reliable than vacuum tube.

iii) Third Generation of Computers (1964 -1971):

- IC (Integrated Circuit) were developed in this generation.
- These computers used Integrated Circuits (ICs) as the main component.
- Operating speed of these computers was in Nanoseconds.
- High Level Languages like FORTAN, COBOL, PASCAL, C, C++, etc were developed and used for programming in this generation.
- Semiconductor memory (silicon) was used as primary memory.
- Magnetic tape, Magnetic disk like floppy disk, hard disk, etc are used as secondary memory.
- Keyboard is used as input device, monitor is used as output device.
- These Computers were used for managing population census, bank, insurance company, etc.
- Concept of database was developed and used in this generation.
- These computers were fast and reliable.
- Use of IC in the computer provides the small size of the computer.
- The Size, cost, power requirement, and heat generation of third generation computers were decreased compared to previous generations.
- Processing speed, storage capacity, use of the computer increased compared to previous generations.

Ex: IBM 360/370, PDP-8, PDP-11, CDC 6600

iv) Fourth Generation of Computers (1971 to Present):

These computers used VLSI (Very Large Scale Integrated Circuits) as the main component.
Operating speed of these computers was in Pico seconds.
4GL (Problem Oriented Language) are used for programming in this generation.
Semi-conductor memory is used as primary memory.
Magnetic tape, Magnetic Disk, Optical memory (CD/DVD/ Blu ray), Flash memory (pen drive, memory card) are used for Secondary memory.
Advanced I/O devices like mouse, touch screen, scanner, LCD, LED, color printer, etc. are developed in this generation.
These Computers are used for different task in different areas like education, business, hospital, transportation, military, etc.
Microcomputers like desktop PC, laptop, notebook, etc, are developed in this generation.
The popular communication media like internet, email, mobile communication, etc were developed in this generation.
Advanced, user friendly, web based software, etc are developed in this generation.
Size, cost, power requirement, heat generation decreased compared to previous generation.

- Operating speed, storage capacity, use of the computer increased compared to previous generation.

EX: IBM PC and its clones, Apple II, TRS-80, VAX 9000, CRAY-1, CRAY-2, CRAY-X/MP.

vi) Fifth Generation of Computers (Present & Next):

- This generation is based on ULSI(Ultra Large Scale Integration) technology.
- Bio-chip technology to be used in this generation.
- This generation computers have artificial intelligence.
- Operating speed of these computers is in Femto seconds.
- Natural language is to be used Programming language.
- The computers will have AI.
- The computers will be used in complex calculation where intelligence of the computer is required.
- The computers will have parallel processing in full fledge.
- The computers will be based on KIPS (Knowledge based Information Processing System).
- The aim of the fifth generation is to make a device which could respond to natural language input and are capable of learning and self-organization.
  EX: BM notebooks, Pentium PCs, SUN Workstations, IBM SP/2, SGI Origin 2000, PARAM 10000

Classification of Computers

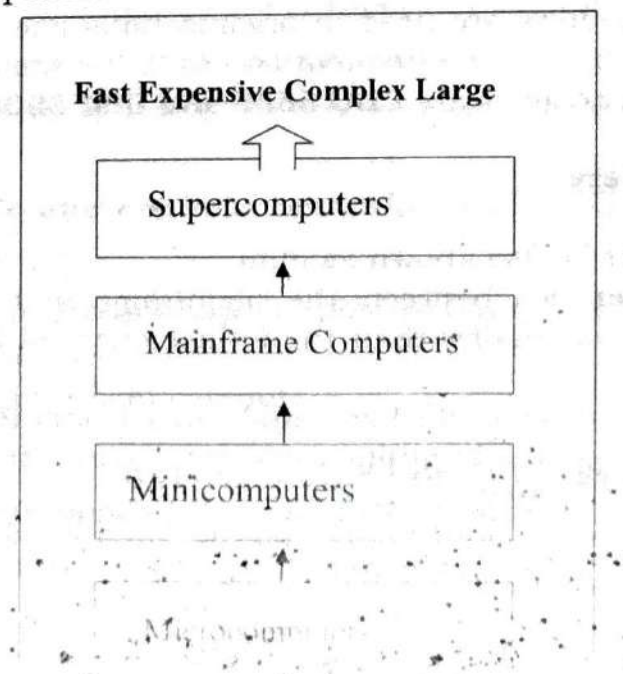
Explain the types of computers.

OR

Explain the Classification of Computers.

The **digital computers** that are available nowadays vary in their **sizes** and **types**. These computers are broadly classified into four categories based on their **size** and **type.**

1) Micro Computers
2) Mini Computers
3) Mainframe Computers
4) Super Computers



Slow Cheap Simple Small

Classification of computers based on size and type

1.Super Computers:

- A **supercomputer** is the fastest computer in the world.
- The computing Performance of a "supercomputer" is measured very high as compared to a general purpose computer.
- The computing Performance of a *supercomputer* is measured in FLOPS (that is floating-point operations per second).
- The **supercomputer** consists of tens of thousands of processors which can perform billions and trillions of calculations per second.
- The supercomputer price is very high,
- These computers are most massive concerning size. A most powerful supercomputer can occupy few feet to hundreds of feet.
- Supercomputers are used for highly calculation-intensive tasks, such as, weather forecasting, climate research, molecular research, biological research, Rocket launching and aircraft design.
- Some examples of supercomputers are **IBM Roadrunner, IBM Blue gene** and **Intel ASCI red.**

2.Mainframe Computers:

- Mainframe computers are multi-user, multi-programming and high performance computers.
- These computers operate at a very high speed, have very large storage capacity and can handle the workload of many users.
- Mainframe computers are large and powerful systems generally used in centralized databases.
- The user accesses the mainframe computer via a terminal. A terminal is a keyboard and screen wired to the mainframe.
- Mainframe computers are used in organizations like banks or companies, where many people require frequent access to the same data.
- Examples of mainframes are **CDC 6600 and IBM ES000 series**.

3.Mini Computers:

- A **minicomputer** is also known as mini.
- A **minicomputer** lies between the mainframe and the **microcomputer** because its size is smaller than the former one and larger than the latter one.
- A minicomputer is also called as a mid-range computer.
- *Minicomputers* are mainly multi-users systems where more than one user can work simultaneously.
- **Minicomputer** can support multi-user and multiprocessing system.
- These are easy to use and to carry.

- These are small and very portable.
- These are more reliable.
- The power of processing of minicomputers is not larger than the power of mainframe and supercomputers.
- These minicomputers can do time-sharing, batch processing, and online processing.
- The size of minicomputers can range from 12 inches in width to less than 7.
- The types of minicomputer are- tablet PC, Desktop minicomputers, cell phones, notebooks, high-end mP3 players, etc.
- t is less expensive than mainframe or supercomputer.
- **Mini computer examples**: IBM's AS/400e, Honeywell200, TI-990

3. Micro Computers:

- Micro computers are also called as Personal computers.
- A microcomputer is a computer with a microprocessor as its CPU.
- It contains memory in the form of ROM (Read Only Memory) and RAM (Random Access Memory), I/O (input/output) ports, and a bus or system of interconnecting wires, housed in a unit that is usually called a motherboard.
- It is the mostly used computers are microcomputers.
- It is called Home PC or Personal Computer (PC) because it is a single user computer.
- It supports many higher level languages, multimedia, graphics, 3D graphics and games.
- Microcomputers are small, low-cost and single-user computer
- IBM, Hewlett Packard, Apple, Compaq are some well known companies which manufacture microcomputers.
- Microcomputers are two types: 1. D**esktop computers**
- **2.Notebook computers etc.**
- **Desktop computers**: Desktops are personal computers and bigger than notebook computers.
- These microcomputers consist of the system unit, keyboard and monitor and I/O devices.
- Desktop microcomputers are cheaper than laptops.
- A desktop micro computer is non portable.
- The desktop microcomputers are more reliable than notebooks and easy to repair.
- **Notebook Computers:***Notebook is the smallest microcomputer.*
- Exmaple: Laptop
- Laptop is a notebook computer powered by a battery.
- These are portable.
- These are light weight computers.

Overview of the Computer System

Explain the overview of the computer system.

Computer is an electronic device that accepts data as input, processes the input data by performing mathematical and logical operations on it, and gives the desired output.

The computer system consists of four components : 1) Hardware
2) Software
3) Data
4) User

Parts of computer system

Hardware:

- ***The physical components which we can see, touch and feel are called as the hardware.***
- The hardware consists of physical devices of the computer. The devices are required for input, output, storage and processing of the data.
- The Input and Output devices, Memory, storage and processor are hardware of computer system.

Software:

- Software is a set of programs.
- Software is a set of instructions or programs instructing a computer to do specific tasks.
- It tells the computer about the tasks to be performed and how these tasks are to be performed.

Program:

- Program is a set of instructions.
- It is written in a language understood by the computer, to perform a specific task.

- The hardware of the computer system cannot perform any task on its own.
- The hardware needs to be instructed about the task to be performed.
- Software instructs the computer about the task to be performed.
- The hardware carries out these tasks. Different software can be loaded on the same hardware to perform different kinds of tasks.

Data:

- Data are set of values or raw facts.
- The data is provided as input to the computer, which is processed to generate some meaningful information.

User:

- User is an operator, who uses the computer.
- Uses are people who write computer programs or interact with the computer. They are also known as humanware or peopleware.
- Programmers, data entry operators, system analyst and computer hardware engineers are also considered as users.

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Applications of Computer

Explain the applications of computer.

The following are the applications of computer:

Computers in Science: Scientists use computers to help develop hypotheses, collect and test data and exchange information electronically.

- Scientists also use computers to simulate complex events, such as predicting how earthquakes will affect buildings or how pollution will change weather patterns etc.

Computers in Engineering:

- The role and importance of computer are very significant in each field of engineering, e.g. computer engineering, civil engineering, electrical engineering, mechanical engineering, etc.
- Auto CAD (automatic computer aided design) is the computer software which is used by the engineers, designers, and architectures for designing of vehicles, mapping of buildings, roads, bridges, and industries, etc.
- Engineers draw the sketch of each point of the object. We can define a complete sample of the object with the help of a 3D image by the help of Auto CAD.

Computers in Manufacturing:

- All manufacturing process can also be monitored and controlled by a computer, e.g. computer shows and control temperature of the manufacturing process.
- Some industries use robots (a programmable machine which automatically handles hard tasks) where human access is not possible.

Computers in Law:

- The uses of computer in law chamber are very important for keeping the record of the cases.

Computers in Defense:

- Computer also play a great role in the army and defense system.
- All the new weapons and defense appliances are run and controlled by the computer.
- For example, atomic technology, missiles technology, tanks, radars, and airforce is totally computerized.
- Coordinates system is used to target the correct position of the enemy, which is online possible by the computer.

Computers in Music:

- Computes have become a creative tool for musicians.
- The Musical Instrument Digital Interface (MIDI) allows electronic instruments and computers to be connected.
- MIDI keyboard is used to produce music.

Computers in Education

- In education, computers are used to provide Computer Based Training (CBT) to the students.
- CBT are programs include text, graphics and sound.
- Audio and Video lectures are recorded on the CDs.
- CBT is a low cost solution for educating people to train a large number of people easily.
- Computer plays the key role in the filed of distance learning.
- Different online exams can be conducted using the computers.

Computers Aided Learning (CAL)

- Computer aided learning is the process of using information technology to help teaching and enhance the learning process and the quality of teaching.
- The use of computer can reduce the time that is spent on preparing teaching material.

Computers in Business

- The use of computer technology in business provides many facilities.
- Businessmen are using computers to interact with their customers anywhere in the world.
- Many business tasks are performed more quickly and efficiently using computers.
- Computers also help them to reduce the overall cost of their business.
- An organization can use computers for marketing their products. Computer is also used to manage distribution system, advertising and selling activities.
- Many stock exchanges use computers to conduct bids

Computers in Medical Field

- Specialized hospital management software is used to automate the day to day procedures and operations at hospitals.
- Hospital management systems can store data about patients.
- Computers are used to store data about patients, their diseases & symptoms, the medicines that are prescribed.
- Computers can monitor pulse, blood pressure and body temperature etc.

Computers at Home:

- Computer can be used to manage Home Budget.
- At home computers are used to calculate expenses, income and generate some cool reports.
- An important use of computers at home is playing games.
- People can manage the office work at home.
- At home, People can use the computers for the Internet.

Computer in Office:

Each and every organization or department uses a computer in their office to managing the work, e.g. type document, preparing of presentation, manages accounts matter, drawing maps, send emails and browsing.

A computer makes easy our work in the office instead of typing machine. It saves our time.

Input and Output Devices

Input devices

4. What is an Input device? Explain different types of Input devices.

Input Devices: An input device is a hardware or peripheral device used to send data to a computer.

- Input devices allow users and other applications to send data into the computer for processing.
- The input is provided to the computer using an input device, and must be translated to a form that the computer can understand. The translation is done by the input interface of the input device.
- The data can be in the form of text, audio, video, etc.
- The following are different input devices:
    - Keyboard
    - Pointing devices
    - Scanners
    - Voice recognition System
    - Vision Input System
    - Touch Screen

1. **Keyboard:** The Keyboard is the primary input device for entering text and numbers.
    - It allows the user to input alphabets, numbers, punctuation symbols and other characters.
    - The most common keyboard layout, which has 101 keys arranged in the following groups:

- **Alphanumeric Keypad**: It consists of keys for English alphabets A to Z , 0 to 9 numbers, and special characters like + − / * ( ) etc.

- **Function Keys:** There are twelve function keys labeled F1, F2, F3... F12. The functions assigned to these keys differ from one software package to another.

- **Special-function Keys** These keys have special functions. Ex: Enter Key, Spcaebar, Backspace, Deltete, Insert, Shift, Caps Lock, Tab, Alt, Esc.

- **Numeric Keypad :** Numeric keypad is located on the right side of the keyboard and consists of keys having numbers (0 to 9) and mathematical operators (+ − * /) defined on them.

- **Cursor Movement Keys:** These are arrow keys and are used to move the cursor in the direction indicated by the arrow up, down, left, right.

2. Mouse: It is also called as pointing device.

- A device that controls the movement of the cursor or pointer on a display screen.
- The mouse is important for graphical user interfaces because user can simply point to options and objects and click a mouse button.
- It can be used to select menu commands, size windows, start programs etc.

- The mouse has two buttons: 1.The left button
  2. The Right button

Mouse Actions:

- Left Click : Used to select an item.
- Double Click : Used to start a program or open a file.
- Right Click : Used to display a set of commands.
- Drag and Drop : It allows to select and move an item from one location to another.

3. Trackball:

- Trackball is a device that is a variant of the mouse but has the functionality of mouse.
- It is easy to use and takes less space than a mouse.
- Trackball is built in laptops since there is no space for the mouse to move on the lap.
- Track balls come in various sizes- small and big.
- Instead of moving the whole device to move the cursor on computer screen, track ball requires the ball to be rotated manually with a finger.
- The cursor on the computer screen moves in the direction in which the ball is moved.

4. Light(electronic) Pen:

- It is a light sensitive pen-like input device and is used to select objects directly on the computer screen.
- It is used for making drawing, graphics and for menu selection. Figures and drawings can be made by moving the pen on computer screen.
- When the pen is moved on the screen, light from the screen at the location of pen causes the photocell to respond.
- The electric response is transmitted to the computer that can identify the position on screen at which the light pen is pointing.

5. Touch Screen:

- A touch screen is an electronic visual display that can detect the presence and location of a touch within the display area.
- It allows the user to make selections by simply touching the display screen.
- It is an input device that accepts input when the user places a fingertip on the computer screen.

- The computer selects the option from the menu of screen to which the finger points.
- Touch screen are used in applications like Automated Teller Machine (ATM), public information computers like hospitals, airline reservation, railway reservation, supermarkets etc.

6. **Microphone:** A microphone is a hardware peripheral that allows computer users to input audio into their computers.

7. **Barcode Reader:** It is used in grocery stores & shopping malls.

- A barcode reader is a photoelectric scanner that reads the bar codes of a product.
- A bar code is a set of lines of different thicknesses that represent a number.
- Bar code readers work by shining a beam of light on the lines that make up the bar code and detecting the amount of light that is reflected back
- The bar code reader reads the bar code of a product and displays and sends the information about the product into the computer. For example the price of the product.

8. **Optical Scanner:** An optical scanner is a hardware input device that allows a user to take an image or text and convert it into a digital file, allowing the computer to read or display the scanned object.

- It is an optical input device and uses light as an input source to convert an image into an electronic form that can be stored on the computer
- Scanner is an input device used for direct data entry from the source document into the computer system.
- It converts the document image into digital form so that it can be fed into the computer.
- Capturing information like this reduces the possibility of errors during large data entry.
- Two types of scanner: –Flatbed
  –Hand-held

Flatbed Scanner: Flatbed scanners look similar to a small photocopier with the document remaining flat and stationary during the scanning.

- The document to be scanned is placed on the glass top, which activates the light beam beneath the glass top and starts the scan from left to right.
- These are largely used to scan full page documents.

Hand-held scanners: Hand-held scanners are used for entering text and images that are less than a page wide.

- These are portable and are placed over the document to be scanned.
- Hand-held scanners are adequate for small pictures and photos but are difficult for entire pages.

Fingerprint Scanner: A fingerprint scanner or fingerprint reader is a hardware device that verifies a user or enters password information by scanning their finger.

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Output Devices

What is an output device? Explain different types of output devices.

- Any peripheral that receives or displays output from a computer.
- An output device is a device used to send output or result to the user.

An output unit of a computer system performs the following functions:

- 1.It accepts the results produced by the computer, which are in coded form
- 2. It converts these coded results to human acceptable (readable) form.
- 3. It sends the converted results to the user.

- The commonly used output devices are Monitor, Printer, Speakers and Plotters.

Output devices are classified as follows:

- Monitor
- Printer
- Plotter
- Speakers

Softcopy Devices

Softcopy output devices give screen displayed output that is lost when the computer is shut off. Some examples of soft copy output devices are monitors, projectors, video display terminals.

Soft copy is an electronic display of digital information, such as a monitor. A digital .JPG file, a digital Word document, an email attachment are all examples of soft copy.

1. Monitor:

- Monitor is a common output device.
- The monitor is provided along with the computer, to view the displayed output.
- The monitor displays the video and graphics information generated by the computer through the video card.
- Monitors are very similar to televisions but usually display information at a much higher resolution.

Monochrome Monitor:

- A monochrome monitor is a type of CRT computer display which was very common in the early days of computing, from the 1960s through the 1980s, before color monitors became popular.

i. They are still widely used in applications such as computerized cash register systems.

- Monochrome monitors actually display two colors, one for the background and one for the foreground.
- The colors can be black and white, green and black, or amber and black.

Color monitors: Color monitors can display from 16 to over 1 million different colors.

•Color monitors are called as RGB monitors because they accept three separate signals --red, green, and blue.

Types of Monitors:

ii. Cathode Ray Tube (CRT)
iii. Liquid Crystal Display (LCD)
iv. Light-emitting Diode (LED)

Cathode Ray Tube (CRT) Monitors:

- The monitors that use cathode ray tube for producing the output are known as CRT monitors.
- These are not potable.
- These monitors are of heavy weight.
- They require more power.
- They require more space.
- These are very large in size.
- These produce heat.
- These are not expensive.

Liquid Crystal Display (LCD) Monitors:

- LCD stands for Liquid Crystal Display Monitors.
- These monitors which use liquid crystals for producing the image.
- These monitors require less space.
- These are lighter in weight.
- These are used in different applications.
- These monitors consume low power.
- These are expensive.

Light-emitting Diode (LED) Monitors:

- LED stands for Light Emitting Diode.
- An LED monitor produces brighter images.
- They are slimmer
- LEDs don't use mercury like some other backlighting methods.
- These monitors require less space
- These are Lighter
- These are Very expensive
- These monitors provide higher contrast and better quality than LCD monitor.

2.Speakers:

- A hardware device connected to a computer's sound card that outputs sounds generated by the computer.

- Speakers can be used for various sounds meant to alert the user, as well as music and spoken text.
- Speakers are produce output in the form of sounds.
- They are built-in or externally connected to the computer.
- Speakers are used to listen to audio from the output.
- The signals are sent to the speakers via the sound card that translate the digital sound back into analog signals.
- Audio response provides audio output from the computer.
- Audio output device like speakers, headset or headphone is used for audio output sound from computer.

3.Headphones: •Headphones give sound output from the computer.
•They are similar to speakers, except they are worn on the ears so only one person can hear the output at a time.

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Hardcopy Devices

What are Hard-copy devices?

Hard-copy devices are the entities that produce the output over the paper.
Hard Copy: the output obtained in a tangible form on a paper or any surface is called hard copy output.
Hard Copy Devices: The devices that generate hard copy output are called hard copy devices.

Hard- copy devices are divided into two types:

1. Printers
2. Plotters

PRINTER

Printers are used for graphics and line drawings where plotters are exclusively used for line drawings i.e. computer aided drawings or the maps or such kind of things.

1.Printer:•Printer is an external hardware device responsible for taking computer data and generating a hard copy of that data.
•Printers are one of the most used peripherals on computers and are commonly used to print text, images, and photos.

Printing Speed: The printing speed is measured in:
•cps(characters per second)
•lpm(lines per minute)•ppm(pages per minute.

•Printers are classified into two categories:

1. Impact printer
2. Non-impact printer

1. **Impact Printers:** The impact printers print the characters by striking them on the ribbon which is then pressed on the paper.
Advantages:

- These are less expensive.
- These printers can print multiple copies.

Disadvantages:

- These are noisy.
- The Print quality is low.
- These are poor in graphics printing.
- These are slow.

Impact printers are of two types:

- Character printers
- Line printers

Character Printers: Character printers are the printers which print one character at a time. These are two types: •Dot Matrix Printer(DMP)
•Daisy Wheel

Dot Matrix Printers:

•Creates characters by striking pins against an ink ribbon.

- Each pin makes a dot, and combinations of dots form characters and illustrations.
- These printers print one character at a time.
- The speed of dot matrix printer lies between 200 and 600 characters per second (cps) and their resolution ranges from 72 to 360 dpi.
- Dot matrix printers normally come in two sizes—80 column printer and 132 column printer.
- Dot matrix printers can print alphanumeric characters, special characters, charts and graphs. They can print only in black and white.
- Some dot matrix printers can print in both directions- left to right and right to left.
- Dot matrix printers are commonly used for printing in applications like payroll and accounting.

