

Department of Mathematics
SR&BGNR Arts and Science College (Autonomous), Khammam
Certificate Course Syllabus
Name of the Course: LaTeX

Objectives :-

The main motive is to impart the knowledge and understanding about LaTeX system, explain the procedure of LaTeX typesetting and familiarize the participants with various document formats of LaTeX and enable them to prepare research articles, thesis, books, and presentations with confidence. The broad objectives of the course are:

- To understand LaTeX, a document preparation system for high - quality typesetting.
- To understand features of LaTeX.
- To have hands on experience to become a user of LaTeX.

Course Outcomes:

Students will be able to learn:

- Typesetting of complex mathematical formulae using LaTeX.
- Use tabular and array environments within LaTeX.
- Use various methods to either create or import graphics into a LaTeX document.
- Typesetting of journal articles, technical reports, thesis, books, and slide presentations.
- Automatic generation of table of contents, bibliographies and indexes.

Unit No.	Topic	No. of Periods Allotted	Remarks
I	Introduction to LaTeX <ul style="list-style-type: none"> • What is LaTeX? • A Typical LaTeX Input File • Characters and Control Sequences Producing Simple Documents using LaTeX <ul style="list-style-type: none"> • Producing a LaTeX Input File • Producing Ordinary Text using LaTeX • Blank Spaces and Carriage Returns in the Input File • Quotation Marks and Dashes • Section Headings in LaTeX • Changing Fonts in Text Mode 	7 Hours	

	<ul style="list-style-type: none"> • Accents used in Text • Active Characters and Special Symbols in Text 		
II	Producing Mathematical Formulae using L^AT_EX <ul style="list-style-type: none"> • Mathematics Mode • Characters in Mathematics Mode • Superscripts and Subscripts • Greek Letters • Mathematical Symbols • Changing Fonts in Mathematics Mode • Standard Functions (sin, cos etc.) • Text Embedded in Displayed Equations • Fractions and Roots 	8 hours	
III	<ul style="list-style-type: none"> • Ellipsis (i.e., 'three dots') • Accents in Mathematics Mode • Brackets and Norms • Brackets and Norms • Multiline Formulae in L^AT_EX • Matrices and other arrays in L^AT_EX • Derivatives, Limits, Sums and Integrals 	8 Hours	
IV	Further Features of L^AT_EX <ul style="list-style-type: none"> • Producing White Space in L^AT_EX • Lists • Displayed Quotations • Tables • The Preamble of the L^AT_EX Input file • Defining your own Control Sequences in L^AT_EX 	7 Hours	
	Total	30 Hours	

Text book : Getting started with LaTeX by David R. Wilkins, 2nd Edition

Course Coordinator

Convener

Principal.

PERMISSION LETTER

This is with reference to the request letter received from Department of Mathematics regarding permission to offer a certificate course on **LaTeX** from 18th April 2022 to 25th May 2022 for the students of B.Sc.(Phy. Science)-I Year. The department is permitted to offer the said course during the period.

Date: 11.04.2022


PRINCIPAL



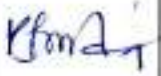
Department of Mathematics

SR&BGNR Arts and Science College (Autonomous), Khammam

Name of the Course: LaTeX

Workload Distribution

Ac. Year 2021-22 (2)

Unit No.	Topic	No. of Periods Allotted	Name of the lecturer allotted	Whether completed or not	Signature
I	Producing simple documents using LaTeX	7 Hours	V. Sambashiva Rao	Yes completed	
II	Producing mathematical formulae using LaTeX	8 hours	B. Venkateswar Rao	Completed	
III	Accents in Mathematics Mode	8 Hours	K. Jyothirmayi Rani	Completed	
IV	Further features of LaTeX	7 Hours	P. Anusudha	Completed	
	Total	30 Hours			

Text book: Getting started with LaTeX by David R. Wilkins, 2nd Edition

Certificate Course in LaTeX

List of students registered

Ac. Year: 2021-22(2)

