

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SCIENCE
B.SC. II SEMESTER EXAMINATIONS – 2022
MATHEMATICS
(Differential Equations)

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

Answer any FIVE (5) questions of the following:

(5 X 6= 30)

1. Solve $\frac{dy}{dx} = \frac{x(2 \log x + 1)}{\sin y + y \cos y}$
2. Solve $(1+y^2) dx = (\tan^{-1}y - x) dy$
3. Solve $(P-xy)(P-x^2)(P-y^2) = 0$
4. Find the Orthogonal Trajectories of the family of Rectangular Hyperbola
 $y = \frac{c_1}{x}$
5. Solve $\frac{d^2y}{dx^2} + (a+b) \frac{dy}{dx} + aby = 0$
6. Solve $(D^2 - 2D + 1) y = e^x x^2$
7. Solve $(D^2 + 3D + 2)y = 12 e^x$ by the method of variation of Parameters.
8. By eliminating the arbitrary functions obtain the partial differential equation from the equation $Z = f(x+ct) + g(x-ct)$

SECTION – A

Answer any FOUR (4) questions from the following

(4 X 10 = 40)

9. a) Solve $(y^2 + yz)dx + (z^2 + zx) dy + (y^2 - xy) dz = 0$

(or)

b) Solve $\frac{dx}{mz - ny} = \frac{dy}{nx - lz} = \frac{dz}{ly - mx}$

10. a) Solve $P^2 + 2PY \cot x = Y^2$

(or)

b) Find the Orthogonal Trajectory of $r = c_1(1 - \sin \theta)$

11. a) Solve $(D^2 + 1) y = \cos x + xe^{2x} + e^x \sin x$

(Or)

b) Solve $(D^2 + 4D + 4) y = 4x^2 + 6e^x$ by the method of Undetermined coefficients.

12. a) Solve $(2x+3)^2 \frac{d^2y}{dx^2} - 2(2x+3) \frac{dy}{dx} - 12y = 6x$

(Or)

b) Solve $\frac{\partial^3 z}{\partial x^2 \partial y} - 18xy^2 + \sin(2x-y) = 0$

**PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF COMMERCE
B.COM II SEMESTER EXAMINATIONS – 2022**

PROGRAMMING WITH C & C++

Time: 03:00 Hours

Max. Marks: 50

SECTION – A

I. Answer any FIVE (5) questions of the following:

5X2=10

1. Write about the concepts of OOPS.
2. List the Operators in 'C'.
3. Discuss about the Conditional Statements.
4. Write about the Nested Loop Statements.
5. Define a Pointer? Write about the Pointer variables.
6. Write about the Built-in functions.
7. Discuss the Structure of C++ Program.
8. Write about the Unions.
9. Function overloading.
10. Inheritance forms.

SECTION – B

II. Answer the following questions.

5 X 8 = 40

11. a) Discuss about the Flow-charts with Diagrams. Write about the Pre-Processors used
(Or)
b) Write about the variables and constants with syntax.
12. a) Compare While and Do-While Statements with an Example.
(Or)
b) Discuss about break, continue and exit.
13. a) Define an Array? Explain about different types of it.
(Or)
b) Explain about String function and explain its different types
14. a) Define an Enumerated Data Type with an Example
(Or)
b) Explain the Differences between C and C++.
15. a) Discuss about a Class and Objects with an example.
(Or)
b) Write and explain about the Multiple Inheritance with syntax and an Example.

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
B.A., B.COM, B.SC. I SEMESTER EXAMINATIONS – 2022
TELUGU
PAPER I

Time: 03:00 Hours

Max. Marks: 70

SECTION - A

I. ఈ క్రింది వానిలో ఐదింటికి సమాధానాలు వ్రాయండి

5×6=30

1. నన్నయ కవి పరిచయం
2. సంవరణుడి తపస్సు గూర్చి సంక్షిప్తంగా వివరింపుము
3. రాజుకి కవికి మధ్య గల వ్యత్యాసం
4. పవన విరహిత నిబ్బృత దీపంబు పగిది సందర్భ సహిత వ్యాఖ్య
5. సత్యమువల్కె, శివాగారంబు – సంధులను
6. ఓరుగల్లుకోటనిర్మాణం
7. బీదలకెప్పుడేనియిచ్చినదివ్యర్థముగబోదు.
8. కర్మ ధారయసమాసభేదాలు

SECTION - B

II. ఈ క్రింది వానిలో ఏవైనా నాల్గింటికి సమాధానాలు వ్రాయండి.

4X10=40

ఈ క్రింది పద్యానికి సమగ్రవ్యాఖ్య వ్రాయండి.