Advantages:

- Inexpensive
- Widely Used
- Other language characters can be printed.

Disadvantages: •Slow Speed
•Poor Quality

Daisy Wheel Printers:

- Similar to a ball-head typewriter, this type of printer has a plastic or metal wheel.
- Head is lying on a wheel and pins corresponding to characters are like petals of Daisy (flower name) that is why it is called Daisy Wheel Printer. Daisy-wheel printers produce letter-quality print but cannot print graphics.
- These printers print one character at a time.
- They produce letter quality document which is better than a document printed by a dot matrix printer.
- The speed of the daisy wheel printers is about 100cps.
- These printers are slow, can only print text.

Advantages: •More reliable than DMP
•Better quality
•The fonts of character can be easily changed

Disadvantages: •Slower than DMP
•Noisy
•More expensive than DMP

Line Printers: Line printers are the printers which print one line at a time. These are two types : •Drum Printer
•Chain Printer

Drum printers:

- This printer is like a drum in shape so it is called drum printer.
- The surface of drum is divided into number of tracks.
- Total tracks are equal to size of paper i.e. for a paper width of 132 characters, drum will have 132 tracks.
- A character set is embossed on track.
- One rotation of drum prints one line.
- Drum printers are fast in speed and can print 300 to 2000 lines per minute.

- **Advantages:** •Very high speed

  Disadvantages: •Very expensive

  i. Characters fonts cannot be changed

Chain Printer:

•In this printer, chain of character sets are used so it is called Chain Printer.
•A standard character set may have 48, 64, or 96 characters.

•**Advantages:** Character fonts can easily be changed.
• Different languages can be used with the same printer.

•**Disadvantages:** •Noisy

Non-Impact Printers: • These printers do not hit or impact a ribbon to print. It uses ink spray, toner powder or inkless.

- Non-impact printers print the characters without using ribbon.
- These printers print a complete page at a time so they are also called as Page Printers.

Advantages:

- Non-impact printers are faster and quieter than impact printers.
- These produce high quality output and can be used for printing text and graphics both in black and white and color.
- These are fast.

- Ink-Jet printers and laser printers are non-impact printers.

Disadvantages:

- These are more expensive.
- These printers occupies a lot of space.
- The cost of operation is high.

These printers are of two types:

ii. Laser Printers
iii. Inkjet Printers

Ink-Jet Printers:

- Inkjet printers are non-impact character printers.
- Inkjet printer print characters by spraying small drops of ink onto paper.
- They are the most common type of computer printer used by consumers.
- They produce high quality graphics and text.
- Ink-jet printers are commonly found in homes and offices.
- These printers are print high quality printing.
- These are more reliable.
- These are expensive.
- These are slow as compared to laser printer.

Laser Printers: Laser Printer (Toner-based)

- These are non-impact page printers.
- They use laser lights to produce the dots needed to form the characters to be printed on a page.
- Laser printers process and store the entire page before printing and are also known as page printers.
- The laser printer can print 5-24 pages of text per minute and their resolution ranges from 400 to 1200 dpi.
- They are faster and expensive than impact printers.
- These are very high speed printers.
- These printers can provide very high quality output
- Laser printers can give good graphics quality.
- These printers can support many fonts and different character size
- Laser printers are used in applications requiring high quality voluminous printing.

PLOTTER

- The plotter is a computer printer for printing vector graphics
- Plotters are used in applications such as computer-aided design such as diagrams, layouts, specification sheets and banners
- The plotter is capable of producing color drawings in a matter of minutes
- Plotters differ from printers in that they draw lines using a pen
- Plotters are considerably more expensive than printers
- Plotters are of two kinds:

- Drum plotter
- Flatbed plotter.

Drum Plotter:

In a drum plotter, pens mounted on the carriage are stationary and move only horizontally; for vertical movement, the drum on which the paper is fixed moves clockwise and anti-clockwise.

Flatbed Plotter:

- In a flatbed plotter, the paper is fixed on a flat bed.
- The paper is stationary and the pens mounted on the carriage move horizontally and vertically to draw lines.
- Plotters are mainly used for drawings in AUTOCAD (Computer assisted drafting), Computer Aided Design (CAD) and computer Aided Manufacturing (CAM) applications.

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Primary Storage or Primary Memory

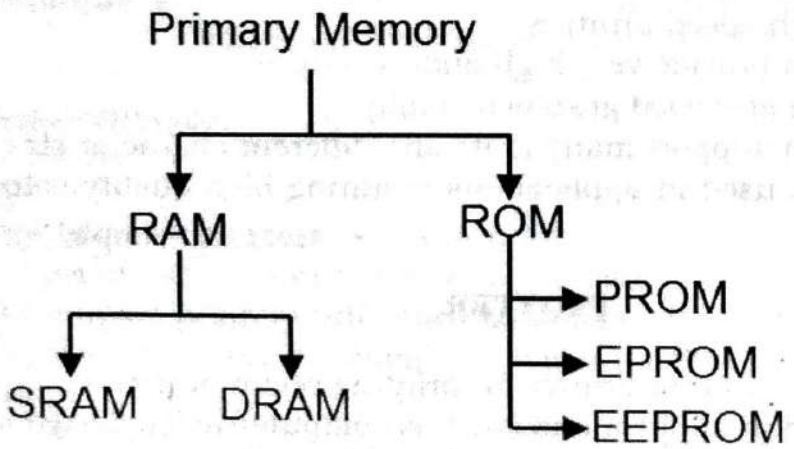
Explain **Primary storage or Primary Memory**

Primary Memory/Internal storage:

- **Primary memory** is also known as **main memory** or may also refer to "*Internal memory.*" and primary storage.
- It is directly accessed by the processor.
- It is central to the operation of a computer.

It is two types:

1. **RAM (Random Access Memory)**
2. **ROM (Read Only Memory)**



a) **RAM (Random Access Memory):**

- RAM stands for Random Access Memory

- It is also called *"direct access memory"*.
- Random access means that each individual byte in entire memory can be access directly.
- RAM is used to store data and instructions temporarily.
- A program must be loaded into RAM before execution.
- RAM is volatile memory. It means that its contents are lost when the power is turned off.
- RAM is read/write memory. CPU can read data from RAM and write data to RAM.
- RAM is also called main memory or primary storage.
- The amount of data that can be stored in RAM is measured in bytes.
- Most desktop computers typically have 2 GB to 4 GM of RAM. It also allows the addition of more memory if needed.
- It is two types: 1. DRAM 2. SRAM

1. Dynamic Random Access Memory (DRAM):

- It is another form of RAM used as Main Memory,
- It retains(holds) information for a short period (a few milliseconds) even though the computer powered
- DRAM needs to be refreshed periodically to maintain. Otherwise, it may lose data.
- CPU cannot access the data from DRAM while it is in the process of refreshing or recharging.
- The DRAM is cheaper, but it can store much more information
- It is also slower and consumes less power than SRAM.

2. Static RAM (SRAM)

- It retains data as long as the computer powered. (Static Ram does not need to be refreshed).
- SRAM is more expensive and consumes more power than DRAM.
- It used as Cache Memory in a computer system.
- SRAM uses more transistors as compared to DRAM.
- It is faster compared to DRAM.

Different between SRAM and DRAM

SRAM

- It is faster than DRAM.
- It is more expensive as compared to DRAM.
- It does not need to be power - refreshed.
- It utilizes less power.
- It holds data indefinitely as long as the computer is turned on.
- It is more complex and less compact.

DRAM

- It is slower than SRAM.
- It is less expensive.
- It has to be refreshed after each read operation.
- It utilizes more power.
- It holds data dynamically not indefinitely.
- It is less complex and more compact.

ROM (Read Only Memory) :

- Read-only memory (ROM) is a type of storage medium that permanently stores data.
- It contains the programming needed to start a PC, which is essential for boot-up.
- ROM is "Non-Volatile Memory" that retains data without the flow of electricity.

- It is 3 types: 1. PROM 2. EPROM 3. EEPROM

1. PROM (Programmable Read Only Memory):

- PROM stands for programmable ROM.
- PROM is read-only memory that can be modified only once by a user.
- The difference between a ROM and a PROM is that a ROM comes with pre-written by the computer manufacturer whereas PROM manufactured as blank memory
- On a blank PROM and we can enter the desired contents using a PROM program.
- It can be programmed only once and is not erasable.
- It can be programmed only once and read many.
- PROM is also nonvolatile memory(permanent).
- PROM can be programmed by PROM burner.

2. EPROM (Erasable Programmable Read Only Memory)

- This memory type retains its contents until it exposed to intense ultraviolet light that clears its contents, making it possible to reprogram the memory.

3. Electrically Erasable Programmable Read Only Memory(EEPROM):

- EEPROM can be burned (programmed) and erased by first electrical waves in a millisecond.
- A single byte of a data or the entire contents of device can be erased.
- To write or erase this memory type, we need a device called a PROM burner.

RAM	ROM
It is a read-write memory.	It is read only memory.
Used to store the data that has to be currently processed by CPU temporarily.	It stores the instructions required during bootstrap of the computer.
It is a volatile memory.	It is a nonvolatile memory.
Random Access Memory.	Read Only Memory.
Data in RAM can be modified.	Data in ROM can not be modified.
RAM sizes from 64 MB to 4GB.	ROM is comparatively smaller than RAM.
RAM is a costlier memory.	ROM is comparatively cheaper than RAM.
Types of RAM are static RAM and dynamic RAM.	Types of ROM are PROM, EPROM, EEPROM.

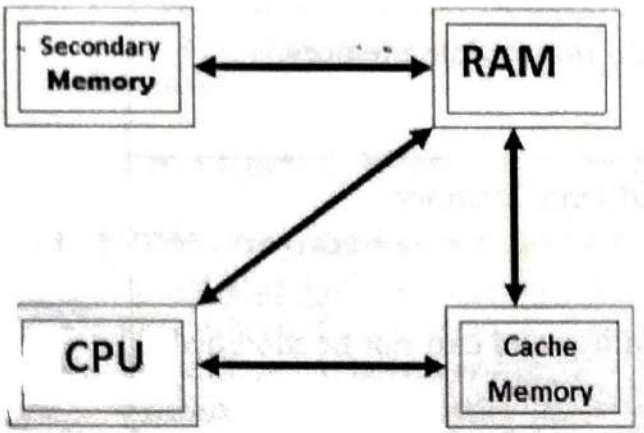
Other types of Memories:

Flash Memory:

Flash memory, stores data even when the power is turned off. ROM is a form of flash memory used in PCs. Other machines that use flash memory are digital cameras.

Cache Memory:

- ✓ Cache memory is a high speed memory placed in between CPU and RAM.
- ✓ It is used for increasing the operating speed of the computer.
- ✓ It balances the difference in operating speed of RAM and CPU.
- ✓ It is 5-10 times faster than RAM.
- ✓ It stores data and instructions which are frequently required by CPU.
- ✓ When CPU requires any data it searches the data in Cache and if not found it searches in RAM.
- ✓ The condition in which CPU finds data in Cache is known as hit and if not found the condition is known as miss.



Secondary Memory or Storage

Explain Secondary Memory or Storage.

- ✓ It is also known as External memory/Storage memory/Auxiliary memory/Backup memory.
- ✓ It is used for storing data and instructions permanently.
- ✓ It is also used for carrying data from one computer to another.
- ✓ Secondary memory is not directly accessible to CPU.
- ✓ It is usually slower for read/write, cheaper and used in larger storage capacity.
- ✓ Example: Hard disk, CD, DVD, Pen drive, etc.

Types of Secondary memory are:

Magnetic memory
Optical memory

Magnetic Storage Devices OR Magnetic Memory: Magnetic memory uses the property of magnet for storing data. It is in use since first generations of computer. It contains data storing surface coated by magnetic oxide. Magnetic memory is further divided as follows:

Magnetic Tape: (TertiaryStorage)

- Magnetic tape contains thin plastic ribbon, only one side of the ribbon is used for storing data.
- The data storing side is coated by magnetic oxide.
- It is a sequential access memory. So, the data read/write speed is slower.
- It is mainly used for storing audio, video and back-up data.
- It is highly reliable.
- It requires magnetic tape drive for reading and writing data.
- It has the storage capacity of 100MB-200GB.
- The width of the ribbon also varies from 4mm-1inch
- It stores large volume of data.
- These are portable.
- It is inexpensive.
- The life of magnetic tape is very high.

Magnetic Disk:

- Magnetic disk contains a circular disc made of metal or plastic.
- Both side of the disc is used for storing data.
- The disc is coated by magnetic oxide. The disc is divided into multiple concentric circles known as track.
- Tracks are further divided into small area known as sectors. Data are stored in sectors.
- Example: Hard disk, floppy disk, zip disk, super disk, Winchesterdisk, jaz disk.

(OR)

- A magnetic disk is a storage device that uses a magnetization process to write, rewrite and access data.
- It is covered with a magnetic coating and stores data in the form of tracks and sectors.
- Hard disks, zip disks and floppy disks are common examples of magnetic disks.
- A magnetic disk primarily consists of mechanical arm.
- The mechanical arm is used to read from and write to the disk.
- The data on a magnetic disk is read and written using a magnetization process.
- Data is organized on the disk in the form of tracks and sectors, where tracks are the circular divisions of the disk.
- Tracks are further divided into sectors that contain blocks of data.
- All read and write operations on the magnetic disk are performed on the sectors.

Magnetic Drum: It contains a metallic drum coated by magnetic oxide on the outer surface of the drum, data is stored in this surface. It was in use in first and second generations of computer.

Cartridge Tape:

- Tape cartridge is a storage device that contains a spool of magnetic tape used to store different kinds of data, from audio and video files.
- Each cartridge is designed to fit into computer system.
- A tape cartridge is the magnetic tape storage cartridge used to store digital data on magnetic tape, which is packaged in cassettes and cartridges.
- Tape cartridges are also known as data cartridges.

Hard Disks:

- The hard disk drive is the main, and largest, data storage device in a computer.
- The disk ismade of aluminum. Both sides of the disk is used for storing data.
- The data storing surface is coated by magnetic oxide. Each data storing surface contains separate read/write head
- Hard disk is also known as hard drive because both data storing disk and data read/write components are combined together.
- It has the storage capacity of few megabytes to tera byte.
- It stores the data permanently in a computer.
- These are less portable than floppy disk.
- These provide quick access for data.
- These are inexpensive.

Floppy Disk:

- It is soft magnetic disk.
- It contains single plastic disk.
- Floppy disks are portable.
- Floppy disks are slower to access than hard disks.
- These have less storage capacity.
- These are much less expensive
- It requires floppy drive for its operation.
- The storage capacity of the floppy is 1.44MB.
- Floppy is used to transfer the data from one computer to another.
- Floppy disks are available in 3 standard sizes. (a) 8 Inch (b) 5¼ Inch (c) 3½ Inch.
- These are portable.

Optical Memory OR Optical storage devices:

- Optical memory uses light beam for its operation.
- It is developed in fourth generation of computer.
- It is mainly used for storing audio/video, backup as well as for carrying data.
- It requires optical drive for its operation.
- Its read/write speed is slower compared to hard disk and flash memories.
- Optical storage has one major advantage over magnetic storage: durability.
- Optical discs are not vulnerable to data loss due to power failure like volatile memory;
- Another advantage of optical disc is that the storage medium is inexpensive to manufacture. The materials are mainly aluminium foil and plastic.
- Example: CD, DVD etc

The most common optical memory or optical storage formats are:

CD- ROM : CD stands for Compact Disk – Read Only Memory.

- A compact disc is a portable storage medium that can be used to record, store and play back audio, video and other data in digital form.
- CD contains hard circular plastic, single side of this plastic is coated by aluminium, which stores data.
- It is protected by additional thin plastic covering.
- CD required CD drive for its operation.
- A standard compact disc has a capacity of 80 minutes of audio, or 650 megabytes (MB) to 700 MB of data.
- It stores large volume of data.
- In CD-ROM, we can't perform write operation, because it is read only memory.
- This alloy stores data.
- Types of CD are:
  - ✓ CD-R: It is a blank CD in which data can be stored once. After storing data it is converted into CD-ROM.
  - ✓ CD-ROM: It cannot be erased or updated
  - ✓ CD-RW: It can be erased and used for multiple times.
  - ✓ **DVD:**
  - It stands for Digital Versatile Disk.
  - It has the storage capacity of 4.7GB to 17GB.
  - Its shape and size is similar to CD but the difference in storage capacity
  - It requires DVD drive for its operation.
  - Read/write speed of DVD is slower than that of CD. Types of DVD are:
  - DVD-R
  - DVD-ROM
  - DVD-RW

    DVD can also be classified as:
  - Single sided single layered DVD (4.7GB)
  - Single sided dual layered DVD (7-8GB)
  - Dual sided single layered DVD (9GB)
- Dual sided dual layered DVD (17GB)

****

Off-line Storage:•Also known as disconnected storage or removable storage.
•It is a computer data storage on a medium or a device that is not under the control of a processing unit.
•It must be inserted or connected by a human operator before a computer can access it again.

Off-line Storage Examples:

–FloppyDisk
–Zipdiskette
–USBFlashdrive
–Memorycard

Zip Diskette:

- It is a magnetic memory.
- It was developed by Iomega that functions like a Standard 1.44" floppy drive.

- It is the modification of floppy disk.
- It has the storage capacity of 100MB and 250MB.
- It requires Zip disk drive for its operation.
- •Now it less popular as users needed larger storage capabilities.

USB Flash Drive:

•A small, portable flash memory card that plugs into a computer's USB port and functions as a portable hard drive.

•Flash drives are available in sizes such as 256MB, 512MB, 1GB, 5GB, and16GB and are an easy way to transfer and store information.

- **Pen drive:**
  It is a flash memory.
- It is mainly used for transferring data.
- It has faster read/write speed.
- Pen drive has storage capacity of few MB-GB.
- A pen drive is a plug and play device.
- A pen drive can be connected with the computer through USB port.

****

UNIT II

Number System and Computer Codes

Explain Number System.

- *Aset of values used to represent different quantities is known as* ***Number System****".*
- For example, a number system can be used to represent the number of students in a class or number of viewers.
- The digital computer represents all kinds of data and information in binary numbers. It includes audio, graphics, video, text and numbers.
- The total number of digits used in a number system is called its base or radix. For example: The base is written after the number as subscript such as (512)10.

Number systems are of two types:

1. Positional number system
2. Non-Positional number system

➢ **Positional number system:**

- In positional number system, there are only a few symbols called digits.
- A digit is a numeral symbol, used in combinations, to represent numbers in positional numeral systems.
- These symbols represent different values, depending upon the position they occupy in a number.
- The value of each digit in such a number is determined by three considerations:
  - The digit itself

•The position of the digit in the number
•The base or radix of the number system

The following are the positional number systems:

- Decimal number system
- Binary number system
- Octal number system
- Hexadecimal number system
- The decimal number system is used in general.
- The computers use binary number system.
- The octal and hexadecimal number systems are used in the computer.

2.**Nonpositional Number System:**

- It is also called as non-place value systems.
- In a non-positional number system, each number in each position does not have to be positional itself
- In this system of numeration in which the placement of a numeral digit does not change its value.
- For example in Roman numerals, the symbol V always means "five" whether it occurs last in a numeral string (e.g., XXV), next to last (XXVI), third from last (XXVII) or fourth from last (XXVIII).

****

1. Explain Decimal number System

Decimal number System

- In our day-to-day life, we use decimal number system. It is also called Hindu-Arabic, or Arabic number system.
- The Decimal Number System consists of ten digits from 0 to 9. These digits can be used to represent any numeric value.
- The base of decimal number system is 10. It is the most widely used number system.
- The value represented by individual digit depends on position of the digit.
- It also requires a dot (decimal point) to represent decimal fractions.
- In decimal number system, successive positions to the left of the decimal point represents units or ones, tens, hundreds, thousands and so on and each position represents a specific power of the base, which is 10.
- Each number in this system consists of digits which are located at different positions.
- The position of first digit towards left side of the decimal point is 0. The position of second digit towards left side of the decimal point is 1.
- Similarly, the position of first digit towards right side of decimal point is -1. The position of second digit towards right side of decimal point is -2 and so on.
- The value of the number is determined by multiplying the digits with position and adding the results. This method is known as expansion method.

The weights and positions of each digit of the number 453 are as follows:

Position	2	1	0
Weights	10^2	10^1	10^0
Face value	4	5	3

The above table indicates that:

The value of digit 4 = 4×10^2 = 400

The value of digit 4 = 5×10^1 = 50

The value of digit 3 = 3×10^0 = 3

The actual number can be found by adding the values obtained by the digits as follows:

$$400 + 50 + 3 = (453)10$$

Example: The weights and positions of each digit of the number 139.78 are as follows.

Position	2	1	0		-1	-2
Weights	10^2	10^1	10^0	.	10^{-1}	10^{-2}
Face Value	1	3	9		7	8

The above table indicates that:

The value of digit 1 = 1×10^2 = 100

The value of digit 3 = 3×10^1 = 30

The value of digit 9 = 9×10^0 = 9

The value of digit 7 = 7×10^{-1} = 0.7

The value of digit 8 = 8×10^{-2} = 0.08

The actual number can be found by adding the values obtained by the digits as follows:

$$100 + 30 + 9 + 0.7 + 0.8 = 139.78$$

*****

Explain Binary Number System

Binary Number System

- Digital computer represents all kinds of data and information in the binary system.
- It is the natural way most digital circuits represent and manipulate numbers.
- Binary Number System consists of two digits 0 and 1.
- The short form of binary digit is called a bit.
- Each digit or bit in binary number system can be 0 or 1.
- Its base is 2.
- A combination of binary numbers may be used to represent different quantities like 1001.
- In binary number system, successive positions to the left of the binary point represents units or ones, twos, fours and so on and each position represents a specific power of the base, which is 2.
- The weight of each position is a power of 2.

For Ex: The place value of the digits according to position and weight is as follows:

Position	3	2	1	0
Weights	2^3	2^2	2^1	2^0

Example: Convert (101.101)2

Position	2	1	0		-1	-2	-3
Face Value	1	0	1	.	1	0	1
Weight	2^2	2^1	2^0		2^{-1}	2^{-2}	2^{-3}

101.1012 $= 1 \times 2^2 + 0 \times 2^1 + 1 \times 2^0 + 1 \times 2^{-1} + 0 \times 2^{-2} + 1 \times 2^{-3}$

$= 1 \times 4 + 0 + 1 \times 1 + ½ + 0 + 1/8$

$= 4 + 0 + 1 + 0.5 + 0.125$

$= (5.625)10$

****

Explain Octal Number System.