S. No.	Name of the Student	Group & Year	H.T. NO.	Signature
1.	B. Sathish	I mcs	mcc 001	B. sathish
2.	E. Uday Kiran	I mcs	mcc 002	E. Uday Kiran
3.	A. Rajkumar	I mcs	mcc 003	A. Rajkumar
4.	K. Brahma	I mcs	mcc 004	K. Brahma
5.	I. Sai	I mcs	mcc 005	I. Sai
6.	K. Anvesh	I mcs	mcc 006	K. Anvesh
7.	L. Mahesh	I mcs	mcc 007	K. Anvesh
8.	B. Kalyan	I mcs	mcc 008	B. Kalyan
9.	D. Neeraja	I MPC	mcc 009	D. Neeraja
10.	T. Srividya	I MPC	mcc 010	D. Neeraja
11.	K. Praveen	I MPC	mcc 011	K. Praveen
12.	S. Vinay	I MPC	mcc 012	B. Vinay
13.	B. Poositha	I MPC	mcc 013	B. Poositha
14.	D. Bharath	I MPC	mcc 014	D. Bharath
15.	G. Kavya	I MPC	mcc 015	G. Kavya
16.	B. Aravind	I MPC	mcc 016	B. Aravind
17.	G. Umesh	I MPC	mcc 017	G. Umesh
18.	B. Rani	I MPC	mcc 018	B. Rani
19.	J. Gopi	I MPC	mcc 019	J. Gopi
20.	A. Suresh	I MPC	mcc 020	A. Suresh

S. No.	Name of the Student	Group & Year	H.T. NO.	Signature
21.	B. Balaji	I mpc	mcc 021	B. Balaji
22.	D. Nagaraju	I mpc	mcc 022	D. Nagaraju
23.	L. Anil	I mpc	mcc 023	L. Anil
24.	B. Prem	I mpc	mcc 024	B. Prem
25.	G. Vamshi	I mpc	mcc 025	G. Vamshi
26.	N. Navya	I mpc	mcc 026	N. Navya
27.	T. Balaram	I mpc	mcc 027	T. Balaram
28.	B. Vinay	I mpc	mcc 028	B. Vinay
29.	M. Sumanth	I mpc	mcc 029	M. Sumanth
30.	D. Gopala Rao	I mpc	mcc 030	D. Gopala Rao
31.	B. Swapna	I mpc	mcc 031	B. Swapna
32.	P. Sravanth	I mpc	mcc 032	P. Sravanth
33.	B. Gnaneswar	I msc	mcc 033	B. Gnaneswar
34.	P. Lahari	I msc	mcc 034	P. Lahari
35.	Y. Nagaraju	I msc	mcc 035	Y. Nagaraju
36.	J. Nithin	I msc	mcc 036	J. Nithin
37.	M. Vishnu	I msc	mcc 037	M. Vishnu
38.	G. Gopi	I msc	mcc 038	G. Gopi
39.	P. Kiran	I msc	mcc 039	P. Kiran
40.	K. Upendra Rao	I msc	mcc 040	K. Upendra Rao
41.	D. Naveenkumar	I msc	mcc 041	D. Naveenkumar
42.	M. Venu	I msc	mcc 042	M. Venu

S. No.	Name of the Student	Group & Year	H.T. NO.	Signature
43.	B. Saiteja	I m s ds	mcc 043	B. saiteja
44.	A. meenakshi	I m s ds	mcc 044	A. meenakshi
45.	K. Rahul	I m s ds	mcc 045	K. Rahul
46.	N. Lingaswamy	I m s ds	mcc 046	K. Rahul
47.	T. Sri Sai Reddy	I m s ds	mcc 047	T. Sri Sai Reddy
48.	M. Shiva Kumar	I m s ds	mcc 048	M. Shiva Kumar
49.	B. Manoj	I m s ds	mcc 049	B. Manoj
50.	D. Hariprasad	I m s ds	mcc 050	D. Hariprasad
51.	K. Mahesh Anand	I m s ds	mcc 051	K. Mahesh Anand.
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Department of mathematics
SR&BGNR GOVT.ARTS AND SCIENCE COLLEGE (A), KHAMMAM
Examination of certificate course
(LaTeX)