1. a) విమలయశోనిధి! పురుషవృత్తమెరుంగుచునుండుజువె, వే
దములునుబంచభూతములుధర్మపుసంధ్యలునంతరాత్మయున్
యముడునుజంద్రసూర్యులునహంబునురాత్రియునన్మహాపదా
ర్థములివియుండగానరుడుదక్కొననేర్చునెతన్నుఘ్రుచ్చిలన్

లేదా

- b) గొడగూచి భక్తితత్వాన్ని వివరించండి

2. a) కాసులు పాఠ్యాంశం ఆధారంగా గురజాడ ప్రేమతత్వాన్ని వివరించండి.

లేదా

b) జయభేరి కవిత ఆధారంగా శ్రీ శ్రీ భావవ్యక్తీకరణ.

3. a) రుద్రమదేవి గుణగణాలు

లేదా

b) మహాదేవుని కుటిలత్వం

4. a) వాక్యభేదాలు గూర్చి వ్రాయండి

లేదా

b) త్రికసంధి, గుణసంధి, యణాదేశ సంధులను గూర్చి నోదాహరణంగా

వివరింపుము.

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANMAKONDA
FACULTY OF SCIENCE
B.Sc. II SEMESTER EXAMINATIONS - 2022
ZOOLOGY
(Animal Diversity -Vertebrates)

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

Answer any FIVE (5) questions of the following.

(5 X 6 = 30)

Draw diagrams wherever necessary.

1. Discuss affinities of *Balanoglossus*.
2. Write the salient features of Cephalochordata.
3. Describe different types of scales in fishes.
4. Write an account on Neoteny and Paedogenesis.
5. Write about different types of skull in Reptilia.
6. Describe the structure of heart in *Columba*.
7. Write in detail about Prototheria with examples.
8. Describe the structure of brain in Rabbit.

SECTION – B

Answer any FOUR (4) questions of the following.

(4 X 10 = 40)

Draw diagrams wherever necessary.

9. a) Write an essay on Retrogressive metamorphosis in Urochordata.
(Or)
b) Describe the general characters and outline classification of Chordates up to orders.
10. a) Describe the respiratory system of *Scoliodon*.
(Or)
b) Write an essay on Parental care in Amphibia.
11. a) How can you identify Poisonous and Non - Poisonous snakes?
(Or)
b) Discuss flight adaptations in birds.
12. a) Explain the dentition in mammals in detail.
(Or)
b) Describe the digestive system of Rabbit.

PINGLE GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS)
 WADDEPALLY, HANUMAKONDA
 B.Sc. (II Semester) Examination
 STATISTICS
 Paper II
 (Probability Distributions)

Time : 3 Hours]

[Max. Marks: 70

Section – A

5 × 6 = 30

I. Answer any five of the following questions.

1. Define Binomial distribution. Stating the underlying conditions show that binomial distribution tends to Poisson distribution.
2. The mortality rate for a certain disease is 7 in 1000, what is the probability for just 2 deaths on account of this disease in group of 400?
3. Derive the mean and variance of geometric distribution.
4. The machine is known to produce 2% defective a quality control inspector is examining the items by taking them at random. What is the probability that at least 4 items are to be examined in order to get 2 defectives?.
5. Define Rectangular distribution and state its properties.
6. A random variable X is normally distributed with mean 45 and standard deviation 10 then find $P(40 < X < 60)$ and $P(X < 60)$
7. Define Beta distribution. Derive the mean and variance of Beta distribution.
8. Let X be the inter arrival time between two successive arrivals. On observing the arrival pattern the average time is 0.4 minutes. What is the probability that the inter arrival time is at least 2 minutes.