Octal Number System

- Octal Number System consists of eight digits from 0 to 7.

- The base of octal system is 8. Each digit position in this system represents a power of 8. Any digit in this system is always less than 8.
- Octal number system is used as a shorthand representation of long binary numbers.
- For example, the number 6418 is not valid in this number system as 8 is not a valid digit.

The place value of each digit according to position and weight is as follows.

Position	4	3	2	1	0
Weight	8^4	8^3	8^2	8^1	8^0

Example: convert (45)8 to decimal number

(45)8 = $4 \times 8^1 + 5 \times 8^0$

= $4 \times 8 + 5 \times 1$

= $32 + 5$

= (37)10

****

Explain Hexadecimal number system.

Hexadecimal number system

- The Hexadecimal Number System consists of 16 digits from 0 to 9 and A to F. (A=10; B=11; C=12; D=13; E=14; F=15).
- The alphabets A to F represent decimal numbers from 10 to 15.
- The base of this number system is 16. Each digit position in hexadecimal system represents a power of 16.
- For example the number (764)16 is valid hexadecimal number.

The place value of each digit according to position and weight is as follows:

Position	4	3	2	1	0
Weights	16^4	16^3	16^2	16^1	16^0

Example: Convert (3A)16 to decimal number

(3A)16 = $3 \times 16^1 + A \times 16^0$

= $3 \times 16 + 10 \times 1$

$48 + 10$ = (58)10

SOFTWARE

Software and its needs:

- Without software a computer cannot work.
- It enables us to interact with a computer, its hardware to perform tasks.
- Similarly, any software can be used only when it is stored inside a storage device, i.e. a hardware.
- Hence, both hardware and software equally important for a computer.

.....

Types of Software

Explain types of Software.

- Software refers to a collection of programs.
- Program is a sequence of instructions.

Software is divided into two major categories:

1. System Software
2. Application Software

System Software: It designed to control the operation and extend the processing capability of a computer system.

- It controls the entire computer system including the hardware.
- The system software also controls and runs the application software.
- Make the operation of a computer system more effective and efficient.
- Help hardware components work together and provide support for the development and execution of application software.
- Programs included in a system software package are called system programs and programmers who prepare them are called system programmers.
- Examples of system software are operating systems, programming language translators, utility programs, and communications software.

Application Software: It is designed to solve a specific problem or to do a specific task.

- Solve a specific problem or do a specific task.
- Programs included in an application software package are called application programs.
- The programmers who prepare them are called application programmers.
- Examples of application software are word processing, spreadsheets, Database Management Software, Presentation Software etc.

.....

System Software

Explain types of System Software.

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- Without software a computer cannot work.
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- The programmers who prepare them are called application programmers.
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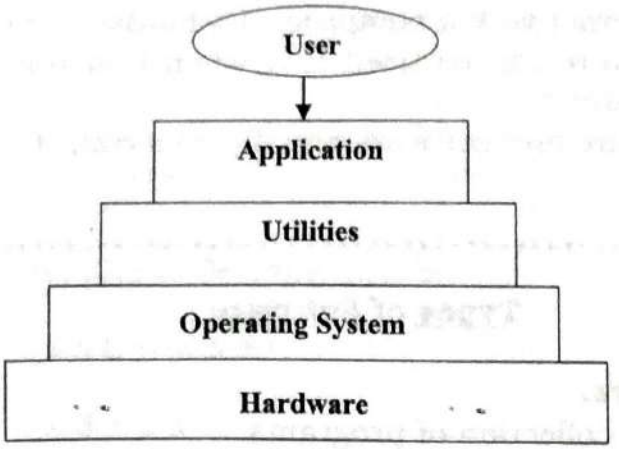
System Software

Explain types of System Software.

The following are the types of system software:

Operating System:

- The Operating system is a kind of System Software.
- Operating system (OS) is the software that provides an interface between the computer hardware and the user of the computer.
- It is the first software that is loaded into computer's main memory. Windows is the most commonly used operating system.



OS has two goals:

1. To make the computer system convenient and easy to use for the user.
2. To use the computer hardware in an efficient way.

- Examples of Operating systems are Microsoft Disk Operating System (MS-DOS), Windows, Linux etc.

Utility Software: This software is designed to perform basic maintenance tasks on a computer.

Types of Application Software

Explain types of Application Software.

Application software, or simply **applications**, are called productivity programs or end-user programs because they enable the user to complete tasks, such as creating documents, spreadsheets, databases and publications, doing online research, sending email, designing graphics, running businesses, and playing games.

Application software is specific to the task it is designed for and can be as simple as a calculator application or as complex as a word processing application.

Examples of **Application Software are** Word processing software, Spreadsheets Software, Presentation, Graphics, CAD/CAM, Sending email etc.

Types of Application Software: According to the need of users it is categorized into following types:

1) **Presentation Software:** Presentation program is a program to show the ɹrmation in the form of slides. We can add text, graphics video and images to ·s to make them more informative.

The software has three components:

1) Text editor for inputting and formatting text.

2) Inserting graphics, text, video and other multimedia files.

3) Slideshow to display the information.

Presentation software helps the presenter to present their ideas with ease and visual information easy to understand.

Example of presentation software: Microsoft's PowerPoint and Apple's Keynote.

1) **Spreadsheet Software:** Spreadsheet software is used to perform manipulate and calculations.

- In spreadsheet software data is stored in intersection row and column. The intersection of row and column is known as a cell.
- The cell labelled with the row and column label like A1, A2 etc.
- We can also define the data value like text, date, time, number.
- It provides formulas and functions to perform calculations like arithmetic operations, logical operations, text operation etc.
- It provides charts, graphs to display data graphically.
- For example Microsoft Excel, lotus 1-2-3 for windows and number for MAC OS.

2) **Database Software:** Database is a collection of data related to any applications.

- Database Management System (DBMS) software tool used for storing, modifying, extracting and searching for information within a database.
- MySQL, MS Access, Microsoft SQL Server and Oracle is the example of database application Software.

3) **Graphics Software:** Graphics software is used to produce advertisements, posters and pictures etc. for example CorelDraw and Photoshop are popular graphics software.

- Multimedia is a combination of text, graphics, audio and Multimedia software used in the editing of video, audio and text.

Multimedia software used in the growth of business, educations, information, remote system and entertainment.

6) Word Processing Software: Word Processing software is used to manipulate, format the text, to create memos, letters, faxes and documents.

- Word Processing Software is used to format and beautify the text.
- It provides a list of features, like thesaurus, provides synonyms, antonyms and related words for chosen word or phrase.
- Find and replace feature enables users to scan and replace selected words or phrases in the document.

MSWORD INTRODUCTION

The Micro Soft Office suite is an essential collection of desktop applications that can assist user in many projects. It is a complete package includes number of application softwares : These are msword,excel,powerpoint,access.

The main components of Ms-office suit are

- Microsoft word
  Microsoft word is a word processing program that enable user to create, edit, save and print documents.
- Microsoft Excel
  Microsoft Excel is a spreadsheet program that lets user manipulate the data by using number of built in functions.
- Microsoft PowerPoint
  Microsoft PowerPoint is a presentation program which helps to create presentations for business settings.
- Microsoft Access
  Microsoft access is a database management program that lets user to store and organize data in a set of tables.

WORD PROCESSING

Word processing enables the users to create and edit documents. To perform word processing, we need a computer, a special program called a word processor and a printer. A word processor enables us to create a document, store it electronically on a disk, display it on a screen, modify it by entering commands and characters from the keyboard, and print it on a printer.

The most popular examples of word processors are Ms-Word, Word-pad and Notepad. We can make changes without retyping the entire document. It we make a typing mistake, we simply back up the cursor and correct our mistake. If we want to delete a paragraph, we simply remove it, without leaving a trace. It is equality easy to insert a word, sentence, or paragraph in the middle of a document. Word processors also make it easy to move sections of text from one place to another within a document, or between documents. When we have made all the changes we want, we can send the file to a printer to get a hardcopy.

FEATURES OF WORD PROCESSING

Word processing supports the following basic features that enable user to manipulate and format documents in more sophisticated ways.

a) **WYSIWYG** (What you see is what you get): With WYSIWYG, A document appears on the display screen exactly as it will look when printed.
b) **Insert Text:** Allows user to insert text anywhere in the document.
c) **Delete Text** : Allows user to erase characters, words, lines, or pages as easily as we can cross them out on paper.
d) **Cut and Paste** : Allows user to remove a section of text from one place in a document and insert it somewhere else.
e) **Copy**: Allows user to duplicate a section of text.

f) **Page size and margins**: Allows user to define various page sizes and margins, and the word processor will automatically readjust the text so that it fits.

g) **Search and replace** : Allows user to direct the word processor to search for a particular word or phrase. We can also direct the word processor to replace one group of characters with another everywhere that the first group appears.

h) **Word Wrap** : The word processor automatically moves to the next line when we have filled one line with text, and it will readjust text if we change the margins.

i) **Print :** Allows user to send a document to a printer to get hardcopy.

j) **Font Specifications**: Allows user to change fonts within a document.

k) **Graphics:** Allows user to embed illustrations and graphs into a document.

l) **Headers, footers and page numbering :** Allows user to specify customized headers and footers that the word processor will put at the top and bottom of every page. The word processor automatically keeps track of page numbers so that the correct number appears on each page.

m) **Spell checker :** A utility that allows us to check the spelling of words. It will highlight any words that it does not recognize.

APPLICATIONS OF WORD PROCESSING

Word processing has a variety of users and applications within the business world, home and education.

- Businesses organizations have tendency to have their own format and style for any documents produced. In business, word processing is used for producing business letters, applications, memos, reference documents etc.
- In the home, word processing tends to be educational, planning or business related, dealing with assignments or work being completed at home, like writing short stories, letter writing, resume creation and so on.
- In education, Word processing is used in a variety of different ways in the production of assignments, notes, exams, and for practicing its uses.

$A_1+B_1+C_1= 2$

$(A+B)^2 = A^2+B^2+2AB$

~~S=A+B+C/2~~

Srbgnr govt arts and science degree college autonomous

srbgnr govt arts and science degree college autonomous

SRBGNR GOVT ARTS AND SCIENCE DEGREE COLLEGE AUTONOMOUS

Srbgnr Govt Arts And Science Degree College Autonomous

SRBGNR GOVT ARTS AND SCIENCE DEGREE COLLEGE AUTONOMOUS

This is the computer. Using the computer we have to run daily works. Using the computer give the input done process on that and produce the result.

DIFFERENT GROUPS

A. B.SC
   1. MCCS
   2. MSCS
   3. MSDS

B. B.A
   1. EPCA
   2. HECA

C. B.COM
   1. COMPUTERS
   2. GENERAL

B.SC I YEAR MPCS STUDENTS MARKS REPORT

ROLL NUMBER	STUDENT NAME	TM	EM	MM	PM	CS	TOT
102	AA	78	45	56	77	56	312
101	BB	67	64	56	67	89	343
103	CC	56	46	65	67	78	312
104	DD	45	36	37	56	54	228
105	EE	45	45	54	56	44	244

B.SC I YEAR MPCS STUDENTS MARKS REPORT

ROLL NUMBER	STUDENT NAME	TM	EM	MM	PM	CS	TOT
102	AA	78 45 56 77 56					312
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103	CC	56	46	65	67	78	312
104	DD	45	36	37	56	54	228
105	EE	45	45	54	56	44	244

To change Text Alignment

- Select the text you wish to modify
- Select one of the four Alignment options from the Paragraph group on the Home Tab.
  - **Align Text Left**: Aligns all the selected text to the left margin.
  - **Center**: Aligns text an equal distance from the left and right margins.
  - **Align Text Right**: Aligns all the selected text to the right margin.
  - **Justify**: Justified text is equal on both sides and lines up equally to the right and left margins. Traditionally many books, newsletters, and newspapers use full-justification.
    - You can also use keyboard shortcuts.
      - Ctrl + L → Left Align
      - Ctrl + R → Right Align
      - Ctrl + E → Center
      - Ctrl + J → Justify

By Sales person

Current Sales people & Monthly Ad Sales (Print, TV, Web)

JIM	$19,252	$25,560	$13,745
ALEN	$5,550	$13,470	$27,800

HERE INSERT TEXT BOX AND NEXT MAKE TABLE INSIDE THE TEXTBOX

Format Painter

The format painter in msword is a handy feature for formatting text. It allows you to copy formatting that is applied to one piece of text and apply it to others.

- Click on HOME Tab → Clipboard → Format Painter

Note

- ✓ **Double click on the format painter button to apply the same formatting to multiple pieces of text in the document.**
- ✓ **To turn off the format painter, press escape key or click the format painter button again.**

I applied format painter on above table.

KEYBOARD COMMNDS IN EACH PAGE

EDITING DOCUMENTS

Editing a document refers to changing or modifying the contents of an existing file. In simple terms, editing deals with

1. Adding additional contents into an existing document
2. Deleting some contents from an existing document.
3. Modifying contents by replacing them with some other contents.

To enter text just starts typing. The text will appear where the blinking cursor is located. Move the cursor by using the arrow buttons on the keyboard or positioning the mouse and clicking the left button. The keyboard shortcuts listed below are also helpful when moving through the text of a document.

MOVE ACTION	KEYSTROKE
Beginning of the file	HOME
End of the file	END
Top of the document	Ctrl + HOME
End of the document	Ctrl + END

Additional Contents: Text can be inserted in a document at any point using any of the following methods.

- **Type Text:** Put your cursor where you want to add the text and start typing.
- **Copy** and **Paste** Text: Highlight the text you wish to copy and right click and click copy, put your cursor where you want the text in the document and right click and click paste.
- **Cut** and **Paste** text: Highlight the text you wish to copy, right click, and click Cut, put your cursor where you want the text in the document and right click, and click paste.
- **Drag** text: Highlight the text you wish to move, click on it and drag it to the place where you want the text in the document.

Deleting some contents from an existing document

To delete some content from existing document, it must be selected or highlighted first. Select the text by dragging the mouse over the desired text while keeping the left mouse button depressed. Or hold down the SHIFT key on the keyboard while using the arrow buttons to highlight the text.

SELECTION	TECHNIQUE
Whole Word	Double click within the word
Whole Paragraph	Triple click within the paragraph
Several words or lines	Drag the mouse over the words, or hold down SHIFT while using the arrow keys.
Entire document	Choose Editing → Select → Select All from the Ribbon OR Press Ctrl + A

KEYBOARD COMMNDS IN EACH PAGE

SHORT CUT KEYS

A Special key combination that causes a specific command to be executed. Typically, shortcut keys combine the Ctrl or Alt keys with some other keys. In word 2010 function keys(F1, F5) are also often used as shortcut keys.

Below is a listing of all the major shortcut keys used in Microsoft Word 2010.

Shortcut Key	Description
Ctrl + A	Select all contents of the page.
Ctrl + B	Bold highlighted selection.
Ctrl + C	Copy selected text.
Ctrl + D	Open the font preferences window.
Ctrl + E	Aligns the line or selected text to the center of the screen.
Ctrl + F	Open Find box.
Ctrl + G	Open Go to box.
Ctrl + H	Open replace box.
Ctrl + I	Italic highlighted selection.
Ctrl + J	Aligns the selected text or line to justify the screen.
Ctrl + K	Insert Hyperlink.
Ctrl + L	Aligns the line or selected text to the left of the screen.
Ctrl + M	Indent the paragraph.
Ctrl + N	Open a new blank document.
Ctrl + O	To open an existing file.
Ctrl + P	Open the print window.
Ctrl + R	Aligns the line or selected text to the right of the screen.
Ctrl + S	To Save a document.
Ctrl + T	Create a hanging indent.
Ctrl + U	Underline highlighted selection.
Ctrl + V	Paste.
Ctrl + W	Close a document.
Ctrl + X	Cut selected text.
Ctrl + Y	Redo the last action performed.
Ctrl + Z	Undo last action.
Ctrl + Shift + L	Quickly create a bullet point.
Ctrl + Shift + F	Change the font.
Ctrl +]	Increase selected font +1pts
Ctrl + [	Decrease selected font – 1pts
Ctrl + Del	Deleted word to right of cursor.
Ctrl + Backspace	Deletes word to left of cursor.

SHORT CUT KEYS

A Special key combination that causes a specific command to be executed. Typically, shortcut keys combine the Ctrl or Alt keys with some other keys. In word 2010 function keys(F1, F5) are also often used as shortcut keys.

Below is a listing of all the major shortcut keys used in Microsoft Word 2010.

Shortcut Key	Description
Ctrl + A	Select all contents of the page.
Ctrl + B	Bold highlighted selection.
Ctrl + C	Copy selected text.
Ctrl + D	Open the font preferences window.
Ctrl + E	Aligns the line or selected text to the center of the screen.
Ctrl + F	Open Find box.
Ctrl + G	Open Go to box.
Ctrl + H	Open replace box.
Ctrl + I	Italic highlighted selection.
Ctrl + J	Aligns the selected text or line to justify the screen.
Ctrl + K	Insert Hyperlink.
Ctrl + L	Aligns the line or selected text to the left of the screen.
Ctrl + M	Indent the paragraph.
Ctrl + N	Open a new blank document.
Ctrl + O	To open an existing file.
Ctrl + P	Open the print window.
Ctrl + R	Aligns the line or selected text to the right of the screen.
Ctrl + S	To Save a document.
Ctrl + T	Create a hanging indent.
Ctrl + U	Underline highlighted selection.
Ctrl + V	Paste.
Ctrl + W	Close a document.
Ctrl + X	Cut selected text.
Ctrl + Y	Redo the last action performed.
Ctrl + Z	Undo last action.
Ctrl + Shift + L	Quickly create a bullet point.
Ctrl + Shift + F	Change the font.
Ctrl +]	Increase selected font +1pts
Ctrl + [	Decrease selected font – 1pts
Ctrl + Del	Deleted word to right of cursor.
Ctrl + Backspace	Deletes word to left of cursor.

Ctrl + End	Moves the cursor to the end of the document.
Ctrl + Home	Moves the cursor to the beginning of the document.
Ctrl + Spacebar	Resect highlighted text to the default font.
Ctrl + 1	Single spaces lines
Ctrl + 2	Double space lines
Ctrl + 5	1.5 line spacing
Ctrl + F2	Display the print preview.
F1	Open Help
F5	Open the find, replace, and go to window in Microsoft Word.
F7	Spell-Check and Grammar Check on selected text or document.
F12	Save as.
Shift + Insert	Paste.
Shift + Alt + D	Insert the current date.
Shift + Alt + T	Insert the current time.

CH. JAMUNA RANI

For this page typing I Applied the commands from Design → Watermark, Page color, Page Borders

SR & BGNR Arts & Science Degree College(A), Khammam

BRIDGE COURSE - 2019-2020

The following students are attended the Bridge Course

No.	Hall Ticket No.	Name	Signature
1)	2620-4372	V. Saispurthi	V. Saispurthi
2)	2620-4277	K. Maheshwari	K. Maheshwari
3)	2620-4325	O. Vineela	O. Vineela
4)	2620-4247	D. Devipriya	D. Devipriya
5)	2620-4235	CH. RAJESH	CH. Rajesh
6)	2620-4245	K. Gopichand	K. Gopi
7)	2620-4250	E. Narendar Naik	E. Naren
8)	2620-4225	Boda. Sai	Sai
9)	2620-4228	B. Ganesh	B. Ganesh
10)	2620-4264	G. Vamsi krishna	G. Vamsi
11)	2620-4329	P. Vijay	P. Vijay
12)	2620-4307	M. Sai Jashwanth	M. Sai Jashwanth
13)	2620-4326	P. Venu Gopal	P. Venu Gopal
14)	2620-4328	P. Vamshee krishna	P. Vamshee
15)	2620-4242	Ch. Bhargav	Ch. Bhargav
16)	2620-4380	Y. Saichaitanya	Y. Saichaitanya
17)	2620-4255	G. Surendra lokesh	G. Surendra lokesh
18)	2620-4212	B. Shiva	B. Shiva
19)	2620-4291	L. Devendar	L. Devendar
20)	2620-4372	P. Jayanth	P. Jayanth

21.	2620-4321	M. Umasekhar	M Umasekhar
22.	2620-4207	B- Sai Kumar	B- Sai Kumar
23.	2620-4273	K. Laxmam	K. Laxmam
24.	2620-4284	K. Udhay	K. Udhay
25.	2620-4204	A. Gangothri	A. Gangothri
26.	2620-4360	S. hema gayathri	S. hema Gayathri
27.	2620-4366	T. pujitha	T. pujitha
28.	2620-4205	A. Archana	A. Archana
29.	2620-4231	B. Manikanta	B. Manikanta
30.	2620-4246	D. Meghana Bai	D. Meghana Bai

MS-Word-2007

INTRODUCTION :- Microsoft Word 2007 is an Application software and a part of MS office package.

It is a full-featured word processing program that allows you to create documents such as letters, brochures, newsletters, reports, and web pages.

Finding text :-

To find text, follow the given steps :

Step1 :- click the Home tab.

Step2 :- click Find from editing group. The find and replace dialog box appears.

Step3 :- In the find what box, write the text you would like to search for.

Step4 :- click more button to get more search options that will help you refine your search.

Step5 :- click find next for finding further occurences. press Esc to stop searching.

Replacing text:-

To replace text with some alternate text, follow the given steps:

Step1:- click the Home tab.

Step2:- click Replace from Editing group. The find and Replace dialog box appears.

Step3:- In the find What box, write the text you would like to search box.

Step4:- In the Replace with box write the text you want to be replaced with.

Step5:- click More button to get more search options.

Step6:- Select the required search options to refine your search, and also select direction of search. close the dialog box when you have finished your work.

Step7:- click Replace to replace All option, it will replace all occurrences of word 'Grade' with 'class'

Microsoft office help Button:- If you could not find how to use any word feature, you can just click the microoffice Help [?] button at the right corner on the Ribbon.

Inserting Hyperlinks:- Hyperlinks help you to move quickly from one page to another page by simply clicking a link. The links may be in the form of text or picture. The mouse generally takes the shape of hand over a hyperlink. The target may be a picture, a webpage, or another file.

Using the Hyperlink:- Hyperlink helps you to move quickly from the current from document to linked page. The process of moving from one document to the other or from one document to a web page is called following the link.

Applying Drop cap:-

Drop cap is a feature in MS Word. Which lets you create a large dropped initial capital letters.

To create a drop cap letter, follow the given steps:

Step1:- click in the paragraph that you want to begin with a drop cap letter.