Max.Marks: 50

Duration: 45Min

Name : _____ Regd.No: _____ Marks _____

secured _____

(2021-22) Batch 2

1. What is LaTeX ?

- a) An application used to draw geometrical figures
- b) A computer programme for typesetting documents
- c) Numeric computing environment
- d) None of the above

2. LaTeX is created by

- a) D.E.Knuth
- b) Markus Hohenwarter
- c) L.B.Lamport
- d) J.H.Wilkinsom

3. Which of the following is not control sequence?

- a) $\$x-y\$$
- b) \textit{tit}
- c) \textit{indent}
- d) \textit{to}

4. The control sequence used to give space at beginning of a paragraph

- a) \textit{indent}
- b) \textit{in}
- c) \textit{tab}
- d) \textit{Tab}

5) The control sequence used to get bold font in LaTeX?

- a) \textit{bold}
- b) \textit{tit}
- c) \textit{tb}
- d) \textit{tbf}

6) The command used for next line

- a) $\$$
- b) \backslash
- c) $\textit{nextline}$
- d) $\backslash\backslash$

7) Which of the following is not control sequence used for font size

- a) \textit{big}
- b) \textit{tiny}
- c) \textit{large}
- d) \textit{huge}

8) Active character used for equation alignment

- a) $\$$
- b) $\%$
- c) $\&$
- d) $\#$

9) the active character used for super script

- a) $_$
- b) $:$
- c) $^$
- d) none

10) The control sequence used for lists

- a) \textit{list}
- b) \textit{lists}
- c) \textit{bullet}
- d) \textit{item}

11) LaTeX code for $K = \frac{b(a+\beta)}{1-b(\gamma+\delta)}$

Department of mathematics
SR&BGNR GOVT.ARTS AND SCIENCE COLLEGE (A), KHAMMAM
Examination of certificate course
(LaTeX)

Max.Marks: 50

Duration: 45Min

Name : _____ Regd.No: _____ Marks secured _____

(2021-22) Batch 2

1. What is LaTeX ?
 - a) An application used to draw geometrical figures
 - b) A computer programme for typesetting documents
 - c) Numeric computing environment d) None of the above
2. LaTeX is created by
 - a) D.E.Knuth b) Markus Hohenwarter c) L.B.Lamport d) J.H.Wilkinsom
3. Which of the following is not control sequence?
 - a) $\$x-y\$$ b) $\backslash\text{textit}$ c) $\backslash\text{indent}$ d) $\backslash\text{to}$
4. The control sequence used to give space at beginning of a paragraph
 - a) $\backslash\text{indent}$ b) $\backslash\text{in}$ c) $\backslash\text{tab}$ d) $\backslash\text{Tab}$
- 5) The control sequence used to get bold font in LaTeX?
 - a) $\backslash\text{textbold}$ b) $\backslash\text{textit}$ c) $\backslash\text{textb}$ d) $\backslash\text{textbf}$
- 6) The command used for next line
 - a) $\$$ b) $\backslash\backslash$ c) $\backslash\text{nextline}$ d) $\backslash\backslash\backslash$
- 7) Which of the following is not control sequence used for font size
 - a) $\backslash\text{big}$ b) $\backslash\text{tiny}$ c) $\backslash\text{large}$ d) $\backslash\text{huge}$
- 8) Active character used for equation alignment
 - a) $\$$ b) $\%$ c) $\&$ d) $\#$
- 9) the active character used for super script
 - a) $_$ b) $:$ c) \wedge d) none
- 10) The control sequence used for lists
 - a) $\backslash\text{list}$ b) $\backslash\text{lists}$ c) $\backslash\text{bullet}$ d) $\backslash\text{item}$
- 11) LaTeX code for $K = \frac{b(\alpha+\beta)}{1-b(\gamma+\delta)}$

a) $K = \frac{b(\alpha + \beta)}{1 - b(\gamma + \delta)}$

b) $K = \frac{b(\alpha + \beta)}{1 - b(\gamma + \delta)}$

c) $K = \frac{b(\alpha + \beta)}{1 - b(\gamma + \delta)}$

d) None

12) The control sequence \leq givesa) \leq b) $<$ c) $=$ d) \neq 13) LaTeX code for $x_n = 1/n^2 + 1$