Section - B

4 × 10 = 40

II. Answer the following questions.

9. (a) Obtain the moment generating function of binomial distribution. Hence, show that sum of the two binomial variates is a binomial variate, if the variates are independent and have the same probability of success.
(Or)
(b) Obtain the 4th order moments of Poisson distribution.
10. (a) Define Hyper geometric distribution derive its mean and variance.
(Or)
(b) Obtain mean and variance of Negative Binomial distribution.
11. (a) Define Normal distribution, state its properties. Also write the importance of normal distribution.
(Or)
(b) Show that in normal distribution all odd order moments are vanished and even order moments are exists .
12. (a) Define exponential distribution. Discuss the lack of memory property of exponential distribution.
(Or)
(b) Derive the characteristics function of Cauchy distribution.

Q.P.Code : 101216

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SOCIAL SCIENCES
B.A II SEMESTER EXAMINATIONS – JULY 2022
PUBLIC ADMINISTRATION
(Development Dynamics Emerging Trends)

Time: 3 hours:

Max. Marks: 70

SECTION - A

I. Answer any Five questions of the following

5x4=20

1. Origins of Comparative Public Administration
తులనాత్మక ప్రభుత్వపాలన యొక్క మూలాలు
2. Development Administration
అభివృద్ధి పరిపాలన
3. Firstst Minnowbrook conference
మొదటి మిన్నోబ్రూక్ సమావేశం
4. Goals of new public administration
నూతన ప్రభుత్వపాలన యొక్క లక్ష్యాలు
5. meaning of public choice approach
ప్రజా ఎంపిక విధానం యొక్క అర్థం
6. scop of new public management
నూతన పాలన నిర్వాహన యొక్క పరిధి.
7. public policy
ప్రజా విధానం
8. welforschems
సంక్షేమ పథకాలు
9. globalization
ప్రపంచీకరణ
10. nature of privatization and globalization
ప్రైవేటీకరణ మరియు ప్రపంచీకరణ యొక్క స్వభావం

SECTION-B

II. Answer the following questions.

5x10=50

11. a) Explain the importance of comparative Administration
తులనాత్మక పరిపాలన యొక్క ప్రాముఖ్యతను వివరించండి

(OR)

- b) Discuss the salient features of Development Administration
అభివృద్ధి పరిపాలన యొక్క ముఖ్య లక్షణాలను చర్చించండి

12. a) Examine the important aspects of second minnowbrook conferences
రెండవ మిన్నోబ్రూక్ సమావేశాల యొక్క ముఖ్యమైన అంశాలను పరిశీలించండి

(OR)

b) Discuss the major areas of concern expressed in the third Minnobrook confereance.

మూడవ మిన్నోబ్రూక్ కాన్ఫరెన్స్ లో వ్యక్తీకరించబడిన ప్రధాన ఆందోళనలను చర్చించండి.

13. a) Explain the importance of public choice approach
ప్రజా ఎంపిక విధానం యొక్క ప్రాముఖ్యతను వివరించండి

(OR)

b) Write an essay on New public management.

నూతన పాలన నిర్వాహన పై ఒక వ్యాసం రాయండి.

14. a) Write about importance and structure of public policy.

సబ్లిక్ పాలసీ యొక్క ప్రాముఖ్యత మరియు నిర్మాణం గురించి వ్రాయండి

(OR)

b) Write an essay on Development of new telangana state.

నూతన తెలంగాణ రాష్ట్ర అభివృద్ధిపై ఒక వ్యాసం రాయండి.

15. a) What do you mean by the concept of globalization? explain the different views on globalization.

ప్రపంచీకరణ భావన అంటే ఏమిటి? ప్రపంచీకరణపై భిన్నమైన అభిప్రాయాలను వివరించండి.

(OR)

b) Criticallay examine the public administration in the context of globalization.

ప్రపంచీకరణ నేపథ్యంలో ప్రభుత్వ పరిపాలనను విమర్శనాత్మకంగా పరిశీలించండి.

Q.P. Code: 105/1

PINGLE GOVERNAMENT COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY HANUMAKONDA
FACULTY OF ARTS/SCIENCE/COMMERCE
B.A/B.Sc./B.Com. I SEMESTER EXAMINATION
SANSKRIT SECOND LANGUAGE: PAPER-I

[TIME:3HOURS]

[MAX.MARKS:70]

SECTION - A भाग:- अ

6X5=30

षण्णां प्रश्नानां समाधानानि लिखत। (Answer any SIX from the following.)