Step2:- click insert tab.

Step3:- click Drop cap from text group and choose the option from the list.

Applying column formatting:-

To apply column formatting, following the given steps:

Step1:- Select the text you want to format in columns.

Step2:- click the page Layout tab on the Ribbon.

Step3:- click columns from page setup group.

Step4:- choose the number of columns you want from the list that opens up, for example, TWO.

The selected text gets divided in the specified number of columns.

Setting line spacing:-

Line spacing refers to the amount of vertical space between the lines of text in a paragraph.

Step1:- Select the paragraph for which you want to set the line spacing.

Step2:- click the Home tab.

Step 3:- Click Line Spacing from paragraph group and choose the required number of spacing from the list to adjust the space between lines.

Setting page orientation:-

Orientation means the layout position of the paper for printing. There are two ways to set orientation of a page in a MS-Word document.

1. Portrait
2. Landscape.

Setting page margin:-

Page margin refers to the blank space around the edges of the page. This space seen on all the four sides of the page is called top margin, bottom margin, left margin and right margin.

→ All the text and images are inserted inside the margin.

Mail Merge:-

In MS Word using the Mail Merge feature with the help of Mail Merge feature, you can send the same letter or

to no. of people.

The process of combining the main document with the DataSource is called Merging. The final document is called the Merged Document.

- creating main document.
- creating data source.
- Merging main document and Data Source.

MS-Excel-2007

INTRODUCTION :-

An excel document is called Workbook. These tables with rows and columns are called spreadsheets.

Spreadsheets:

A spreadsheet is defined as a large sheet which contains data and information, arranged in rows and columns. It is also known as a Worksheet.

It is a rectangular table (or grid) of information, which often contains financial information of an organization.

A Computer Spreadsheets is also known as an electronic spread sheets. It is used for analyzing and manipulating sets of numbers.

Through a computer spreadsheet, you can perform different calculations at very high speed using different formulae.

A Spreadsheet program is designed to perform general computation tasks.

Screen Elements :-

Title bar :- This is on top of the screen. Title bar displays the name of the current document and current program. It also contains minimize, maximize and close buttons.

Quick Access Toolbar :-

This is present on the title bar. This helps to do common tasks with just one click.

Ribbon :-

The Ribbon contains two parts: Tabs and Groups. Each tab contains commands arranged in different groups.

office button :-

This contains different options to work in MS-Excel.

Formula bar :-

The formula bar is made up of two parts: Name box and formula box.

Sheet tab :-

The worksheet names appear on the sheet tab. The active sheet name is displayed in bold letters. You can move from one sheet to another by clicking at it's tab.

Status bar:- This displays current status of the cells and zoom option.

Worksheet:- An excel document is called a workbook. The blank worksheet is a part of the workbook.

Each workbook contains several worksheets. The default names of workbook are book1, book2, and son, and the worksheet names are sheet1, Sheet2, and so on.

Part of a worksheet:-

A worksheet is made up of columns and rows representing cells.

Cells:- cells are the boxes created by the intersection of rows and columns.

Each cell has its own address for reference. The address consists of column letter followed by the row number.

Active cell:-

The cell with a dark boundary around it is called active cell. The boundary is called the cell pointer. It indicates the current active cell.

Name Box:- The name of the active cell appears in the name Box. To make a cell active you can either use the mouse or arrow keys on the keyboard to select it.

Range of cells:-

The group of neighbouring cells that touch each other is called Range of cells.

It generally takes the shape of a rectangle or square. For example a range C3:G12 starts from the cell C3 and extends till cell G12.

Selecting / deselecting cells:-

To select a range using mouse, follow the given steps.

1. Point your mouse to the first cell of the range to be selected.

Hold down the left mouse button and drag it diagonally until all the required cells are selected.

To select a range using the keyboard, press the shift key and move to the lower last cell of the range using arrow keys.

Entering data in cells:-

When you type data in an active cell, the data also appears in the formula box. At the same time two buttons (cancel and enter) appear to the left of the formula box.

The cancel box [x] is used to cancel data entry before pressing the enter key.

You can also use the Esc key. The enter button [✓] is used to complete the data entry.

Operations on cells and columns/Rows:-

You can perform different operations like editing, copying, deleting, moving, resizing formatting in cells and cell contents. Editing means overwriting or modifying cell contents.

Overwriting cell contents:-

To overwrite the contents of a cell, select the cell and type the new data in the cell and press the enter key. Your data gets modified.

Modifying cell contents partially :-

Minor errors in the contents of a cell can be corrected by partial modification.

Deleting cell contents :-

You can delete the contents of a cell very easily.

To delete cell contents, follow the given steps :

Step1 :- Select the cells (s).

Step2 :- click Home tab on the Ribbon -

Step3 :- Click Clear from the Editing group.

Step4 :- click Clear Contents option from the list.

Copying cell contents : Copy and Paste :-

To copy the contents of cell, follow the given steps :-

Step1 :- Select the cell or range. for Example, f5.

Step2 :- click the Home tab on the ribbon.

Step3 :- click Copy from the clipboard group.

Step4 :- Click the cell when you want the same content. for Example, f10.

Moving cell contents: cut and paste:-

To move the contents of a cell, follow the given steps.

Step1:- Select the cell or range for example f5.

Step2:- click the Home tab on the Ribbon.

Step3:- click cut from the clipboard group.

Step4:- click the cell where you want to move the content for ex f10.

Step5:- click paste from the clipboard group.

Inserting cells:-

To insert cells, following the given steps.

Step1:- Select the cell or range of cells where you want to insert cells. for Ex f6.

Step2:- click Home tab on the Ribbon.

Step3:- click insert from the cells group and then click insert cells option from the list. The Insert dialog box appears.

Step4:- Now, choose the required option from the dialog box. for Ex, Shift cell down and click the ok button.

Appling Boorders:-

To apply boorders, follow the given steps:-

Step1:- Select the cell or range.

Step2:- Click Home tab on the Ribbon.

Step3:- Click Boorders from the fort group.

Step4:- choose the boorder style from the list.

formatting data:-

To make a worksheet more attractive and readable, you need to format the data.

formatting numbers:-

To format numbers, use the commands in the number group under the Home tab.

MS - powerpoint 2007

INTRODUCTION:-

Powerpoint is a software program to enhance oral presentation. It operates like an old-fashioned slide show, but uses modern technology in the form of computers and digital projectors rather than a slide projector.

1. Blank and Recent:- This creates a blank presentation

2. Installed Templates:- Installed templates are the saved presentations which include different themes and layouts that help to do your work quickly and easily.

3. Installed Themes:- Installed themes are the set of pre-designed format of text, colour schemes and graphics effects.

Inserting picture from clipArt:- To insert a clip Art in your slide, follow the given steps:

Step1:- click the insert tab.

Step2:- clip Art from Illustrations group. The clip Art task pane appears on the right hand side of the window.

Commerce

26-(3)

24. Bridge courses (Department wise)

Year	Subject	Dates from ….. to….	No. of periods	Name of the Lecturer	No. of students attended	Remarks
2016-2017	Financial Accounting and Business Organization and Management	04/07/2016 to 15/07/2016	20	Sri.N.Madhava Rao Dr.P.Sarveswara Rao SriB.Veera Brahamam and Smt S.Bindusree	14	
2017-2018	Financial Accounting and Business Organization and Management	15/07/2017 to 05/08/2017	20	Sri.N.Madhava Rao Dr.P.Sarveswara Rao SriB.Veera Brahamam and Smt S.Bindusre	13	
2018-2019	Financial Accounting and Business Organization and Management	02/7/2018 to 19/07/2018	20	Dr.S.Narayana Swamy B.Setram S.Ramesh and D.Venkata Ramana	51	
2019-2020	Financial Accounting and Business Organization and Management	03/07/2019 to 17/07/2019	20	Dr.S.Narayana Swamy B.Setram S.Ramesh and D.Venkata Ramana	73	
2020-2021	Financial Accounting and Business Organization and Management	03/02/2021 to 13/02/2021	20	Dr.P.Sarveswara Rao Dr.A.Satyavathi Dr.Sreenivas Dadigala B.Setram	72	
2021-22	Financial Accounting and Business Organization and Management	23-10-2021 To 18-11-2021	22	Dr.P.Sarveswara Rao Dr.A.Satyavathi Dr.Sreenivas Dadigala B. Setram D Venkata Ramana S. Ramesh Dr. S. Narayanaswamy	75	

SR&BGNR GOVERNMENT ARTS & SCIENCE COLLEGE (A)
KHAMMAM

Format for Bridge courses Academic Year 2016-17 to 2021-22

Department of Commerce

Name of the Faculty: Dr. P. Sarveswara Rao, Assistant Professor

Academic Year	Group	Subject	No. of periods taken
2016-17	B.Com.(Gen)	Business Organisation	08
	B.Com.(CA)	Business Organisation	05
2017-18	B.Com(G)T/m&E/m	Business Organisation	07
	B.Com.(CA)	Business Organisation	05
2020-21	BBA	Principles of Management	21
	B.Com.(CA)	BOM	42
2020-21	BBA	Financial Accounting and Business Organisation and Management	22
	B.Com.(CA)		22

SR&BGNR GOVERNMENT ARTS & SCIENCE COLLEGE (A)
KHAMMAM

Format for Bridge courses Academic Year 2016-17 to 2017-18

Department of Commerce

Name of the Faculty: B.V. Brahmam, Assistant Professor

Academic Year	Group	Subject	No. of periods taken
2016-17	B.Com.(Gen)	Financial Accounting-I	06
	B.Com.(CA)	Financial Accounting-I	06
2017-18	B.Com(G)T/m&E/m	Financial Accounting-I	05
	B.Com.(CA)	Financial Accounting-I	06

SR&BGNR GOVERNMENT ARTS & SCIENCE COLLEGE (A)
KHAMMAM
Format for Bridge courses Academic Year 2020-21 To 2021-22
Department of Commerce
Dr. A. Rama Satyavathi, Assistant Professor

Academic Year	Group	Subject	No. of periods taken
2020-21	B.Com(CA)	IT	18
	BBA	Business Economics	38
2021-22	B.Com(CA)	Financial Accounting and Business Organisation and Management	22
	BBA		22

SR&BGNR GOVERNMENT ARTS & SCIENCE COLLEGE (A)
KHAMMAM

Format for Bridge courses Academic Year 2018-19 to 2021-22

Department of Commerce

Name of the Faculty: Dr. S. Narayana Swamy, Assistant Professor

Academic Year	Group	Subject	No. of periods taken
2018-19	B.Com(G)T/m&E/m	Business Organisation	17
	B.Com.(CA)	Business Organisation	30
2019-20	BBA	Principles of Management	11
	B.Com.(CA)	BOM	60
2021-22	BBA	Financial Accounting and Business Organisation and Management	22
	B.Com.(CA)		22

SR&BGNR GOVERNMENT ARTS & SCIENCE COLLEGE (A)
KHAMMAM
Format for Bridge courses Academic Year 2018-19 to 2021-22
Department of Commerce
Name of the Faculty: S. Ramesh, Assistant Professor

Academic Year	Group	Subject	No. of periods taken
2018-19	BBA	Business Economics	19
	B.Com.(G) &CA	Business Economics	31
2019-20	BBA	Business Economics	10
	B.Com.(G) &CA	Business Economics	40
2020-21	BBA	Principles of Management	42
	B.Com.(G) &CA	BOM	11
2021-22	BBA	Financial Accounting and Business Organisation and Management	22
	B.Com.(CA)		22

SR&BGNR GOVERNMENT ARTS & SCIENCE COLLEGE (A)
KHAMMAM
Format for Bridge courses Academic Year 2020-21To 2021-22
Department of Commerce
Dr. Sreenivas Dadigala, Assistant Professor

Academic Year	Group	Subject	No. of periods taken
2020-21	B.Com(CA)	Financial Accounting-I	11
2021-22	**BBA**	Financial Accounting and Business Organisation and Management	22
	B.Com.(CA)		22

SR&BGNR GOVERNMENT ARTS & SCIENCE COLLEGE (A)
KHAMMAM

Format for Bridge courses Academic Year 2018-19 to 2021-22

Department of Commerce

Name of the Faculty: D. Venkata Ramana, Assistant Professor

Academic Year	Group	Subject	No. of periods taken
2018-19	B.Com(G)T/m&E/m	Financial Accounting-I	17
	B.Com.(CA)	Financial Accounting-I	20
2019-20	B.Com.(CA)	Financial Accounting-I	20
2021-22	B.Com.(CA)	Financial Accounting and Business Organisation and Management	22

24. BRIDGE COURSES

Year	Subject	Dates from ..... to. ..	No. of periods	Name of the Lecturer	No. of students attended	Remarks
2016-17	Political Science	2-8-2016 to 11-8-2016	08	Dr. Md. Zakirullah	48	
2016-17	Political Science	2-8-2016 to 11-8-2016	08	Dr. B. Dhana Murthy	27	
2016-17	Political Science	2-8-2016 to 11-8-2016	08	Ch. Jagadeeswara Rao	26	
2017-18	Political Science	5-7-2017 to 7-7-2017	03	Dr. Md. Zakirullah	24	
2017-18	Political Science	5-7-2017 to 7-7-2017	03	Dr. B. Dhana Murthy	30	
2017-18	Political Science	5-7-2017 to 7-7-2017	03	Ch. Jagadeeswara Rao	30	
2018-19	Political Science	2-7-2018 to 7-7-2018	06	Dr.B.V.Reddy	28	
2018-19	Political Science	2-7-2018 to 7-7-2018	06	B.Lalith Babu	25	
2019-20	Political Science	2-7-2019 to 6-7-2019	04	Dr.B.V.Reddy	22	
2019-20	Political Science	2-7-2019 to 6-7-2019	04	Y.Ravivardhan	21	
2020-21	Political Science	7-12-2021 to 14-12-2021	04	Dr.B.V.Reddy	24	Online mode
2020-21	Political Science	7-12-2021 to 14-12-2021	04	Y.Ravivardhan	26	Online mode
2021-22	Political Science	01-10-2021 to 08-102021	05	Dr.B.V.Reddy	30	
2021-22	Political Science	01-10-2021 to 08-102021	05	Dr.B.Dhana Murthy	32	
2021-22	Political Science	01-10-2021 to 08-102021	05	Y.Ravivardhan	32	

23. REMEDIAL TEACHING

Format for Remedial Classes (Department wise)
Academic Year: 2016-17 to 2020-21
Department of political science

Year	Subject	Dates from... to	No. of periods	Name of the Lecturer	No. of students attended	% of students shown improvement	Remarks
2016-17	Political Science	14-9-2016 to 24-9-2016	10	Dr.Md. Zakirullah	30	75	
		14-9-2016 to 24-9-2016	10	Ch.Jagadeeswara Rao	30	73	
		14-9-2016 to 24-9-2016	10	Dr.B.Dhana Murthy	20	74	
2017-18	Political Science	10-10-2017 to 23-10-2017	11	Ch.Jagadeeswara Rao	30	75	
		10-10-2017 to 23-10-2017	10	Dr.B.Dhana Murthy	16	80	
		10-10-2017 to 23-10-2017	10	Dr.Md. Zakirullah	14	85	
2018-19	Political Science	18-2-2019 to 1-3-2019	10	Dr.B.V.Reddy	21	70	
		18-2-2019 to 1-3-2019	10	Y.Ravivardhan	21	65	
2019-20	Political Science	21-10-2019 to 2-11-2019	10	Dr.B.V.Reddy	16	70	
		21-10-2019 to 2-11-2019	10	Y.Ravivardhan	23	75	

25. STUDENT SEMINARS

Record of Student seminars (Department wise)

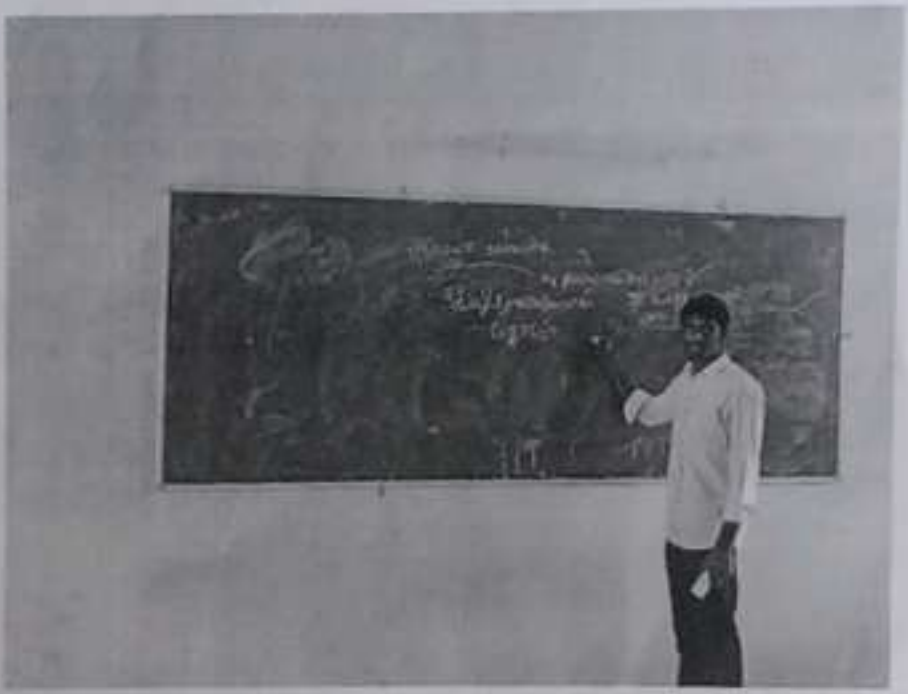
S.No.	Subject	Date	Topic of the seminar	No. of students presented	Name of the Lecturer	Remarks
2016-17						
1	Political Science	26-11-2016	Non Alignment	02	Dr.B.Dhana Murthy	
2		23-01-2017	Terrorism	02	Dr.Md.Zakirullah	
3		27-01-2017	Plato Philosophy	02	Ch.Jagadeeswara Rao	
4		01-02-2017	Theory of Social Contract	02	Dr.B.Dhana Murthy	
5		06-02-2017	Aristotle	02	Dr.Md.Zakirullah	
6		09-02-2017	Theory of Separation of Powers	02	Ch.Jagadeeswara Rao	
7		21-02-2017	Centre State Relations	01	Dr.B.Dhana Murthy	
2017-18						
8		09-08-2017	Elements of the State	02	Dr.Md.Zakirullah	
9		24-08-2017	Characteristics of the Sovereignty	01	Ch.Jagadeeswara Rao	
10		07-09-2017	Plato Ideal State	01	Dr.B.Dhana Murthy	
11		16-09-2017	World War I	01	Dr.Md.Zakirullah	
12		26-10-2017	Features of the Indian Constitution	01	Ch.Jagadeeswara Rao	
13		08-11-2017	Powers of the President	01	Dr.B.Dhana Murthy	
14		16-11-2017	Theory of Separation of Powers	01	Dr.B.Dhana Murthy	
15		24-01-2018	Human Rights	01	Dr.Md.Zakirullah	
2018-19						
16		23-08-2018	Powers and Functions of the	01	B.Lalitha Babu	

			Supreme Court			
17		20-09-2018	Features of the Anarchism	01	Dr.B.V.Reddy	
18		08-10-2018	Features of the Indian Constitution01	01	B.Lalitha Babu	
19		06-02-2019	Features of the Democracy	01	Dr.B.V.Reddy	
20		25-02-2019	Features of the Marxism	01	Dr.B.V.Reddy	
21		06-03-2019	Election Reforms	01	Y.Ravivardhan	
22		20-03-2019	Globalization	01	Y.Ravivardhan	
23		09-04-2019	Gandhian Philosophy	01	Dr.B.V.Reddy	
2019-20						
24		27-07-2019	Koutilya Ardhasastra	01	Dr.B.V.Reddy	
25		27-07-2019	Fundamental Rights	01	Y.Ravivardhan	
26		30-07-2019	World War II	01	Y.Ravivardhan	
27		22-02-2020	United Nations Organization	01	Dr.B.V.Reddy	
28		28-02-2020	Non Alignment	01	Y.Ravivardhan	
29		29-02-2020	Multy Culturalism	01	Dr.B.V.Reddy	
30		29-02-2020	Powers and Functions of the Supreme Court	01	Y.Ravivardhan	
31		29-02-2020	Ambedkar philosophy	01	Dr.B.V.Reddy	
32		07-03-2020	Powers and Functions of the Judiciary	01	Y.Ravivardhan	
2021-22						
33		09-11-2021	World war I	01	Dr.B.Dhana Murthy	
34		12-11-2021	Kautilya	01	Y.Ravivardhan	
35		24-11-2021	Historical theory	01	Dr.B.V.Reddy	
36		14-12-2021	Cold War	01	Dr.B.Dhana Murthy	
37		27-12-2021	Dr. BR Ambedkar	01	Y.Ravivardhan	
38		28-01-2022	Nehru Democracy	01	Dr.B.Dhana Murthy	

SR&BGNR Govt. Arts & Science College (A), Khammam

Department of Political Science

Students Seminar- 2019-20



P. Narasimha Rao

III BA (HPP)

Topic: Koutilya's Ardhasastra

Date: 27-07-2019

SR&BGNR Govt. Arts & Science College (A), Khammam

Department of Political Science

Students Seminar- 2019-20

K. Ravindra

III BA (HEP)

Topic: United Nations Organization

Date: 22-02-2020

SR&BGNR Govt. Arts & Science College (A), Khammam

Department of Political Science

Students Seminar-2019-20

G. Rohith

I BA (HEP)

Topic: Multi Culturalism

Date: 29-02-2020

SR&BGNR Govt. Arts & Science College (A), Khammam

Department of Political Science

Students Seminar-2019-20

B. Prasad

II BA (HEP)

Topic: Powers and Functions of the Supreme Court

Date: 29-02-2020

SR&BGNR Govt. Arts & Science College (A), Khammam

Department of Political Science

Students Seminar-2019-20

G. Rohith

I BA (HEP)

Topic: The Judiciary

Date: 07-03-2020

26

SR&BGNR GOVT. DEGREE COLLEGE
(Autonomous), KHAMMAM

BRIDGE COURSE REGISTER

FROM 2016 -2017

TO

2020-2021

DEPARTMENT OF HISTORY

చరిత్ర - అర్థం - వివరణ

చరిత్ర మనిషి సాధించిన ప్రగతి పదానికి అద్దం పట్టే ప్రస్తుత పథం. అనాథిగా మనిషి పరిణామక్రమాన్ని చిత్రీకరించే రికార్డు "హిస్టరీ" అనే ఆంగ్లపదం "ఇస్తోరియా" అనే గ్రీక్ మరియూ "హిస్టోరియా" అనే లాటిన్ పదాల నుండి వచ్చింది.