a) $x_n = \frac{1}{n^2 + 1}$ b) $x_n = \frac{1}{n^2 + 1}$

c) $x_n = \frac{1}{n^2 + 1}$ d) none

14) The control sequence used to refer an equation

a) $\backslash eqref$ b) $\backslash eqref$ and $\backslash ref$ c) $\backslash ref$ d) none15) The output of the code $\int_0^1 x^3 dx$

a) $\int_0^1 x^3 dx$ b) $\int_1^0 \frac{1}{x^3} dx$ c) $\int_0^1 \frac{1}{x^3} dx$ d) None

16) The control sequence for ∞ a) $\backslash infty$ b) $\backslash infinity$ c) $\backslash inf$ d) $\backslash finite$ 17) The control sequence for \exists a) $\backslash thereexists$ b) $\backslash exists$ c) $\backslash exist$ d) none18) The control sequence for $\sqrt{\quad}$ isa) $\backslash sqrt$ b) $\backslash root$ c) $\backslash squareroot$ d) $\backslash sqrt$ 19) The control sequence for \sum a) $\backslash sum$ b) $\backslash sigma$ c) $\backslash summation$ d) none20) The control sequence for \cup a) $\backslash union$ b) $\backslash cap$ c) $\backslash cup$ d) $\backslash bigcap$

21) A slide in ppt begins with

a) $\backslash begin{slide}$ b) $\backslash begin{frame}$ c) $\backslash begin{item}$ d) $\backslash begin{page}$

22) Latex code for $y = \frac{a^3 + 2C_x}{1 + \sqrt{bx}}$

a) $y = \frac{a^3 + 2C_x}{1 + \sqrt{bx}}$ b) $y = \frac{a^3 + 2C_x}{1 + \sqrt{bx}}$

c) $y = \frac{a^3 + 2C_x}{1 + \sqrt{bx}}$ d) $y = \frac{a^3 + 2C_x}{1 + \sqrt{bx}}$

23) The output for $\bigcup_{x \in X} px = k(X)$

- a) $\bigcup_{x \in X} px = k(X)$ b) $\bigcup_{x \in X} px \neq k(X)$ c) $\bigcup_{x \in X} px \cap k(X)$ d) None

24) The Latex code for $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

- a) $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ b) $\frac{-b \pm \frac{b^2 - 4ac}}{2a}$
c) $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ d) none

25) The output of \cdots

- a) .. b) ... c) . d)

26) The control sequence for \vec{a}

- A) \vec{a} b) \bar{a} c) $\rightarrow a$ d) none

27) The code for $\|f\| = \inf\{k \in [0, \infty) : |f(x)| \leq k \forall x\}$

- a) $\|f\| = \inf\{k \in [0, \infty) : |f(x)| \leq k \forall x\}$
b) $\|f\| = \sup\{k \in [0, \infty) : |f(x)| \leq k \forall x\}$
c) $\|f\| = \inf\{k \in [0, \infty) : |f(x)| \leq k \forall x\}$ d) none

28) The output of $\left[\begin{array}{cc} a & b \\ c & d \end{array} \right]$

a & b \\
c & d \end{array} \right]

- a) $\begin{pmatrix} a & b \\ c & d \end{pmatrix}$ b) $\begin{bmatrix} a & b \\ c & d \end{bmatrix}$ c) $\begin{bmatrix} a & c \\ c & d \end{bmatrix}$ d) $\begin{bmatrix} a & c \\ b & d \end{bmatrix}$

29) The output of

$\left[|x| = \begin{array}{l} -x, x < 0 \\ x, x \geq 0 \end{array} \right]$
 $X \& \in \text{box}\{if \$x \leq 0\} :$
 $-x \& \in \text{box}\{if \$x < 0\}$
 $\end{array} \right]$

- a) $|x| = \begin{cases} -x, & x < 0 \\ x, & x \geq 0 \end{cases}$ b) $|x| = \begin{cases} -x, & x < 0 \\ x, & x > 0 \end{cases}$ c) $|x| = \begin{cases} -x, & x \geq 0 \\ x, & x < 0 \end{cases}$ d) none