1) श्लोकस्य अनुवादं कुरुत।

प्रियवादी च भूतानां सत्यवादी च राघवः।

बहुश्रुतानां वृद्धानां ब्राह्मणानामुपासिता॥

2) ससन्दर्भव्याख्यात। हंहो! कपटसंन्यासिन्! कथं विश्वासघातं स्वामिवञ्चनं च शिक्षयसि?

3) वाल्मीकिमहर्षेः परिचयं संक्षेपेन लिखत।

4) अधोलिखित पदानां लिङ्गविभक्तिवचनानि प्रत्यभिजानीत।

अ) देवस्य आ) भानुना इ) पितरि ई) मधुषु उ) फलानि

5) सन्धिं विघटयत।

अ) रामानुजः आ) एकैकः इ) मुकुन्देति ई) अन्वेति उ) वागीशः

6) ससन्दर्भव्याख्यात। - "क्षुद्रेऽपि नूनं शरणं प्रपन्ने ममत्वमुच्चैः शिरसां सतीव"।

7) श्लोकस्य अनुवादं कुरुत।

ददाति प्रतिगृह्णाति गुह्यमाख्याति पृच्छति।

भुङ्क्ते भोजयते चैव षड्विधं प्रीतिलक्षणम्॥

8) श्लोकपूरणं कुरुत।

मनस्येकंदुरात्मनाम्॥

SECTION - B भाग:-आ

4x10=40

चतुर्णां प्रश्नानां समाधानानि लिखत। (Answer any FOUR from the following.)

9. द्वयोः श्लोकयोः प्रतिपदार्थं तात्पर्यं च लिखत।

[1201 : 9:00 : 1:00]

1. अ) अनन्तरत्नप्रभवस्य यस्य हिमं न सौभाग्यविलोपि जातम्।
एको हि दोषो गुणसन्निपाते निमज्जतीन्दोः किरणेष्विवाङ्कः॥
आ) आमेखलं सञ्चरतां घनानां च्छायामधः सानुगतां निषेव्य।
उद्वेजिता वृष्टिभिराश्रयन्ते शृङ्गाणि यस्यातपवन्ति सिद्धाः॥

(अथवा)

2. अ) कपोलकण्डूः करिभिर्विनेतुं विघट्टितानां सरलद्रुमाणाम्।
यत्र स्त्रुतक्षीरतया प्रसूतः सानूनि गन्धः सुरभीकरोति॥
आ) यः पूरयन्कीचकरन्ध्रभागान्दरीमुखोत्थेन समीरणेन।
उद्गास्यतामिच्छति किन्नराणां तानप्रदायित्वमिवोपगनन्तुम्॥
10. (अ) 'धर्मबद्धो दौवारिकः' - इति पाठ्यांशस्य सारांशं लिखत।

(अथवा)

(आ) पञ्चतन्त्रमनुसृत्य रक्तमुख-करालमुखयोः कथां संक्षेपेण लिखत।

11. द्वौ शब्दौ सर्वासु विभक्तिरूपाणि लिखत।

अ) देव आ) भानु इ) वारि ई) मति

(अथवा)

आ) " एष धर्मः सनातनः " इति पाठ्यांशस्य सारांशं लिखत।

12. अ) अधोनिर्दिष्टेषु पञ्चपदानां सन्धिनामनिर्देशपूर्वकं विघटयत।

1. तथागमः 2. गायकः 3. सूर्योदयः 4. परमौदार्यम् 5. धात्रंशः
6. कविश्च 7. तट्टीका 8. षण्मुखः

(अथवा)

आ) अधोनिर्दिष्टेषु पञ्चानां सन्धिनामनिर्देशपूर्वकं सन्धत।

1. इति + अत्र 2. परम + ऊहः 3. महा + औषधिः 4. कुर्वन् + एव
5. सुप् + अन्तः 6. गुरोः + आज्ञा 7. वाक् + मयम् 8. गौरी + इयम्

Q.P. Code:101215

PINGLE GOVT. COLLEGE FOR WOMEN (Autonomous)

WADDEPALLY, HANUMAKONDA

FACULTY OF SOCIAL SCIENCES

B.A. II SEMESTER EXAMINATIONS-2022

POLITICAL SCIENCE

(Western Political Thought)

Time: 03.00 Hrs.