హిస్టరీ అంటే పరిశోధన, పరిశీలన, విచారణ అని అర్థం. మనిషి పరిణామాన్ని వివరించే పరిశోధన అని చెప్పవచ్చు. ఒక విధానంగా విషయ పరిశీలన చేసిన తరువాత ఒక క్రమపద్ధతి మనిషి పరిణామాన్ని అతనిపై పరిసరాల ప్రభావాన్ని అతని చర్యలను, జీవన విధానాన్ని తెలిపే శాస్త్రమే "చరిత్ర"

"ఒక సమాజంగా నివసించే మానవుని గాథే చరిత్ర" - "రీనే"

అనాథి పూర్వ ఆధారాలను అనుసరించి చరిత్రకారులు మనిషి పరిణామ దశలను పరిశీలిస్తే మనిషి మొట్టమొదట గుహలలో నివసించేవాడని ఆతరువాత గృహాలలో ఉండేవాడని మనకు తెలుస్తుంది.

ఆకాలంలో అతనికి లిపి తెలియదని వస్త్రాలను, ఉంగరాలను తయారించే వాడని కూడా అర్థమవుతున్నది.

క్రమంగా సహజీవనాన్ని అలవరుచుకున్నాడు.

ఆ సమయంలో అతనికి లిపి తెలియదు కాబట్టి ఈ కాల చరిత్రను తెలుసుకోవడానికి ఆధారాలుగా అతడు ఉపయోగించిన వస్తువులు ఉపకరిస్తున్నాయి.

గృహము - స్థలము - కుటుంబము

→ అతడు ఉపయోగించిన వస్తువుల ద్వారా అతని తెలివి పరిజ్ఞానం, ఆర్థిక స్థితిగతులతో పాటు - అతని తెలుసుకున్న వాటిని ఉపయోగించే విధానం మొ॥ అంశాలు తెలుసుకోవడం

1) B. Yamuna — B.A 1st Year HEP. [T.M]
2) T. Nagalaxmi — B.A 1st year H.E.P [T.M]
3) G. Vennela — B.A 1st year H.E.P.A [T.M]
4. Ch. Keerthi. — B.A 1st year HEP T/M
5. R. Divya — B.A 1st year HEP T/M
6. S. Sruthi — B.A 1st year HEP T/m
7. B. Nirosha — B.A I year HEP T/m
8. R. Ajay — B.A 1st year HEPA T/M
9. Sk. Shareef — BA 1st year H.E.P.A T/M
10. K. Ramesh Baby — BA 1st year (HEP)
11. K. Uday Kumar — B.A 1st year HEP [T.M]
12. D. Laxman Rao — B.A 1st year HPPA [TM]
13. M. Madhu — BA 1st year
14. K. Charan Kumar — BA 1st year ~~HEP~~ (HEP) (EM) ~~HEPA (TM)~~
15. B. Kushivardhan — 1st year BA (H.E.P.A)
16. B. Vijay Kumar — 1st year BA (HEP)
17. A. Sai Shiva — 1st year BA (HEP)

39) BHUVANA VAMSI HEP [E/M]

0) J Naveen HEP [T/M]

1) B. Hanuman Thu [T/M]

2) L. Suresh [T/M]

3) O. Madhu [E/M]

4) V. Rakesh. HEP [T/M]

5) V. Chandu [T/M]

6) BANOTH VISHNU [E/M]

7) G. Srivani

8) B. Maheshwari

9) G krishna kumari

0) M. Sandhyarani [TM HEP]

1) M. Mounika

2) B. Sowdanya

3) T. Manasa

4) N. ~~Prasanna~~ Laxmi prasanna

5) B. Aruna

6) D. shirisha

7) R. mounika

8) J. Sri Lakshmi

9) A. Roja

0) P. Savitha

64) G. ~~Anand~~ Anand. Anan

65) B. Lokesh

66) G. Nagajyothi

67) B. Snaburu

68) D. Manusha

69) L. Swathi

చరిత్ర - నిర్వచనాలు

భారతదేశ చరిత్రను అధ్యయన సౌలభ్యం కోసం 3 భాగాలుగా విభజించడం జరిగింది. ఆ విభాగాలు.

1) ప్రాచీన భారతదేశ చరిత్ర
2) మధ్యయుగ భారతదేశ చరిత్ర
3) ఆధునిక భారతదేశ చరిత్ర

→ ఈ మూడు ప్రధాన చారిత్రక దశలను ప్రస్తావించేటప్పుడు చరిత్ర అనే పదం తాలుకూ నిర్వచనాలు గురించి తెలుసుకోవడం అవసరం

చరిత్ర ఒక సామాజిక శాస్త్రం అన్ని సామాజిక శాస్త్రాలలాగే చరిత్రకు ఎంతో విస్తృతమైన అర్థం ఉండటం వలన మంచి మేధావులు, పండితులు రూపొందించిన అనేక నిర్వచనాలను అవగాహన చేసుకుంటే తప్ప చరిత్ర సారం అర్థం, ప్రయోజనం అర్థం కావు.

నిర్వచనాలు:

"మార్పుతోని ఏకరూపమైన గతం గురించిన వృత్తాంతమే చరిత్ర" - అరిస్టాటిల్

"తాత్విక జ్ఞానాన్ని ఉదాహరణ సహితంగా వివరించేదే చరిత్ర" డైమెనిషస్.

"నైతిక విలువలను వివరించే వృత్తాంతాలే చరిత్ర" - లాకి

"ఇంతవరకు జరిగిన చరిత్ర అంతా వర్గపోరాటల చరిత్ర"
→ కారల్ మార్క్స్

"గతానికి వర్తమానానికి మధ్య జరిగే నిరంతర సంభాషణే చరిత్ర"
→ E.H కార్

"చరిత్ర ఒక శాస్త్రం అంత కన్నా ఎక్కువకాదు, తక్కువా కాదు" → బ్యూరి

"మానవుడు స్వేచ్ఛను సంపాదించుకున్న తీరే చరిత్ర" → లార్డ్ ఆక్టన్

"దృష్టాంతాలనుండి గమనించిన తత్వశాస్త్రం చరిత్ర" → డయోనిషస్

"చరిత్ర మానవులను జ్ఞానవంతులుగా చేసే ఒక విద్యావిభాగం"
→ ఫ్రాన్సిస్ బేకన్

"యుక్తా, యుక్తా విచక్షణా జ్ఞానం కలిగించేదే చరిత్ర" → ఎడ్మండ్ బర్క్

"చరిత్ర అంటే మానవులు చెప్పింది చేసింది అన్నింటి కంటే వాళ్ళు ఆలోచించేది" → మైట్ లాండ్

"గత రాజకీయాలే నేటి చరిత్ర" → సీలీ ప్రీమాన్

"ప్రతి దేశ చరిత్ర ఆ దేశానికి సంబంధించిన నాగరికత చరిత్రే"
→ రాసే

చరిత్ర - ఇతర సామాజిక శాస్త్రాల మధ్య సంబంధం

చరిత్ర సామాజిక శాస్త్రాలలో అత్యంత ప్రధానమైనది. సామాజిక శాస్త్రాలు ఒక దానితో ఒకటి అవినాభావ సంబంధం కలిగి ఉన్నాయి. అంతే కాక సామాజిక శాస్త్రాలు అన్ని ఒక దానితో ఒకటి కలిసి ముడి పడి ఉన్నాయి.

చరిత్ర- సామాజిక శాస్త్రం: సమాజంలోని వివిధ పరిణామాలను చరిత్రలో అధ్యయనం చేయడం జరుగుతుంది. వివిధ దేశ కాలమాన పరిస్థితులు సమాజాలను గురించి అధ్యయనం చేసే చరిత్రకు మానవుని పరిణామ అంశాలను అధ్యయనం చేసే సామాజిక శాస్త్రానికి మధ్య సన్నిహిత సంబంధం కలదు.

చరిత్ర- అర్థశాస్త్రం:- చరిత్రకు అర్థశాస్త్రానికి మధ్య అవినాభావ సంబంధం ఉంది చరిత్ర గతంలో జరిగిన వివిధ కాలాలలోని ఆర్థిక అంశాలను పరిశీలిస్తుంది. అర్థశాస్త్రం మానవుని ఆర్థిక కార్యకలాపాలను వివరిస్తుంది.

చరిత్ర- రాజనీతి శాస్త్రం: చరిత్ర వివిధ రాజనీతి శాస్త్ర సిద్ధాంతాలు వాటి ముందు పరిస్థితులను కూలంకషంగా పరిశీలించి వివరిస్తుంది చరిత్ర. రాజనీతి సిద్ధాంతాల అధ్యయనం చరిత్రలో భాగంగా ఉంటాయి. చరిత్రలోని రాజకీయ అంశాలు. సంస్థలు మొదలైన వాటిని రాజనీతి శాస్త్రం వివరిస్తుంది.

చరిత్ర- నీతి శాస్త్రం:- వివిధ కాలంలోని నీతి నియమాలను గురించి చరిత్ర అధ్యయనం చేస్తుంది. మానవ సమాజాల నడవడిక, కర్మాలను, పద్ధతులను, వ్యవహారాలను నీతి శాస్త్రం తెలియ చేస్తుంది అందుకే చరిత్రకు- నీతి శాస్త్రానికి మధ్య అవినాభావ సంబంధం కలదు.

2619 - HEPA
1203 - A. Srihari
1204 - B. Ashok Kumar
1206 - B. Naveen
1208 - ch. Ajay
1209 - G. Suresh
1211 - J. Vinay
1213 - K. Chandu
1215 - K. Praveen Kumar
1222 - S/K Jhony
1223 - S. Srikanth
1225 - V. Tharun
1230 - B. Upendar
1232 - Veenesh
1235 - K. Naresh
1237 - Vinodkumar
1239 - M. Seetharamulu
1240 - P. Lokesh
1245 - T. Gopi
1246 - V. Ramu
1249 - V. Ashok Kum

1 Mangilal [73
D. Upendar [74
D. Nagendra Babu
D. Suresh [76]
G. Naresh [77]
G. Nagaraju [78
A. Naveen [79
Devalla. Nagaraju
A. Ganesh
V. Ganesh
A. Venkatesh [83]
M. Madhu [84
R. Sandeep (85)
N. Naveen (86)

సంస్కృతి - అర్థ వివరణ - విషయ పరిధి

కొంత కాల వ్యవధిలో ఒక నాగరిక సమాజం పాటించే సామాన్య జీవన విధానం లక్షణములు, సాంప్రదాయాలు ఆ జాతి సంస్కృతులుగా పరిగణించబడతాయి.

కాలానుగుణంగా మార్పులు చెందినప్పటికి ప్రాచీన కాలం నుంచి నేటి వరకు సనాతనమైన భారతీయ సంస్కృతి ఆధారమైన తత్వాలు జాతి విశ్వాస లక్షణాలు భారతీయ కీర్తి పతాక వ్యాప్తం చేయడంలో కీలక పాత్ర వహిస్తాయి.

ఒక సమాజం నడత ప్రజల జీవన విధానం లౌకిక పారలౌకిక దృక్పథం కళలు సాహిత్యం సాంఘిక, మత, రాజకీయ, ఆర్థిక వ్యవస్థల స్వరూప స్వభావములను కలిపి ఆ ప్రజల సంస్కృతిగా వ్యవహరించబడుతుంది.

> మానవ సమాజానికి చెందిన ప్రవృత్తి అయినా కాలానుగుణంగా మార్పు చెందుతుంది. మానవ జీవనము నిరంతరం సమస్యలతో నిండి ఉంటుంది. ఆ సమస్యలకు తగిన మార్పులను కోరుతూ ఉంటాడు. కారణంగా నిరంతరం సంస్కరణకు లోనైన మన సమాజ స్వరూపాన్ని సంస్కృతి అని పిలవవచ్చు.

సంస్కృతికి సమాజ శాస్త్రవేత్తలు, తత్వవేత్తలు పలు నిర్వచనాలు అనేక వివరణ ఇచ్చారు. వ్యక్తి మరో భావాలు ఆత్మ విశ్వాసాలు ఆదర్శాలు, మేధాశక్తి, వేషధారణ, చాతుర్యం మొదలగు అంశాలు కలిపి సంస్కృతి అవుతుందని అరవింద్ ఘోష్ అన్నాడు.

ఒక సమాజంలో సభ్యులుగా మానవుడు సాధించే విజ్ఞానం, జీవన ఆచార సాంప్రదాయాల కలయికే సంస్కృతి → టైలర్

→ ఒక జాతి భావితరాల వారికి ఆచార సాంప్రదాయాల రూ
అందించే భౌతిక వారసత్వమే సంస్కృతి అని R. C మజుం
పేర్కొన్నాడు

→ సంస్కృతి మానవ జీవన విధానం ఆలోచనలు సాహిత్య
మతం, వినోదాల ద్వారా ప్రకటించబడుతుంది అని మోర్రిస్
అన్నాడు

సమాజంలోని వ్యక్తుల మానసిక, భౌతిక ప్రపంచాలు
ఒకదానిపై మరొకటి ఆధారపడుతూనే స్వతంత్రంగా ఉం
అతని ఆలోచనల విధానాలు ప్రభావం అతని భౌతిక విధానాలు
ప్రభావితం చేసినట్లు అతని చుట్టు ఉన్న భౌతిక వనరుల మీ
అతని ఆలోచనలకు పదును పెడుతుంటాయి. అందువలన చ
కారులు మానవుని ఆలోచన విధానాన్ని కళలు సాహిత్య
విజ్ఞానం మొదలైనవి సంస్కృతిలో భాగంగా స్వీకరిస్తాయి

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NO	ADMISSION NO	NAME OF THE STUDENT	FATHER NAME
1	26171001	SHAIK LATHEEF	MEERA SAHEEB
2	26171002	BANDARI MAHESH	MALLAIAH
3	26171003	JATOTH NAVEEN	THAVURYA
4	26171004	SURARAPU POOJA RANI	VENKANNA
5	26171005	GUDIBOINA PRANAY SAI	LAXMAIAH
6	26171007	KODIREKKALA SAIKUMAR	NAGESWARARAO
7	26171008	TAMMARAPU SRIKANTH	KRISHNAIAH
8	26171009	SAMALA MURALI	SRINIVASA RAO
9	26171010	RAVELLA RAKESH	MADHAVA RAO
10	26171013	GARIDEPALLI SRINIVASA RAO	SHANKAR
11	26171014	JARPALA SURESH	BHADRU
12	26171015	EKKIRALA PRAVEEN KUMAR	SRINIVASA RAO
13	26171016	BANOTH UPENDRA	RAMU
14	26171017	SARIKA MADHU	GOVINDU
15	26171019	GUGULOTH SUSEELA	HARI
16	26171020	SAPAVAT RENUKA	SAMYA
17	26171021	HATKAR SONIA	HANUMA
18	26171022	JALLI RAMESH	KOTAIAH
19	26171027	GUNTURU NAGA RAJU	KOTAIAH
20	26171028	PAGADALA NAGA RAJU	SREENIVASA RAO
21	26171030	VUKE PRAVEEN	LAXMIPATHI
22	26171031	TALLURI SAI KIRAN	MARESWARA RAO
23	26171032	KONDRU KAMESHWAR RAO	RAMULU
24	26171033	GUNDEPAKA KRANTHIKUMAR	VENKATAIAH
25	26171034	CHEKURI SATISH	DASHARADHA
26	26171035	KANAKAPUDI NAVEEN	PEDDA PULLA RAO
27	26171036	GUGULOTH MALSUR	BALAJI
28	26171038	LAVUDYA VENKATESH	HANUMA
29	26171039	KELOTH ANIL KUMAR	RANGYA
30	26171041	KUNJA NAVEEN KUMAR	VENKATESWARLU
31	26171042	VASANTH BALARAJU	VENKATESWARLU
32	26171043	JARAPALA PAVAN KALYAN	SAMA
33	26171044	GUDEPU ANUSHA	MALLESWARA RAO
34	26171047	BHUKYA RAMADEVI	BHAV SINGH
35	26171048	BANDI HANMANTHARAO	KASHAIAH
36	26171049	GUDIPALLI KOTESWARA RAO	GOVINDU
37	26171050	KONDAPALLI UPENDRA	SRINIVASA RAO
38	26171051	GUNDLAPALLI TULASINADH	BHADRACHALAM
39	26171054	ADURI NAGARAJU	ANANDARAO
40	26171055	NUNAVATH AKHIL	MOHAN
41	26171056	YENUGULA MAHESH	DARGAIAH
42	26171057	KASIMALLA YUVARAJU	VENKATI
43	26171058	NALAMOLU THIRUPATHI REDDY	SRINIVASA REDDY

5. సంస్కృతి - నాగరికత

చరిత్రకారులు నిర్వచనంలో సంస్కృతి మానవాళి కీసమే అని పేర్కొంటారు. కాగా సామాజిక శాస్త్రజ్ఞులు సమాజ జీవనానికి అన్ని అంశాలకు ప్రధానంగా భౌతిక జీవనానికి సంస్కృతిలో భాగ పేస్తారు. అందువలన మనం నేడు చదువుతున్న ఆది పాషాణం నుండి క్రీ.పూ 7వ శతాబ్దం నుండి క్రీ.పూ 3వ శతాబ్దం వరకు అంటే చారిత్రక యుగం ప్రారంభం అయినప్పటి నుండి మన సంస్కృతి మొదలయిందని చరిత్రకారుల అభిప్రాయం.

చరిత్రక యుగానికి పూర్వం మానవుడు సాధించిన భౌతిక విజయాలను క్రీ.పూ 3000 నుండి క్రీ.పూ 1750 చరిత్ర కారులు నాగరికతగా వ్యవహరిస్తారు.

చారిత్రక యుగం ప్రారంభం నుండి నాగరికత సంస్కృతిలో భాగంగా చేరుతుంది. ఇందులో భిన్నంగా సామాజిక శాస్త్రవేత్తలు ఆదిమకాలం నుండి నేటి వరకు మానవ జీవనానికి సంబంధించిన అన్ని అంశాలను సంస్కృతులుగా వ్యవహరిస్తారు. ఆది పాషాణ యుగం నుండి చారిత్రక యుగం నుండి నాగరికతగా పరిగణిస్తారు. అందువల్ల యుగారంభం నుండి సంస్కృతి నాగరికతలో భాగంగా చేరుతుంది.

చరిత్ర పూర్వ యుగ మానవుడు - జీవన విధానం

భారతదేశంలో కూడా ఆదిమ మానవుడు నివసించాడు. 5 లక్షల సం॥ పూర్వమే అతను ఇక్కడ ఆవిర్భవించి నివసించ అని తెలుస్తుంది. మొదట అతను నిరక్షరాస్యుడు అనాగరికుడు అతను అడవులలో సంచరించేవాడు సహజంగా గుహలలో నివసించసాగాడు. అతనికి ఆవి రాకపోయినా తన జీవనాన్ని ఆకాలంలో అతను అనేక రకాల అయిన పరికరాలను వాడేవా అతను వాడిన పరికరాలను బట్టి, అతను ఎలా జీవించేవా పురావస్తు శాస్త్రం ఆధారంగా తెలుసుకోగలుగుతున్నాము అతను వాడిన పరికరాలను పరిశీలించి పరిశీలించిన తీరుతో ఆయు

1. ప్రాచీన శిలాయుగం
2. మధ్య శిలాయుగం
3. నవీన శిలాయుగంగా విభజించారు.

1) ప్రాచీన శిలాయుగం : క్రీ॥పూ 30,000 to 20,000 ఈ కాలం మానవుడు సంచార జీవనం గడిపాడు ఒకే ప్రదేశంలో జీవ వాడు కాదు గుంపులు, గుంపులుగా నదీ తీర ప్రాంతాల్లోనూ నివసించేవాడు అతనికి నిప్పు చెయ్యడం తెలియదు! గుహ జీవించాడు. పళ్ళు, జంతువుల మాంసం, చేపలు తింటూ జీవించేవాడు.

2) మధ్య శిలాయుగం : క్రీ॥పూ 10,000 నుండి 4000

ఈ యుగంలో అర్థం చేసుకునే శక్తిని అలవర్చుకున్నాడు. బుద్ధి వికసించడంతో ఆలోచనలు పెరిగాయి. కొత్త పని ముట్టు ప్రారంభించాడు. ఈ పని ముట్టు 2.5 సెంటిమీటర్లు పొడవు

చరిత్ర- అర్థం - వివరణ

చరిత్ర మనిషి సాధించిన పురోగతి పథానికి అర్థం పట్టే ఒక పథం. అనేకానేక మనిషి పరిణామ క్రమాన్ని చరిత్రీకరించిన ఒక రూపం "హిస్టరీ" అనే ఆంగ్లపదం "ఇస్తోరియా" అనే గ్రీక్ పదమరియూ "హిస్టోరియా" అనే లాటిన్ పదాల నుండి వచ్చింది.

→ హిస్టరీ అంటే పరిశోధన పరిశీలన, విచారణ అని అర్థం. ఇది మనిషి పరిణామాన్ని వివరించే పరిశోధన అని చెప్పవచ్చు అనేక విధాలుగా వివరిస్తూ చేసిన తరువాత ఒక క్రమ పద్ధతిలో మనిషి పరిణామం అతనిపై పరిసరాల ప్రభావాన్ని అతని అలవాట్లను జీవనవిధానాలను తెలిపే శాస్త్రమే "చరిత్ర"

"ఒక సమాజంగా నివసించే మానవుని గాథే చరిత్ర"- "రీవే"

అనేకానేక పూర్వ ఆధారాలను అనుసరించి చరిత్ర రాస్తారు. మన జీవిత పరిణామ దశలను పరిశీలిస్తే మనిషి మొట్టమొదట అడవిలో నివసించేవాడని ఆతరువాత గుహలలో ఉండేవాడని మనకు తెలుస్తుంది.

→ ఆకాలంలో అతనికి అగ్ని తెలియదని పక్షులను, జంతువులను ఆహారంగా తినేవాడని కూడా అర్థమవుతుంది.

→ క్రమంగా సమాజాన్ని అలవరచుకున్నాడు.

→ ఆసమయంలో అతనికి అగ్ని తెలియదు కాబట్టి ఈకాలం చరిత్ర తెలుసుకోడానికి ఆధారాలుగా అతడు ఉపయోగించిన వస్తువులు ఉపకరిస్తున్నాయి.