30) Which of the following are bibliography style

- a) All b) unsrt c) abbrv d) Plain

Certificate Course in LaTeX

Final Examination Result

Ac. Year: 2021-22 (2)

S. No.	Name of the Student	Regd. No.	Max. marks	Marks secured	Percentage	Grade
1	B. Sathish	mcc001	50	46	92%	
2	E. uday Kiran	mcc002	50	36	72%	
3	A. Rajkumar	mcc003	50	44	88%	
4	K. Brahma	mcc004	50	45	90%	
5	T. Sai	mcc005	50	48	96%	
6	K. Anvesh	mcc006	50	46	92%	
7	L. Mahesh	mcc007	50	32	64%	
8	B. Kalyan	mcc008	50	39	78%	
9	D. Neeraja	mcc009	50	37	74%	
10	J. srividya	mcc010	50	39	78%	
11	K. Praveen	mcc011	50	34	68%	
12	S. Vinay	mcc012	50	40	80%	
13	B. Pojitha	mcc013	50	44	88%	
14	D. Bharath	mcc014	50	46	92%	
15	G. Kavya	mcc015	50	45	90%	
16	B. Abhinav	mcc016	50	39	78%	
17	G. umesh	mcc017	50	43	86%	
18	B. Rani	mcc018	50	35	70%	
19	J. Gopi	mcc019	50	44	88%	
20	A. suresh	mcc020	50	47	94%	

S. No.	Name of the Student	Regd. No.	Max. marks	Marks secured	Percentage	Grade
21	B. Balaji	mcc001	50	40	80 %	
22	D. Nagaraju	mcc002	50	40	80 %	
23	L. Anil	mcc003	50	46	92 %	
24	B. Prem	mcc004	50	42	84 %	
25	G. Vamsi	mcc005	50	44	88 %	
26	N. Navya	mcc006	50	47	94 %	
27	T. Balraj	mcc007	50	42	84 %	
28	B. Vinay	mcc008	50	41	82 %	
29	M. Sumanth	mcc009	50	39	78 %	
30	D. Gopala Rao	mcc030	50	44	88 %	
31	B. Swapna	mcc031	50	41	82 %	
32	P. Sravanth	mcc032	50	42	84 %	
33	B. Gnaneshwar	mcc033	50	41	82 %	
34	P. Lakshmi	mcc034	50	40	80 %	
35	Y. Nagaraju	mcc035	50	35	70 %	
36	J. Nithin	mcc036	50	40	80 %	
37	m. Vidhnu	mcc037	50	39	78 %	
38	G. Gopi	mcc038	50	43	86 %	
39	p. Kiran	mcc039	50	37	74 %	
40	K. ugendra Rao	mcc 040	50	36	72 %	

S. No.	Name of the Student	Regd. No.	Max. marks	Marks secured	Percentage	Grade
41	D. Nalcent Kumar	mcc041	50	45	90%	
42	M. Veni	mcc042	50	41	82%	
43	B. Saitga	mcc043	50	45	90%	
44	A. Meenakshi	mcc044	50	37	74%	
45	K. Rahul	mcc045	50	40	80%	
46	N. Lingaswamy	mcc046	50	41	82%	
47	T. Sri Sai Reddy	mcc047	50	43	86%	
48	M. Shivakumar	mcc048	50	39	78%	
49	B. Manoj	mcc049	50	46	92%	
50	D. Hariprasad	mcc050	50	43	86%	
51	K. Mahesh Anand	mcc051	50	46	92%	
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SR & BGNR GOVERNMENT ARTS & SCIENCE COLLEGE(A)

Khammam:: Telangana-507002



Certificate Course on LaTeX

This is to certify that **Mr/Ms B. Poojitha** of **MPCs I Year** of SR & BGNR Government Arts & Science College(A), Khammam has enrolled for the **Certificate Course on LaTeX** organized by **The Department of Mathematics** from 18th April 2022 to 25th May 2022 with Regd. No. **MCC0013** and successfully completed the course with 88% score.


Course Coordinator


Convener


Principal