→ అతడు ఉపయోగించిన వస్తువుల ద్వారా అతని యొక్క పరిస్థితి ఆర్థిక స్థితిగతులతో పాటూ అతను తెలుసుకున్న లోహాలు వాటిని ఉపయోగించే విధానం మొ॥ అంశాలు తెలుసుకోగలుగుతున్నాము

చరిత్ర - నిర్వచనాలు

భారత దేశ చరిత్రను అధ్యయనా సౌలభ్యం కోసం 3 భాగాలు విభజించడం జరిగింది. ఆ విభాగాలు.

1) ప్రాచీన భారతదేశ చరిత్ర
2) మధ్యయుగ భారత దేశ చరిత్ర
3) ఆధునిక భారతదేశ చరిత్ర

→ ఈ మూడు ప్రధాన చారిత్రక దశలను ప్రస్తావించే ముం అసలు చరిత్ర అనే పదం తాలూకూ నిర్వచనాల గురించి తె కోవడం అవసరం

చరిత్ర ఒక సామాజిక శాస్త్రం అన్ని సామాజిక శా మాదిరే చరిత్రకు ఎంతో విస్తృతమైన అర్థం ఉండటం వలన మంది మేధావులు, పండితులు రూపొందించిన అనేక నిర్వచనాల అవగాహన చేసుకుంటే తప్ప చరిత్ర సారం, అర్థం, ప్రయోజ అర్థం కాదు.

నిర్వచనాలు:- "మార్పు తేని ఏకరూపమైన గతం గురించిన వృత్తాంతమే చరిత్ర" - అరిస్టాటిల్

"తాత్విక జ్ఞానాన్ని ఉదాహరణ సహితంగా వివరించేదే చరిత్ర"
→ డైనోనిషస్

"నైతిక విలువలను వివరించే వృత్తాంతాలే చరిత్ర" → లీకి

"ఇంతే పేరుకు జరిగిన చరిత్ర అంతా వర్గపోరాటాల చరిత్ర".
→ కారల్ మార్క్స్

"గతానికి వర్తమానానికి మధ్య జరిగే నిరంతర సంభాషణే చరి
→ E. H కార్

"చరిత్ర ఒక శాస్త్రం అంతకన్నా ఎక్కువ కాదు, తక్కువ కాదు" - బ్యూరి

"మానవులు స్వేచ్ఛను సంపాదించుకున్న తీరే చరిత్ర" - లార్డ్ ఆక్టన్

"వృత్తాంతాల నుండి గమనించిన తాత్త్వికశాస్త్రం చరిత్ర" - డయోనిషస్

"చరిత్ర మానవులను జ్ఞానవంతులుగా చేసే ఒక విజ్ఞానవిభాగం"
→ ఫ్రాన్సిస్ బేకన్

"యుక్తి, యుక్తి విచక్షణా జ్ఞానం కలిగించేది చరిత్ర"
→ ఎడ్మండ్ బర్క్

"చరిత్ర అంటే మానవులు చెప్పింది, చేసింది అన్నిటికంటే వాళ్ళు ఆలోచించినది" — థామస్ కార్లైల్

"గత రాజకీయాల నాటకం చరిత్ర" — సీలీ ఫోయర్

"ప్రతి దేశ చరిత్ర ఆ దేశానికి సంబంధించిన నాగరికత చరిత్ర"
— కాస

చరిత్ర - ఇతర సామాజిక శాస్త్రాల మధ్య సంబంధం

చరిత్ర సామాజిక శాస్త్రాలలో అత్యంత ప్రధానమైనది. సామాజిక శాస్త్రాలు ఒక దానితో ఒకటి అవినాభావ సంబంధం కల్గి ఉన్నాయి. అంతేకాక సామాజిక శాస్త్రాలు అన్ని ఒక దానితో ఒకటి కలిసిమెలిసి ఉన్నాయి.

చరిత్ర - సామాజిక శాస్త్రం:- సమాజంలో వివిధ పరిణామాలను చరిత్ర అధ్యయనం చేయడం జరుగుతుంది. వివిధ దేశ కాలమాన పరిస్థితులు సమాజాలను గురించి అధ్యయనం చేసే చరిత్రకు మానవుని పరిణామ అంశాలను అధ్యయనం చేసే సామాజిక శాస్త్రానికి మధ్య సన్నిహిత సంబంధం కలదు.

చరిత్ర - అర్థశాస్త్రం:- చరిత్రకు అర్థశాస్త్రానికి మధ్య అవినాభావ సంబంధం ఉంది. చరిత్ర గతంలో జరిగిన వివిధ కాలాలలోని ఆర్థిక అంశాలను పరిశీలిస్తుంది అర్థశాస్త్రం మానవుని ఆర్థిక కార్యకలాపాలను వివరిస్తుంది.

చరిత్ర - రాజనీతి శాస్త్రం:- చరిత్ర వివిధ రాజనీతి శాస్త్ర సిద్ధాంతాలు వాటి ముందు పరిస్థితులను కూలంకషంగా పరిశీలించి వివరిస్తుంది చరిత్ర రాజనీతి సిద్ధాంతాల అధ్యయనం చరిత్రలో భాగంగా ఉంటాయి. చరిత్రలోని రాజకీయ అంశాలు సంస్థలు మొదలైన వాటిని రాజనీతిశాస్త్రం వివరిస్తుంది.

చరిత్ర - నీతిశాస్త్రం:- వివిధ కాలములలోని నీతి నియమాలు గురించి చరిత్ర అధ్యయనం చేస్తుంది. మానవ సమాజాలలో నడవడిక ధర్మాలను, పద్ధతులను వ్యవహారాలను నీతిశాస్త్రం తెలియజేస్తుంది. అందుకే చరిత్రకు - నీతిశాస్త్రానికి మధ్య అవినాభావ సంబంధం కలదు.

సంస్కృతి - అర్థ వివరణ - విశేషపరిధి

కొంత కాలవ్యవధిలో ఒక నాగరిక సమాజం పాటించే సామాన్య జీవన విధానం లక్షణములు సాంప్రదాయములు ఆ జాతి సంస్కృతులుగా పరిగణించబడుతుంది.

కాలానుగుణంగా మార్పులు చెందినప్పటికి ప్రాచీన కాలం నుంచి నేటి వరకు సనాతనమైన భారతీయ సంస్కృతికి ఆధారమైన తాత్వికత జాతి విశ్వజనీన లక్షణాలు భారతీయ కీర్తి ప్రపంచ వ్యాప్తం చేయడంలో కీలక పాత్ర వహిస్తాయి.

ఒక సమాజం నందలి ప్రజల జీవన విధానం లౌకిక, పారలౌకిక దృక్పథం కళలు సాహిత్యం సాంఘిక, మత, రాజకీయ ఆర్థిక వ్యవస్థలు స్వరూప స్వభావములను కలిపి ఆచారాలు సంస్కృతిగా వ్యవహరించబడుతుంది.

మానవ సమాజానికి చెందిన ప్రత్యేక ఉనికి కాలానుగుణంగా మార్పు చెందుతుంది. మానవ జీవనము నిరంతరం సమస్యలతో నిండి ఉంటుంది. ఈ సమస్యలకు తగిన మార్గాలను కోరుతూ ఉంటాడు. ఆకారణంగా నిరంతరం సంస్కరణకు లోనయ్యే మానవ సమాజ స్వరూపాన్ని సంస్కృతి అని పిలువవచ్చు.

సంస్కృతికి సమాజ శాస్త్రవేత్తలు, తాత్వికవేత్తలు పలు విధాలుగా అయిన వివరణ ఇచ్చారు. వ్యక్తి మనోభావాలు ఆత్మ విశ్వాసాలు ఆదర్శాలు, మేధాశక్తి, వేషధారణ, చాతుర్యం మొదలగు అంశాలు కలిపి సంస్కృతి అవుతుందని అవినాష్ ఘోష్ అన్నాడు.

→ ఒక సమాజంలో సభ్యులుగా మానవుడు సాధించే విజ్ఞానం ప్రగతి ఆచార సాంప్రదాయాల కలయికే సంస్కృతి → టైలర్

→ ఒక జాతి భౌతికరాల వారికి ఇతర సాంప్రదాయాల రూపు అర్థించే భౌతిక వారసత్వమే సంస్కృతి అని R.C మజుందార్

→ సంస్కృతి మానవ జీవన విధానం & ఆలోచనలు సాంఘిక వినోదాల ద్వారా ప్రకటించే ఒకానొక అని-మాక్స్ ముల్లర్ అన్న

సమాజంలోని వ్యక్తుల మానసిక భౌతిక ప్రయోజనాలు ఒక దానిపై మరొకటి ఆధార పడుతూనే స్వతంత్రంగా ఉంటే అతని ఆలోచనల విధానాల ప్రభావం అతని భౌతిక విధానాలను చేసినట్లు అతని-చుట్టు ఉన్న భౌతిక వనరుల అవసరాలు ఆలోచనలకు పదును పెడుతుంటాయి. అందువలన చరిత్ర మానవుని ఆలోచన విధానాన్ని కళలు సాహిత్యం విజ్ఞానం సంస్కృతిలో భాగంగా స్వీకరిస్తారు.

5. సంస్కృతి - నాగరికత

చరిత్రకారులు అర్థవివరణలో సంస్కృతి మానవాళికి సంబంధించి ప్రాధాన్యత వహించింది. కాగా సామాజిక శాస్త్రజ్ఞులు మన జీవనానికి చెందిన అన్ని అంశాలకు యథానుగా భౌతిక జీవన సంస్కృతిలో ప్రాధాన్యత ఇస్తారు. అందువలన మనం నేడు చదువుతున్న అపి ప్రారంభం అయిన నాటి నుండి క్రీ.పూ 7వ శతాబ్దం నుండి క్రీ.పూ 3వ శతాబ్దం వరకు అంటే చారిత్రక యుగం ప్రారంభం అయిన నుండి మానవ సంస్కృతి మొదలయిందని చరిత్రకారుల అభిప్రాయం.

చరిత్రక యుగానికి పూర్వం మానవుడు సాధించిన విజయాలను క్రీ.పూ 3000 నుండి క్రీ.పూ 1750 వరకు చరిత్రకారులు నాగరికతగా వ్యవహరిస్తారు.

చారిత్రక యుగం ప్రారంభం నుండి నాగరికత సంస్కృతి భాగంగా చేరుతుంది. ఇందుకు భిన్నంగా సామాజిక శాస్త్రవేత్తలు ఆదిమ కాలం నుండి నేటి వరకు మానవ జీవనానికి సంబంధించిన అన్ని అంశాలను సంస్కృతులుగా వ్యవహరిస్తారు. అపి ప్రారంభం నుండి చారిత్రక యుగం నుండి నాగరికతగా పరిగణిస్తారు. అందువల్ల యుగారంభం నుండి సంస్కృతి నాగరికతలో భాగంగా చేరుతుంది

చరిత్ర పూర్వయుగ మానవుడు
– జీవన విధానం

భారత దేశంలో కూడా ఆధిమ మానవుడు నివసించాడు 5 లక్షల సం॥ పూర్వమే అతను ఇక్కడ ఆవిర్భవించి నివసించాడు అనిపిస్తుంది. మొదట అతను నిర్దిష్టప్రదేశం అనాగరికుడు మొదట అతను అడవులలో సంచరించే వాడు నెమ్మదిగా గుహలలో నివసించసాగాడు. అతనికి లిపి రాకపోయినా తన జీవనాన్ని సాగించాడు ఆ కాలంలో అనేక రూపాలు అయిన పరికరాలను వాడేవాడు. అతను వాడిన పరికరాలు బట్టి అతను ఎలా జీవించేవాడో పురావస్తు శాస్త్రం ఆధారంగా తెలుసుకోగలుగుతున్నాము. అతను వాడిన పరికరాలను పరిశీలించి పరిశోధించి తరువాత ఆ యుగాలను

1) ప్రాచీన శిలాయుగం
2) మధ్య శిలాయుగం
3) నవీన శిలాయుగంగా విభజించారు.

1) ప్రాచీన శిలాయుగం: [క్రీ.పూ 30,000 to 20,000] ఈ కాలంలో మానవుడు సంచార జీవనం గడిపాడు ఒకే ప్రదేశంలో జీవించేవాడు కాదు. గుంపులు, గుంపులుగా నది తీర ప్రాంతాల్లోనూ నివసించేవాడు. అతనికి నివాసం చెప్పడం తెలియదు గుహలలోనూ జీవించాడు. పక్షులు, జంతువుల మాంసం, చేపలు తింటూ జీవించేవాడు.

2. మధ్య శిలాయుగం: (క్రీ.పూ 10,000 నుండి 8,000)
ఈ యుగంలో అర్థం చేసుకునే శక్తిని అలవర్చుకున్నాడు బుద్ధి వికసించడంతో ఆలోచనలు పెరిగాయి. కొత్త పనిముట్లు చేయడం ప్రారంభించాడు. ఈ పనిముట్లు 2.5 సెంటిమీటర్లు పొడవు మాత్రమే ఉండేవి ఈ యుగాన్ని సూక్ష్మశిలాయుగం అంటారు.

నవీన శిలాయుగం:- ఈ కాలంలో మానవుడు అభివృద్ధి చెందడం ప్రారంభించాడు. మానవుడు అనేక విధాలుగా మేధాశక్తిని ప్రదర్శించాడు. అనేక వేల సంవత్సరాల నుండి ఆహారాన్ని సేకరించడం నేర్చుకున్న మానవుడు ఆహారాన్ని ఉత్పత్తి చేయడం నేర్చుకున్నాడు. దీనిలో భాగంగా వ్యవసాయం చేయడం ప్రారంభించాడు. క్రమంగా మానవుడు నాగరికుడు అయినాడు. నదీ పరీవాహక ప్రాంతాల్లో సరస్సుల దగ్గర జీవిస్తూ జంతువులను మచ్చిక చేసుకొని వాటిని పోషిస్తూ, ఆహార ఉత్పాదకులుగా మారటం ఈ కాలంనాటి ప్రత్యేకతగా చెప్పవచ్చు.

చరిత్ర - అర్థం - వివరణ

చరిత్ర మనిషి సాధించిన ఉన్నతి పదానికి అర్థం పట్టే ఒక స్మృతి పథం అనాథగా మనిషి పరిణామ క్రమాన్ని చిత్రీకరిస్తే ఒక రికార్డు "హిస్టరీ" అనే ఆంగ్ల పదం "ఇస్తోరియా" అనే గ్రీక్ & మరియు "హిస్టోరియా" అనే లాటిన్ పదాల నుండి వచ్చింది.

→ హిస్టరీ అంటే పరిశోధన, పరిశీలన, విచారణ అని అర్థం. ఇది మనిషి పరిణామాన్ని వివరించే పరిశోధన అని చెప్పవచ్చు అనేక విధాలుగా విషయ పరిశీలన చేసిన తరువాత ఒక క్రమపద్ధతిలో మనిషి పరిణామాన్ని అతని పై పరిసరాల ప్రభావాన్ని అతని అలవాట్లను, జీవన విధానాన్ని తెలిపే శాస్త్రమే "చరిత్ర"

"ఒక సమాజంలో నివసించే మానవుని గాథే చరిత్ర" - "రీసే"

లిఖిత పూర్వ ఆధారాలను అనుసరించి చరిత్ర రాస్తారు. మనిషి జీవిత పరిణామ దశలను పరిశీలిస్తే మనిషి మొట్టమొదట గుహలలో నివసించేవాడని ఆతరువాత కుప్పలలో ఉండేవాడని మనకు తెలుస్తుంది.

→ ఆకాలంలో అతనికి లిపి తెలియదని పక్షులను, జంతువులను అనుకరించే వాడని కూడా అర్థమవుతున్నది.

→ క్రమంగా సహజీవనాన్ని అలవరుచుకున్నాడు.

→ ఆదిమానవులలో అతనికి లిపి తెలియదు కాబట్టి ఈ కాలచరిత్రను తెలుసుకోవడానికి ఆధారాలుగా అతడు ఉపయోగించిన వస్తువులు ఉపకరిస్తున్నాయి.

→ అతడు ఉపయోగించిన వస్తువుల ద్వారా అతని తెలుసుకున్నారు. పరిజ్ఞానం, ఆర్థిక స్థితిగతులతో పాటు అతను తెలుసుకున్న లోహాలు వాటిని ఉపయోగించే విధానం మొ॥ అంశాలు తెలుసుకోగలుగుతున్నాం.

చరిత్ర - నిర్వచనాలు

భారతదేశ చరిత్రకు అధ్యయనం సౌలభ్యం కోసం 3 భాగాలుగా విభజించడం జరిగింది. ఆ విభాగాలు.

1) ప్రాచీన భారతదేశ చరిత్ర
2) మధ్యయుగ భారతదేశ చరిత్ర
3) ఆధునిక భారతదేశ చరిత్ర

⇒ ఈ మూడు విధాన చారిత్రక దినములను అధ్యయనించే ముందు అసలు చరిత్ర అనే పదం తాలుకూ నిర్వచనాల గురించి తెలుసుకోవడం అవసరం

చరిత్ర ఒక సామాజిక శాస్త్రం అన్ని సామాజిక శాస్త్రాల మాదిరే చరిత్రకు ఎంతో విస్తృతమైన అర్థం ఉండటం వలన ఎంతో మంది మేధావులు, పండితులు రూపొందించిన అనేక నిర్వచనాలను అవగాహన చేసుకుంటేనే తప్ప చరిత్ర సారం అర్థం, ప్రయోజనం అర్థం కావు.

నిర్వచనాలు:-

"మార్పుతోని ఏకరూపమైన గతం గురించిన వృత్తాంతమే చరిత్ర" - అరిస్టాటిల్

"తాత్విక జ్ఞానాన్ని ఉదాహరణ సహితంగా వివరించేది చరిత్ర" - డైమెనిషస్.

"నైతిక విలువలను వివరించే వృత్తాంతాలే చరిత్ర" - తిసిరో

"ఇంతవరకు జరిగిన చరిత్ర అంతా వర్గ పోరాటాల చరిత్రే" - కారల్ మార్క్స్

"గతానికి వర్తమానానికి మధ్య జరిగే నిరంతర సంభాషణే చరిత్ర" - E.H కార్

"వృత్తాంతాల నుండి గ్రహించిన తత్వశాస్త్రం చరిత్ర" - డయోనిషస్

"చరిత్ర ఒక శాస్త్రం అంతకన్నా ఎక్కువ కాదు, తక్కువ కాదు" - బ్యూరీ

"మానవుడు స్వేచ్ఛను సంపాదించుకున్న తీరే చరిత్ర" - లార్డ్ ఆక్టన్

"యుక్తా, యుక్తా విచక్షణా జ్ఞానం కలిగించేదే చరిత్ర" — ఎడ్మండ్

"చరిత్ర మానవులను జ్ఞానంతో వంతులుగా చేసే ఒక విద్య"

→ ఫ్రాన్సిస్ బేకన్

"చరిత్ర అంటే మానవులు చెప్పింది చేసింది అన్నింటి కంటే ఆలోచించేది" → మైఖేల్ లాండ్

"గత రాజకీయాల్లో నేటి చరిత్ర" → సీలీ ప్రొఫెసర్

"ఏతి దేశ చరిత్ర ఆదేశానికి సంబంధించిన నాగరికత చరిత్ర" →

PA 2nd	B. Govardhanachary	2619-1228
A 2nd	V. Ashok Kumar	2619-1249
EP 2nd	Y. prasad	2619-1057
EP IInd year	B. Veeranna	2619-2205
PA IInd year	B. Kushivardhan	2619-1205
PA IInd year	B. Janardhan	2619-1231
E.P IInd year	T. Pavan kumar	2619-1046
(H.E.P) 2nd	A Thirumalu Rao	2619-2203
(HEPA) 2nd	R. Charankumar chary	2619-1242
(HEPA) IInd year	K Praveen	2619121 5
CHPP	B. naresh	2619-1026
(Mrs)		
(H.E.P) 2nd year	B. Niroshe	2619-1006
(H.E.P) 2nd year	T. sailaja	2619-1022
HEP 2nd year	Ch. Keerthi	2619-1031
HEP 2nd year	B. Sruthi	2619-1007
HEP 2nd year	T. Nagalaxmi	2619-1021
H.E.PA 2nd year	G. vennela.	2619-1210
(H.E.PA) 2nd year	V. Navya sri	2619-1247
(HEPA) 2nd year	B. Sailaja	2619-1201

చరిత్ర - ఇతర సామాజిక శాస్త్రాల మధ్య సంబంధం

చరిత్ర సామాజిక శాస్త్రాలలో అత్యంత ప్రధానమైనది. సామాజిక శాస్త్రాలు ఒక దానితో ఒకటి అవినాభావ సంబంధం కల్గి ఉన్నాయి అంటే సామాజిక శాస్త్రాలు అన్ని ఒక దానితో ఒకటి కలిసి ముడి పడి ఉన్నాయి.

చరిత్ర - సామాజిక శాస్త్రం: సమాజంలోని వివిధ పరిణామాలను అధ్యయనం చేయడం జరుగుతుంది. వివిధ దేశ కాలమాన పరిస్థితులు సమాజాలను గురించి అధ్యయనం చేసే చరిత్రకు మానవుని యొక్క అంశాలను అధ్యయనం చేసే సామాజిక శాస్త్రానికి మధ్య సన్నిహిత సంబంధం కలదు.

చరిత్ర - అర్థశాస్త్రం: చరిత్రకు అర్థ శాస్త్రానికి మధ్య అవినాభావ సంబంధం ఉంది. చరిత్ర గతంలో జరిగిన వివిధ కాలాలలోని ఆర్థిక అంశాలను అర్థశాస్త్రం పరిశీలిస్తుంది. ఆర్థిక కార్యకలాపాలను వివరిస్తుంది.

చరిత్ర - రాజనీతి శాస్త్రం: చరిత్ర వివిధ రాజనీతి శాస్త్ర సిద్ధాంతాలు మరియు పరిస్థితులను కూలంకషంగా పరిశీలించి వివరిస్తుంది. చరిత్ర రాజనీతి సిద్ధాంతాల అధ్యయనం చరిత్రలో భాగంగా ఉంది. చరిత్రలోని రాజకీయ అంశాలు, సంస్థలు మొదలైన వాటిని రాజనీతి శాస్త్రం వివరిస్తుంది.

చరిత్ర - నీతి శాస్త్రం: వివిధ కాలంలోని నీతి నియమాలను గురించి చరిత్ర అధ్యయనం చేస్తుంది. మానవ సమాజాల నడవడిక దాని ఆచారాలను, వ్యవహారాలను నీతి శాస్త్రం తెలియచేస్తుంది అందుచేత - చరిత్రకు - నీతి శాస్త్రానికి మధ్య అవినాభావ సంబంధం

Dt. 23.10.2018 1st B.A HEP & HEPA

Sk. Rubeena	B.A [HEP]	1st year	[T/M]
T. Shailaja	B.A [HEP]	1st year	[T/M]
Ch. Keerthi	B.A HEP	1st year	T/M
B. Sruthi			
B. Yamuna	B.A HEP	1st year	T/M
Chasan Kumar	B.A. HEP B.A. HE.P.A	1st year 1st year	T/M T/M
Shareef	B.A H.E.P.A	1st year	(T/M)
B. Venkatesh	BA [H.E.PA]	1st Year	T/M
Venil Kumar	B.A [H.E.P]	1st year	T/M
B. Vijay Kumar	B.A (HEP)	1st year	T/M
M. Madhu	B.A (HEP)	E/M	
Ch. Vena	1 B.A	[H.E.P]	(E/M]
Uday Kumar	1st year	B.A [H.E.P]	T.M
D. Indrendar Rao	1st year	B.A [H.E.P]	T/M
D. Pavan Kalyan	1st year	B.A [H.E.P]	T/M
A. Sai Shiva	1st year	(B.A (H.E.P]	T.

Dt. 24.10.2018 1st B.A HEP & HEPA

Sk. Rubeena	1st year	B.A [HEP]	[T/M]
B. Nirosha	1st year	B.A (H.E.P)	(T/M)
A. Sandhya	1st year	B.A (H.E.PA)	(T/M)
T. Shilaja	1st year	B.A (H.E.P)	(T/M)

సంస్కృతి - అర్థవివరణ - విస్తృత పరిధి

కొంత కాల వ్యవధిలో ఒక నాగరిక సమాజం పాటించే సంస్కృతి జీవన విధానం లక్షణములు, సాంప్రదాయాలు ఆ జాతి సంస్కృతి గా పరిగణించబడతాయి.

కాలానుగుణంగా మార్పులు చెందినప్పటికీ ప్రాచీన కాలం నేటి వరకు సనాతనమైన భారతీయ సంస్కృతి ఆధ్యాత్మిక తత్వాన్ని జాతి విశ్వజనీన లక్షణాలు భారతీయ కీర్తి ప్రతిష్ఠలు నిలబెట్టడంలో కీలక పాత్ర వహిస్తాయి.

ఒక సమాజం నందలి ప్రజల జీవన విధానం లౌకిక పారలౌకిక జ్ఞానం కళలు సాహిత్యం సాంఘిక, మత, రాజకీయ, ఆర్థిక వ్యవస్థలు సంస్థలు కలిపి ఆ ప్రజల సంస్కృతిగా వ్యవహరించబడుతుంది.

→ మానవ సమాజానికి చెందిన ప్రతి వ్యవస్థ అయినా కాలానుగుణంగా మార్పు చెందుతుంది. మానవ జీవితము నిరంతరం సమస్యలతో ఉంటుంది. ఈ సమస్యలకు తగిన మార్పులను కోరుతూ ఉంటాడు. ఆ నిరంతరం సంస్కరణకు లోనైయ్యే మానవ సమాజ స్వరూపాన్ని సంస్కృతి అని పిలువవచ్చు.

సంస్కృతికి సమాజ శాస్త్రవేత్తలు, తత్వవేత్తలు పలువురు వివరణ ఇచ్చారు. వ్యక్తి మరో బాటలు ఆత్మవిశ్వాసాలు ఆదర్శాలు మేధాశక్తి, మేధాధారణ, చాతుర్యం మొదలగు అంశాలు కల్పి సంస్కృతి ఉద్భవిస్తుందని అరవింద్ ఘోష్ అన్నాడు.

ఒక సమాజంలో సఫలీకృతం మానవుడు సాధించే విజ్ఞానం ఆచార సాంప్రదాయాల కలయికే సంస్కృతి → టైలర్

→ ఒక జాతి భావితరాల వారికి ఆచార సాంప్రదాయాలు రుచులు చే భౌతిక వారసత్వమే సంస్కృతి అని R.C మజుందార్ పేర్కొన్నారు

→ సంస్కృతి మానవ జీవన విధానం ఆలోచనలు సాంఘీకత్వం మరియు ఎన్నో అంశాల ద్వారా రూపొందించబడుతుంది అని మాక్స్ ముల్లర్ అన్నాడు.

సమాజంలోని వ్యక్తుల మానసిక, భౌతిక ప్రపంచాలు రెండు ఒకదానిపై ఒకటి ఆధారపడుతూనే స్వతంత్రంగా ఉంటాయి. అతని ఆలోచనలు విధానాల ప్రభావం అతని భౌతిక విధానాలను ప్రభావితం చేసినట్లు అతని చుట్టూ ఉన్న భౌతిక పరిస్థితులు అవసరాలు అతని ఆలోచనలకు దిశను పెడుతుంటాయి. అందుచేతనే చరిత్రకారులు మానవుని ఆలోచన విధానాన్ని కళలు సాహిత్యం విజ్ఞానం మొదలైనవి సంస్కృతిలో భాగంగా స్వీకరిస్తారు.

5. సంస్కృతి-నాగరికత

చరిత్రకారుల దృష్టిలో సంస్కృతి మానవాళి కోసం ప్రాధాన్యత వహించింది. కాగా సామాజిక శాస్త్రజ్ఞులు సమాజం చెందిన అన్ని అంశాలకు ప్రధానంగా భౌతిక జీవనానికి సంస్కృతి ప్రాధాన్యత ఇస్తారు. అందువలన మనం నేడు చదువుగల అవి అయిన నాటి నుండి క్రీ.పూ 7వ శతాబ్దం నుండి క్రీ.పూ 3వ శతాబ్దం వరకు అంటే చారిత్రక యుగం ప్రారంభం అయినప్పటి నుండి మానవ సంస్కృతి మొదలయిందని చరిత్రకారుల అభిప్రాయం.

చరిత్రక యుగానికి పూర్వం మానవుడు సాధించిన భౌతిక విజయాలను క్రీ.పూ 3000 నుండి క్రీ.పూ 1750 వరకు చరిత్రకారులు నాగరికతగా వ్యవహరిస్తారు.

చరిత్రక యుగం ప్రారంభం నుండి నాగరికత సంస్కృతిలో చేరుతుంది. ఇందుకు భిన్నంగా సామాజిక శాస్త్రవేత్తలు ఆధునిక కాలం నేటి వరకు మానవ జీవనానికి సంబంధించిన అన్ని అంశాలను సంస్కృతిగా వ్యవహరిస్తారు. అవి ప్రారంభం అయిన చరిత్రక యుగం నుండి నాగరికతగా పరిగణిస్తారు. అందువల్ల యుగారంభం నుండి సంస్కృతి నాగరికతలో చేరుతుంది.

BA (HEP) (HPPA)

2619 - 1050.

2619 - 1210 (H·EPA)

2619 - 1049 -

2619 - 1003 - HEP

2619 - 1315 - (EPPA)

2619 - 1331 - (EPPA)

2619 - 1347 - (EPPA)

2619 - 1201 - (H.E.PA)

2619 - 1232 - (HEPA)

2619 - 1028 (H·EP)

2619 - 1625 (EPCA)

2619 - 1012 [HEP]

2619 - 1029

2619 - 1004

2619 - 1006

2619 - 1901 [H.E.PA]

2619 - 1207 [HEPA]

2619 - 1041 [HEP]

2619 - 2225 [HEP]

2619 - 1337 (EPPA)

2619 - 1025 (HEP)

2619 - 1245 [H.E.P.A]

2619 - 1019 [H·E·P]

2619 - 1243 [H.E.PA]

24] 2619 - 1039 [H E.P]

2619 - 1203 (HEPA)

2619 - 1218 [HEPA]

27] 2619 - 1205 [H·E·PA

2619 - 1231 [H·E·PA

29] 2619 - 1316 [EPPA· B

30) 2619 - 1333 [E·PPA

2619 - 1319 (EPPA) BA

32) 2619 - 1325 (EPPA) BA

2619 | 245 (HEP)

34) 2619 - 1034 [BA. H.E.P

2619 - 2244 (H·EP)

2619 - 1229 (H.E.PA

37) 2619 - 1014 (HEP)

38) 2619 - 1001 (HEP)

39) 2619 - 1004 (HEP)

2619 - 1208 (HEP

2619 - 1249 (HE

42) 2619 - 1326 (EPPA)

43) 2619 - 1106 (H PP

చరిత్ర పూర్వయుగ మానవుడు - జీవన విధానం

భారతదేశంలో కూడా ఆదిమ మానవుడు నివసించాడు. 5 సం॥ పూర్వమే అతను ఇక్కడ ఆవిర్భవించి నివసించాడు. ఈ తెగ మొదట అతను నిర్గక్షత్రాన్నుడు ఉనాగరికుడు మొదట అతను అడవుల సంచరించేవాడు నెమ్మదిగా గుహలలో నివసించసాగాడు. అతనికి రాక పోయినా తన జీవనాన్ని సాగించాడు. ఆకాలంలో అతను అనేక రకాల ఉనన పరికరాలను వాడే వాడు అతను వాడిన పరికరాలను అతను ఎలా జీవించేవాడో పురావస్తువాడ్డు బాగా తెలుసుకో తున్నాము అతను వాడిన పరికరాలను పరిక్షించి పరిశోధించిన ఆయుధాలను

1. ప్రాచీన శిలాయుగం
2. మధ్యశిలాయుగం
3. నవీన శిలాయుగంగా విభజించారు.

1. ప్రాచీన శిలాయుగం:- క్రీ.పూ 30,000 to 20,000 ఈ కాలంలో మానవ సంచార జీవనం గడిపాడు ఒకే ప్రదేశంలో జీవించే వాడు కాదు గుంపులుగా నదీ తీర ప్రాంతాల్లోనూ నివసించేవాడు అతని నివాసం చెయ్యడం తెలియదు. గుహలోనూ జీవించాడు. పళ్ళు, దుంపలు మాంసం, చేపలు తింటూ జీవించేవాడు.

2. మధ్య శిలాయుగం:- క్రీపూ 10,000 నుండి 8,000 ఈ యుగంలో తన చేసుకునే శక్తిని అలవర్చుకున్నాడు. బుద్ధి వికసించడంతో ఆలోచనలు పెరిగాయి. కొత్త పనిముట్లు చేయడం ప్రారంభించాడు. ఈ పనిముట్లు 2.5 సెంటిమీటర్ల పొడవు మాత్రమే ఉండేవి ఈ యుగాని మధ్య శిలాయుగం అంటారు.

నవీన శిలాయుగం:- ఈ కాలంలో మానవుడు అభివృద్ధి చెందడం ప్రారంభించాడు. మానవుడు అనేక విధాలుగా మేధాశక్తిని ప్రదర్శించాడు. అనేక వేల సంవత్సరాల నుండి ఆహారాన్ని

సేకరించడం నేర్చుకున్న మానవుడు ఆహారాన్ని ఉత్పత్తి చేయడం నేర్చుకున్నాడు. దీనిలో భాగంగా వ్యవసాయం చేయడం ప్రారంభించాడు. క్రమంగా మానవుడు నాగరికుడు అయినాడు. నదీ పరివాహక ప్రాంతాల్లో సారవంతమైన దగ్గర జీవిస్తూ జంతువులను మచ్చిక చేసుకుని వాటిని పెంచుతూనే ఆహార ఉత్పాదకులుగా మారటం అనేకం నాటి ప్రత్యేకతగా చెప్పవచ్చు.

Dt. 26. 09. 2019 I & II B.A

HEP & HEPA HPP

1. B. Rohith [E/M]
2. BANOTH VISHNU [E/M]
3. Mareedu. venugopalrao (TM)
4. Sk. Gause pasha.
5. A. Bharath Kumar T/M
6. B. Prabhu [E/M]
7. G. VINOD KUMAR [E/M]
8. V. Rakesh (H.E.P) T/M.
9. G. Anand (H.E.P) E/M
10. Sk. Sameerpasha (H.E.P) T.M
11. Devalla. Nagaraju
12. L. Bhaskar [H.E.P] TM
13. K. santhosh KUMAR (HEP) T/M
14. D. Uday H.E.P T/M.
15. J. Kalyan [H.E.P] T/M
16. U. Gopi. B.A (H.E.P) T.M
17. B. NagaRaju (H.E.P) T/M
18. A. Rajesh (H.E.P) T./M
19. B. Sowanya
20. M. Mounika
21. B. Maheshwari
22. D. Shirisha
23. B. Swarupa
24. J. Sri laxmi
25. P. Saritha.
26. Pasnakola. Bharath (B.A) T/M
27. Sk. shareef (H.E.P)
28. P. HUSSain H.E.P (T/M)
29. Sk. Nagul meera.
30. CH. upendarao (H.E.P) (B.A) T.M
31. A. Naveen (H.E.P T/M)
32. B. Kalyan H.E.P [T/M]
33. B. Prasad H.E.P [T/M]
34. B. Arun Kumar (H.E.P)
35. B. Lokesh (H.E.P) [T/M]
36. B. Sravan (H.E.P) E/M
37. T. Deekshith kumar (H.E.P) T/M
38. B. VIJAY H.E.P (T/M)
39. A. Siva Krishna.
40. K. sandeep HEPA
41. Bidan Kumar.

చరిత్ర - అర్థం-వివరణ

చరిత్ర మనిషి సాధించిన ప్రగతి పదానికి అర్థం పట్టే ఒక స్మృతి పథం. అనాదాగా మనిషి పరిణామ క్రమాన్ని చిత్రీకరించిన ఒక రికార్డు "హిస్టరీ" అనే ఆంగ్ల పదం "ఇస్తోరియా" అనే గ్రీక్ & మరియు "హిస్టోరియా" అనే లాటిన్ పదాల నుండి వచ్చింది.

హిస్టరీ అంటే పరిశోధన పరిశీలన, విచారణ అని అర్థం. ఇది మనిషి పరిణామాన్ని వివరించే పరిశోధన అని చెప్పవచ్చు అనే విధంగా విషయం పరిశీలన చేసిన తరువాత ఒక క్రమపద్ధతిలో మనిషి పరిణామాన్ని అతనిపై పరిసరాల ప్రభావాన్ని అతనే అలవాట్లను జీవన విధానాన్ని తెలిపే శాస్త్రమే "చరిత్ర"

"ఒక సమాజంగా నివసించే మానవుని గాథే చరిత్ర" - "రీసే"

అఖిత పూర్వ ఆధారాలను అనుసరించి చరిత్ర రాస్తారు. మనిషి జీవిత పరిణామ దశలను పరిశీలిస్తే మనిషి మొదట అడవులో నివసించే వాడని ఆతరువాత గుహలలో ఉండేవాడని మనకు తెలుస్తుంది.

→ కాలంలో అతనికి ఆవు తెలియదని పక్షులను, జంతువులను అనుకరించే వాడని కూడా అర్థమవుతుంది.

→ క్రమంగా సమాజీయ జీవనాన్ని అలవరచుకున్నాడు.

→ ఆదిమయుగంలో అతనికి ఆవు తెలియదు కాబట్టి ఈకాల చరిత్రను తెలుసుకోడానికి ఆధారాలుగా అతడు ఉపయోగించిన వస్తువులు ఉపకరిస్తున్నాయి.

→ అతడు ఉపయోగించిన వస్తువుల ద్వారా అతని యొక్క పరిజ్ఞానం ఆర్థిక స్థితిగతులతో పాటు అతను తెలుసుకున్న లోహాలు వాటిని ఉపయోగించే విధానం మొ॥ అంశాలు తెలుసుకోగలుగుతున్నాం.

చరిత్ర - నిర్వచనాలు

భారతదేశ చరిత్రను అధ్యయనా సౌలభ్యం కోసం 3 భాగాలుగా విభజించడం జరిగింది. ఆ విభాగాలు.

1. ప్రాచీన భారతదేశ చరిత్ర
2. మధ్యయుగ భారత దేశ చరిత్ర
3. ఆధునిక భారత దేశ చరిత్ర

→ ఈ మూడు ప్రధాన చారిత్రక దశలను ప్రస్తావించే ముందు అసలు చరిత్ర అనే పదం తాలూకు నిర్వచనాల గురించి తెలుసుకోవడం అవసరం.

చరిత్ర ఒక సామాజిక శాస్త్రం అన్ని సామాజిక శాస్త్రాల మాదిరే చరిత్రకు ఎంతో విస్తృతమైన అర్థం ఉండటం వలన ఎంతో మంది మేధావులు, పండితులు రూపొందించిన అనేక నిర్వచనాలను అవగాహన చేసుకుంటే తప్ప చరిత్ర సారం అర్థం, ప్రయోజనం అర్థం కావు.

నిర్వచనాలు:-

"మార్పులేని విశ్వజనీనమైన గతం గురించిన వృత్తాంతమే చరిత్ర" - అరిస్టాటిల్

"తాత్విక జ్ఞానాన్ని ఉదాహరణ సహితంగా వివరించేదే చరిత్ర" - డైనోనిషస్

"నైతిక విలువలను వివరించే వృత్తాంతాలే చరిత్ర" - లీకి

"ఇంత వరకు జరిగిన చరిత్ర అంతా వర్గపోరాటాల చరిత్ర" - కార్ల్ మార్క్స్

"గతానికి వర్తమానానికి మధ్య జరిగే నిరంతరం సంభాషణే చరిత్ర" - E.H కార్

"చరిత్ర ఒక శాస్త్రం అంతకన్నా ఎక్కువ కాదు, తక్కువ కాదు" - బ్యూరీ

"మానవుడు స్వేచ్ఛను సంపాదించుకున్న తీరే చరిత్ర" - లార్డ్ ఆక్టన్

"జ్ఞప్తాంతాలు నుండి గ్రహించిన తత్వశాస్త్రం చరిత్ర" - డయోనిషస్

"చరిత్ర మానవులను జ్ఞానులుగా చేసే ఒక విద్యావిభాగం - ఫ్రాన్సిస్ బేకన్

"యుక్తా, యుక్తా విచక్షణా జ్ఞానం కల్గించేది చరిత్ర" - ఎడ్మండ్ బర్క్

"చరిత్ర అంటే మానవులు చెప్పింది, చేసింది అన్నిటికంటే వాళ్ళు ఆలోచించేది" - మైకేల్ ఆండ్

"గత రాజకీయాల నేటి చరిత్ర" - సీలీ ఫ్రీమన్

"ప్రతి దేశ చరిత్ర ఆదేశానికి సంబంధించిన నాగరికత చరిత్ర" - రాస్

చరిత్ర - ఇతర సామాజిక శాస్త్రాల మధ్య సంబంధం

చరిత్ర సామాజిక శాస్త్రాలలో అత్యంత ప్రధానమైనది. సామాజిక శాస్త్రాలు ఒక దానితో ఒకటి అవినాభావ సంబంధం కల్గి ఉన్నాయి. అంతేకాక సామాజిక శాస్త్రాలు అన్ని ఒక దానితో ఒకటి కల్సి ముడిపడి ఉన్నాయి.

చరిత్ర - సామాజిక శాస్త్రం: సమాజంలో వివిధ పరిణామాలను చరిత్రలో అధ్యయనం చేయడం జరుగుతుంది. వివిధ దేశ కాలమాన పరిస్థితులు సమాజాలను గురించి అధ్యయనం చేసే చరిత్రకు మానవుని పరిణామ క్రమాన్ని అధ్యయనం చేసే సామాజిక శాస్త్రానికి మధ్య సన్నిహిత సంబంధం కలదు.

చరిత్ర - అర్థ శాస్త్రం: చరిత్రకు అర్థశాస్త్రానికి మధ్య అవినాభావ సంబంధం ఉంది. చరిత్ర గతంలో జరిగిన వివిధ కాలాలలోని ఆర్థిక అంశాలను పరిశీలిస్తుంది అర్థశాస్త్రం మానవుని ఆర్థిక కార్యకలాపాలను వివరిస్తుంది.

చరిత్ర - రాజనీతి శాస్త్రం: చరిత్ర వివిధ రాజనీతి శాస్త్ర సిద్ధాంతాలు వాటి ముందు పరిస్థితులను కూలంకషంగా పరిశీలించి వివరిస్తుంది చరిత్ర రాజనీతి సిద్ధాంతాల అధ్యయనం చరిత్రలో భాగంగా ఉంటుంది. చరిత్రలోని రాజకీయ అంశాలు సంస్థలు మొదలైన వాటిని రాజనీతి శాస్త్రం వివరిస్తుంది.

చరిత్ర - నీతి శాస్త్రం: వివిధ కాలాలలోని నీతి నియమాలు గురించి చరిత్ర అధ్యయనం చేస్తుంది. మానవ సమాజాల నడవడిక ధర్మాలను పద్ధతులను వ్యవహారాలను నీతి శాస్త్రం తెలియజేస్తుంది. అందుకే చరిత్రకు - నీతి శాస్త్రానికి మధ్య అవినాభావ సంబంధం కలదు.

సంస్కృతి - అర్థ వివరణ - నిర్వచనాలు

కొంత కాలవ్యవధిలో ఒక నాగరిక సమాజం పాటించే సామాన్య జీవన విధానం లక్షణాలు సాంప్రదాయాలు జాతి సంస్కృతులు గా పరిగణించబడతాయి.

కాలానుగుణంగా మార్పులు చెందినప్పటికి ప్రాచీన కాలం నుంచి నేటి వరకు సనాతనమైన భారతీయ సంస్కృతిక ఆధారమైన తత్వాన్ని చాటి విశ్వజనీన లక్షణాలు భారతీయ కీర్తి ప్రపంచ వ్యాప్తం చేయడంలో కీలక పాత్ర వహిస్తాయి.

ఒక సమాజం నిండిన ప్రజల జీవన విధానం లౌకిక, పారలౌకిక దృక్పథం కళలు సాహిత్యం సాంఘిక, మత, రాజకీయ ఆర్థిక వ్యవస్థల స్వరూప స్వభావములను కలిపి ఆ ప్రజలు సంస్కృతిగా వ్యవహరించబడుతుంది.

మానవ సమాజానికి చెందిన ఏ వ్యవస్థ అయినా కాలానుగుణంగా మార్పు చెందుతుంది. మానవ జీవనము నిరంతరం సమస్యలతో నిండి ఉంటుంది. ఈ సమస్యలకు తగిన మార్పులను కోరుతూ ఉంటాడు. కారణంగా నిరంతరం సంస్కరణకు లోనైయ్యే మానవ సమాజ స్వరూపాన్ని సంస్కృతి అని పిలవవచ్చు.

సంస్కృతి సమాజ శాస్త్రవేత్తలు, తత్వవేత్తలు పలువిధాలు అయిన వివరణ ఇచ్చారు. వ్యక్తి మనోభావాలు ఆత్మ విశ్వాసాలు ఆదర్శాలు మేధాశక్తి, వేషధారణ, చాతుర్యం మొదలగు అంశాలు కలిపి సంస్కృతి అవుతుందని అరవింద్ ఘోష్ అన్నాడు.

→ ఒక సమాజంలో సభ్యులుగా మానవుడు సాధించే విజ్ఞానం ప్రగతి ఆచార సాంప్రదాయాల కలయికే సంస్కృతి — టైలర్

→ ఒక జాతి భావితరాల వారికి ఆచార సాంప్రదాయాల రూపంలో అందించే చాతికే వారసత్వమే సంస్కృతి అని R.C మజుందార్ పేర్కొన్నాడు.

→ సంస్కృతి మానవ జీవన విధానం & ఆలోచనలు సాంఘిక మీతం వినోదాల ద్వారా వ్యక్తపరచ బడుతుంది. అని మాక్స్ వెబ్ అన్నాడు.

సమాజంలోని వ్యక్తుల మానసిక భౌతిక ప్రయోజనాలు ఒక దానిపై మరొకటి ఆధారపడుతూనే స్వతంత్రంగా ఉంటూ అతని ఆలోచనల విధానాల ప్రభావం అతని భౌతిక విధానాలను ప్రభావితం చేసినట్లు అతని చుట్టు ఉన్న భౌతిక వనరుల అవసరం అతని ఆలోచనలకు పదును పెడుతుంటాయి. అందువలన చరిత్ర మానవుని ఆలోచన విధానాన్ని కళలు సాహిత్యం విజ్ఞానం మొదలగు సంస్కృతిలో భాగంగా స్వీకరిస్తారు.

5. సంస్కృతి - నాగరికత

చరిత్రకారులు నిర్వచించేటప్పుడు సంస్కృతి మానవాళి కోసమే ప్రవేశపెట్టారు. కాగా సామాజిక శాస్త్రజ్ఞులు సమాజ జీవనానికి చెందిన అంశాలను ప్రధానంగా భౌతిక జీవనానికి సంస్కృతిలో ప్రాధాన్యత ఇస్తారు. అందువలన మనం నేడు చదువగల లిపి ప్రారంభం అయిన నాటి క్రీ.పూ 7వ శతాబ్దం నుండి క్రీ.పూ 3వ శతాబ్దం వరకు అంటే చారిత్రక యుగం ప్రారంభం అయినప్పటి నుండి మానవ సంస్కృతి మొదలయిందని చరిత్రకారుల అభిప్రాయం.

చారిత్రక యుగానికి పూర్వం మానవులు సాధించిన భౌతిక విజయాలను క్రీ.పూ 3000 నుండి క్రీ.పూ 1750 వరకు చరిత్రకారులు నాగరికతగా వ్యవహరిస్తారు.

చారిత్రక యుగం ప్రారంభం నుండి నాగరికత సంస్కృతిలో భాగం చేరుతుంది. ఇందుకు బదులుగా సామాజిక శాస్త్రవేత్తలు అధిక కాలం నుండి నేటి వరకు మానవ జీవనానికి సంబంధించిన అన్ని అంశాలను సంస్కృతిలోగా వ్యవహరిస్తారు. లిపి ప్రారంభం అయిన చారిత్రక యుగం నుండి నాగరికతగా పరిగణిస్తారు. అందువల్ల యుగారంభం నుండి సంస్కృతి నాగరికతలో భాగంగా చేరుతుంది.

చరిత్ర పూర్వయుగ మానవుడు - జీవన విధానం

భారతదేశంలో కూడా ఆదిమ మానవుడు నివసించాడు. సం॥ పూర్వమే అతను ఒకడు ఆవిర్భవించి నివసించాడు అని మొదట అతను అక్షరాస్యుడు ఆనాటకుడు మొదట అతను సంచరించేవాడు. నెమ్మదిగా గుహలలో నివసించసాగాడు. అంత రాక పోయినా తన జీవనాన్ని సాగించాడు. ఆకాలంలో అతను అయిన పరికరాలను వాడేవాడు అతడు వాడిన పరికరాలను అతను ఎలా జీవించేవాడో పురావస్తు శాస్త్రం ఆధారంగా తెలుసు-కున్నాము. అతను వాడిన పరికరాలను పరిక్షించి పరిశీలించి తెలుసుకొన్న యుగాలను

1. ప్రాచీన శిలాయుగం
2. మధ్య శిలాయుగం
3. నవీన శిలాయుగంగా విభజించారు.

1. ప్రాచీన శిలాయుగం:- క్రీ.పూ 30,000 నుండి 20,000 ఈకాలంలో మానవ సంచార జీవనం గడిపాడు ఒకే ప్రదేశంలో జీవించేవాడు కాదు. గుంపులుగా నదీ తీర ప్రాంతాల్లోనూ నివసించేవాడు. అతనికి చెప్పు తెలియదు గుహలలోనూ జీవించాడు. పక్షి, జంతువుల మాంసం, తినుట జీవించేవాడు.

2. మధ్య శిలాయుగం:- క్రీ.పూ 10,000 నుండి 8,000

ఈ యుగంలో అర్థం చేసుకునే శక్తిని అలవర్చుకున్నాడు. వికసించడంతో ఆలోచనలు పెరిగాయి. కొత్త పనిముట్లు చేయడం ప్రారంభించాడు. ఈపనిముట్లు 2.5 సెంటిమీటర్లు పొడవు మారుతూ ఉండేవి ఈ యుగాని సూక్ష్మ శిలాయుగం అంటారు.

నవీన శిలాయుగం: ఈ కాలంలో మానవుడు అభివృద్ధి చెందడం ప్రారంభించాడు. మానవుడు అనేక విధాలుగా మేధాశక్తిని పెంపొందించి అనేక వేల సంవత్సరాల నుండి ఆహారాన్ని సేకరించడం నేర్చుకున్న మానవుడు ఆహారాన్ని ఉత్పత్తి చేయడం నేర్చుకున్నాడు. దీనిలో భాగంగా వ్యవసాయం చేయడం ప్రారంభించాడు. క్రమంగా మానవుడు సంచారకుడు అయినాడు సదా పరిభ్రమక ప్రాంతాల్లో సస్యాల దగ్గర జీవిస్తూ జంతువులను మచ్చిక చేసుకుని వాటిని పోషిస్తూనే ఆహార ఉత్పాదకులుగా మారటం ఈ కాలం నాటి ప్రత్యేకతగా చెప్పవచ్చు.

చరిత్ర - అర్థం - వివరణ

చరిత్ర మనిషి సాధించిన ప్రగతి పథానికి అద్దం పట్టే చరిత్ర అనాదిగా మనిషి పరిణామ క్రమాన్ని చిత్రీకరించిన ఒక శాస్త్రం "హిస్టరీ" అనే ఆంగ్ల పదం "ఇస్టోరియా" అనే గ్రీక్ & మరియు "హిస్టోరియా" అనే లాటిన్ పదాల నుండి వచ్చింది.

→ హిస్టరీ అంటే గతంలో జరిగిన సంఘటనల పరిశీలన విచారణ అని అర్థం. ఇది మనిషి పరిణామాన్ని వివరించే యంత్రాంగం అని చెప్పవచ్చు అనే విధంగా పరిశీలన చేసిన తరువాత ఒక క్రమ పద్ధతిలో మనిషి పరిణామం అతనిపై పరిసరాల ప్రభావాన్ని అతని అలవాట్లను జీవన విధానం తెలిపే శాస్త్రమే "చరిత్ర"

"ఒక సమాజంగా నివసించే మానవుని గాథ - చరిత్ర" — "రెనా"

లిఖిత పూర్వక ఆధారాలనుఅనుసరించి చరిత్ర రాస్తారు. మనిషి జీవన పరిణామ దశలను పరిశీలిస్తే మనిషి మొట్టమొదటి అడవులో నివసించే వాడని ఆతరువాత గుహలలో ఉండేవాడని మనకు తెలుస్తుంది.

→ కాలంలో అతనికి ఆగ్ని తెలియదని పక్షులను, జంతువులను అనుకరించే వాడని కూడా అర్థమవుతుంది.

→ క్రమంగా సహజీవనాన్ని అలవరచుకున్నాడు.

→ ఆదిమయుగంలో అతనికి అగ్ని తెలియదు కాబట్టి ఈకాలం - చరిత్రను తెలుసుకోడానికి ఆధారాలుగా అతడు ఉపయోగించిన వస్తువులు ఉపకరిస్తున్నాయి.

→ అతడు ఉపయోగించిన వస్తువుల ద్వారా అతని యొక్క పరిజ్ఞాన, ఆర్థిక స్థితిగతులతో పాటు అతను తెలుసుకున్న లోపాలు వాటిని ఉపయోగించే విధానం మొ॥ అంశాలు తెలుసుకోగలుగుతున్నాము.

చరిత్ర - నిర్వచనాలు

భారత దేశ చరిత్రను అధ్యయనం సౌలభ్యం కోసం 3 భాగాలుగా విభజించడం జరిగింది. అవి భాగాలు.

1) ప్రాచీన భారతదేశ చరిత్ర
2) మధ్యయుగ భారతదేశ చరిత్ర
3) ఆధునిక భారతదేశ చరిత్ర

→ ఈ మూడు ఘటనా చరిత్ర దశలను ప్రస్తావించి ముందు అసలు అనే పదం తాలూకు నిర్వచనాల గురించి తెలుసుకోవడం అవసరం.

చరిత్ర ఒక సామాజిక శాస్త్రం అన్ని సామాజిక శాస్త్రాల మాదిరి చరిత్రకు ఎంతో విస్తృతమైన అర్థం ఉండటం వలన మంది మేధావులు, పండితులు రూపొందించిన అనేక నిర్వచనాలు అవగాహన చేసుకుంటే తప్ప చరిత్ర సారం, అర్థం, ప్రయోజనం అర్థం కాదు.

నిర్వచనాలు :-

"మార్పు లేని శిలాజమైన గతం గురించిన వృత్తాంతమే చరిత్ర" - అన్నే

"తాత్విక జ్ఞానాన్ని ఉదాహరణ సహితంగా వివరించేదే చరిత్ర" - డైమోథీస్

"నైతిక విలువలను వివరించే వృత్తాంతాలే చరిత్ర" - బోడిన్

"అంతవరకు జరిగిన చరిత్ర అంతా వర్గపోరాటాల చరిత్ర" - కార్ల్ మార్క్స్

"గతానికీ వర్తమానానికీ మధ్య జరిగే నిరంతర సంభాషణే చరిత్ర" → E.H కార్

"చరిత్ర ఒక శాస్త్రం అంతకన్నా ఎక్కువ కాదు, తక్కువ కాదు" - బ్యూరీ

"మానవుడు స్వేచ్ఛను సాధించుకున్న తీరు చరిత్ర" - లార్డ్ ఆక్టన్

"దృష్టాంతాల నుండి గ్రహించిన తత్వశాస్త్రం చరిత్ర" - డయోనిషస్

"చరిత్ర మానవులను జ్ఞాన వంతులుగా చేసే ఒక విద్యాభాగం - ఫ్రాన్సిస్ బేకన్

"యుక్తాయుక్త విచక్షణా జ్ఞానం కల్గించేదే చరిత్ర" - ఎడ్మండ్ బర్క్

"చరిత్ర అంటే మానవుడు చెప్పింది, చేసింది, అనుకుంటే కంటే వాస్తవాన్ని తెలియజేసేది" — మైట్ లాండ్

"గత రాజకీయాలే నేటి చరిత్ర" - సీలీ

"ఏ దేశ చరిత్ర ఆ దేశానికి సంబంధించిన సాంఘిక చరిత్ర" - కెర్

చరిత్ర- ఇతర సామాజిక శాస్త్రాల మధ్య సంబంధం

చరిత్ర సామాజిక శాస్త్రాలలో అత్యంత ప్రధానమైనది. సామాజిక శాస్త్రాలు ఒక ఒకటి అవినాభావ సంబంధం కల్గి ఉన్నాయి. అంటే సామాజిక శాస్త్రాలు అన్ని ఒక దానితో ఒకటి కల్సి ముడిపడి ఉన్నాయి.

చరిత్ర-సామాజిక శాస్త్రం: సమాజంలో వివిధ యదార్థాలను చరిత్రలో అధ్యయనం చేయడం జరుగుతుంది. వివిధ దేశ కాలమాన పరిస్థితులు సమాజాలను గురించి అధ్యయనం చేసే చరిత్రకు మానవుని పరిణామ క్రమాలను అధ్యయనం చేసే సామాజిక శాస్త్రానికి మధ్య సన్నిహిత సంబంధం కలదు.

చరిత్ర-అర్థ శాస్త్రం: చరిత్రకు అర్థశాస్త్రానికి మధ్య అవినాభావ సంబంధం ఉంది. చరిత్ర గతంలో జరిగిన వివిధ కాలాలలోని ఆర్థిక అంశాలను పరిశీలిస్తుంది. అర్థ శాస్త్రం మానవుని ఆర్థిక కార్యకలాపాలను వివరిస్తుంది.

చరిత్ర- రాజనీతి శాస్త్రం: చరిత్ర వివిధ రాజనీతి శాస్త్ర సిద్ధాంతాలు వాటి ముందు పరిస్థితులను క్రమం తప్పకుండా పరిశీలించి వివరిస్తుంది. చరిత్ర రాజనీతి సిద్ధాంతాల అధ్యయనం చరిత్రలో భాగంగా ఉంటుంది. చరిత్రలోని రాజకీయ అంశాలు సంస్థలు మొదలైన వాటిని రాజనీతి శాస్త్రం వివరిస్తుంది.

చరిత్ర-నీతి శాస్త్రం: వివిధ కాలంలోని నీతి నియమాలు గురించి చరిత్ర అధ్యయనం చేస్తుంది. మానవ సమాజాల నడవడిక ధర్మాలు, పద్ధతులను వ్యవహారాలను నీతి శాస్త్రం తెలియ జేస్తుంది. అందుకే చరిత్రకు - నీతి శాస్త్రానికి మధ్య అవినాభావ సంబంధం కలదు.

సంస్కృతి - అర్థ వివరణ - విశేష పరిధి

కొంత కాలవ్యవధిలో ఒక నాగరిక సమాజం పాటించే సామాన్య జీవన విధానం లక్షణాలు సాంప్రదాయాలు ఆ జాతి సంస్కృతులుగా పేర్కొనబడుతాయి.

కాలాను గుణంగా మార్పులు చెందినప్పటికీ ప్రాచీన కాలంనుండి నేటి వరకు సనాతనమైన భారతీయ సంస్కృతికి ఆధారమైనవి తత్వశాస్త్ర విజ్ఞాన లక్షణాలు భారతీయ కీర్తి ప్రపంచ వ్యాప్తం చేయడంలో కీలక పాత్ర వహిస్తాయి.

ఒక సమాజం నందలి ప్రజల జీవన విధానం లోకిక, పారలౌకిక భావం కళలు సాహిత్యం సాంఘిక, మత, రాజకీయ ఆర్థిక వ్యవస్థల స్వరూప స్వభావములను కల్పి ఆయా సంస్కృతిగా వ్యవహరించబడుతుంది.

మానవ సమాజానికి చెందిన వివిధ అంశాలు కాలానుగుణంగా మార్పు చెందుతుంది. మానవ జీవనము నిరంతరం సమస్యలతో నిండి ఉంటుంది. ఈ సమస్యలకు తగిన మార్పులను కోరుతూ ఉండడం కారణంగా నిరంతరం సంస్కరణలు లోనైయ్యి మానవ సమాజ స్వరూపాన్ని సంస్కృతి అని పిలువవచ్చు.

సంస్కృతి సమాజ శాస్త్రవేత్తలు, తత్వవేత్తలు పలువిధాలు అయిన వివరణ ఇచ్చారు. వ్యక్తి మనోభావాలు ఆత్మనిగ్రహాలు ఆదర్శాలు, మేధాశక్తి, వివేచన, చాతుర్యం మొదలగు అంశాలు కల్గి సంస్కృతి అవుతుందని అరవిందఘోష్ అన్నాడు.

→ ఒక సమాజంలో సభ్యులుగా మానవుడు సాధించే విజ్ఞానం ప్రగతి ఆచార సాంప్రదాయాల కలయికే సంస్కృతి → టైలర్

→ ఒక జాతి భావితరాల వారికి ఆచార సాంప్రదాయాల రూపంలో అందించే భౌతిక వారసత్వమే సంస్కృతి అని R.C మజుంద పేర్కొన్నాడు.

→ సంస్కృతి మానవ జీవన విధానం ఆలోచనలు సాహిత్యం వినోదాల ద్వారా వ్యక్తీకరణ జరుగుతుంది. అనిమాక్స్ ముల్గర్ ప్రకారం సమాజంలో వ్యక్తుల మానసిక భౌతిక ప్రపంచాలు రెండు దాన్ని మరొకటి ఆధారపడుతూనే స్వతంత్రంగా ఉంటాయి. అందువలన చరిత్రకారులు మానవుని ఆలోచన విధానాన్ని సాహిత్యం విజ్ఞానం మొదలైన సంస్కృతిలో భాగంగా స్వీకరిస్తారు.

సంస్కృతి - నాగరికత

చరిత్ర కారుల నిర్వచనంలో సంస్కృతి మానవుని కేంద్ర ప్రాధాన్యత వహించింది. కాగా సామాజిక శాస్త్రజ్ఞులు సమాజీవనానికి చెందిన అన్ని అంశాలకు ప్రధానంగా భౌతిక జీవన సంస్కృతిలో ప్రాధాన్యత ఇస్తారు. అందువలన మనం నేడు చదువుతున్న లిపి ప్రారంభం అయిన నాటి నుండి క్రీ.పూ 7వ శతాబ్దం నుండి క్రీ.పూ 3వ శతాబ్దం వరకు అంటా చారిత్రక యుగం ఆరంభం అయినప్పటి నుండి మానవ సంస్కృతి మొదలయిందని చరిత్ర కారుల అభిప్రాయం.

చరిత్రక యుగానికి పూర్వం మానవుడు సాధించిన విజయాలను క్రీ.పూ 3000 నుండి క్రీ.పూ 1750 వరకు చరిత్రకు నాగరికతగా వ్యవహరిస్తారు.

చారిత్రక యుగం ఆరంభం నుండి నాగరికత సంస్కృతిలో భాగంగా చెరుతుంది. ఇందుకు బిన్నంగా సామాజిక శాస్త్రవేత్తలు ఆధిమ కాలం నుండి నేటి వరకు మానవ జీవనానికి సంబంధించిన అన్ని అంశాలను సంస్కృతులుగా వ్యవహరిస్తారు. అది ఆరంభం అయిన చరిత్రక యుగం నాగరికతగా పరిగణిస్తారు. అందువల్ల యుగారంభం నుండి సంస్కృతి నాగరికతలో భాగంగా చెరుతుంది.

చరిత్ర పూర్వయుగ మానవుడు
– జీవన విధానం

భారత దేశంలో కూడా ఆదిమ మానవుడు నివసించాడు 5 లక్షల సం॥ పూర్వమే అతను ఇక్కడ ఆవిర్భవించి నివసించాడు అని తెలుస్తుంది. మొదట అతను నిర్మాణమైనప్పుడు ఆహారపు మొదట అతను గుహలలో సంచరించే వాడు నెమ్మదిగా గుహల నివసించసాగాడు అతనికి ఆవి రాకపోయినా తన జీవనాన్ని సాగించే కాలంలో అతను అనేక రకాలు అయిన పరికరాలను వాడేవాడు అతను వాడిన పరికరాలను బట్టి అతను ఎలా జీవించేవాడో పురావస్తు శాస్త్రం ఆధారంగా తెలుసుకోగలుగుతున్నాం. అతను వాడిన పరికరాలను పరిక్షించి పరిశీలించిన తరువాత ఆయుగాలను

1) ప్రాచీన శిలాయుగం
2) మధ్య శిలాయుగం
3) నవీన శిలాయుగంగా విభజించారు.

1) ప్రాచీన శిలాయుగం:- [క్రీ.పూ 30,000 to 20,000] ఈకాలంలో మానవుడు సంచార జీవనం గడిపాడు ఒకే ప్రదేశంలో జీవించేవాడు కాదు. గుంపులు, గుంపులుగా నది తీర ప్రాంతాల్లోనూ నివసించేవాడు. అతనికి చెప్పడం తెలియదు సమూహాలలోనూ జీవించాడు. పక్షి జంతువుల మాంసం, చేపలు తింటూ జీవించేవాడు.

2. మధ్య శిలాయుగం:- [క్రీ.పూ 10,000 నుండి 8,000]
ఈ యుగంలో అర్థం చేసుకునే శక్తిని అలవర్చుకున్నాడు బుద్ధి వికాసం-దంతో ఆలోచనలు పెరిగాయి. కొత్త పనిముట్లు చేయడం ప్రారంభించాడు ఈ పనిముట్లు 2.5 సెంటిమీటర్ల పొడవు మాత్రమే ఉండేవి కాబట్టి సూక్ష్మ శిలాయుగం అంటారు.

నవీన శిలాయుగం :- ఈ కాలంలో మానవుడు అభివృద్ధి చెందడం ప్రారంభించాడు. మానవుడు అనేక విధాలుగా మేధాశక్తిని ప్రదర్శించాడు. వేల సంవత్సరాల నుండి ఆహారాన్ని సేకరించడం నేర్చుకున్న తరువాత ఆహారాన్ని ఉత్పత్తి చేయడం ప్రారంభించాడు. క్రమంగా మానవుడు సంచారకుడు అయినాడు నదీ పరీవాహక ప్రాంతాల్లో జంతువుల దగ్గర జీవిస్తూ జంతువులను మచ్చిక చేసుకుని పెంచి పోషిస్తూనే ఆహార ఉత్పాదకులుగా మారటం ఈ కాలం యొక్క ప్రత్యేకతగా చెప్పవచ్చు.