Max.Marks: 70

SECTION-A

5X4=20

Answer any FIVE (5) questions of the following:

- 1) Sophists
- 2) Plato's Theory of Justice.
- 3) Thomas Aquinas Theory of Eternal Law.
- 4) Machiavelli views on religion - Politics.
- 5) Thomas Hobbes views on Nature State.
- 6) Locke's Theory of Natural Rights.
- 7) Felicific Calculus.
- 8) J.S. Mill's views on right to vote.
- 9) Views of Hegel on War.
- 10) Karl Marx theory of 'Surplus Value'

SECTION-B

5X10=50

Answer the following questions:

11. a) Critically examine the Plato's theory of Ideal State.
(or)
b) Explain the views of Aristotle on Slavery
12. a) Explain Political Philosophy of Thomas Aquinas.
(or)
b) Describe Machiavelli's techniques for the extension and preservation of the state.
13. a) Analytically explain the social contract theory of John Locke.
(or)
b) Write an essay on Rousseau's 'Theory of General Will'.
14. a) Describe the views of Jeremy Bentham on Utilitarianism.
(or)
b) Explain the view of J.S. Mill on 'Liberty' and Representative Government.
15. a) Explain Hegel's Dialectic Method.
(or)
b) Write an essay on Karl Marx's Scientific Socialism.

FACULTY OF SOCIAL SCIENCES
B.A.II SEMESTER EXAMINATIONS-2022
POLITICAL SCIENCE (WESTERN POLITICAL THOUGHT)

Time: 03.00 Hours

Max.Marks:70

సెక్షన్-ఎ

ఈ క్రింది వానిలో ఏవైన (5) ప్రశ్నలకు సమాధానములు వ్రాయుము:

5x4=20

- 1) సోఫిస్టులు
- 2) ప్లేటో ధర్మ సిద్ధాంతము
- 3) థామస్ అక్విన్సాస్ శాశ్వత న్యాయం
- 4) మతం-రాజకీయాలపై మాకియవెల్లి భావాలు.
- 5) ప్రాకృతిక వ్యవస్థపై హోబ్స్ భావాలు.
- 6) జాన్ లాక్ సహజ హక్కుల సిద్ధాంతము
- 7) ఫెలిసిఫిక్ కలనగణితము
- 8) ఓటు హక్కుపై జె.ఎస్.మిల్ భావాలు
- 9) యుద్ధం పై హెగెల్ భావాలు.
- 10) కార్లమార్బ్ మిగులు విలువ సిద్ధాంతము.

సెక్షన్-బి

ఈ క్రింది ప్రశ్నలకు సమాధానములు వ్రాయుము:

5x10=50

- 11) ప్లేటో ఆదర్శ రాజ్య సిద్ధాంతాన్ని విమర్శనాత్మకంగా పరిశీలించుము.
లేక
బానిసత్వంపై అరిస్టాటిల్ భావాలను వివరించుము.
- 12) థామస్ అక్విన్సాస్ రాజనీతి తత్వాన్ని వివరించుము.
లేక
రాజ్యవిస్తరణ మరియు రాజ్య పరిరక్షణకు మాకియవెలి సూచించిన వ్యూహాలను తెలుపుము.
- 13) జాన్ లాక్ సామాజిక ఒడంబడిక సిద్ధాంతాన్ని విశ్లేషణాత్మకంగా వివరించుము.
లేక
రూసో 'జనేచ్చు' సిద్ధాంతంపై ఒక వ్యాసము వ్రాయుము.
- 14) ఉపయోగితావాదం పై జెర్మి బెంధాం భావాలు వివరించుము.
లేక
స్వేచ్ఛ మరియు ప్రాతినిధ్య ప్రభుత్వంపై జె.ఎస్. మిల్ అభిప్రాయాన్ని తెలుపుము.
- 15) హెగెల్ గతితార్కిక పద్ధతిని వివరించుము.
లేక
కార్లమార్బ్ శాస్త్రీయ సామ్యవాద సిద్ధాంతాన్ని వ్రాయుము.

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SCIENCE
B.SC. II SEMESTER EXAMINATIONS – 2022
PHYSICS
(Thermal Physics)

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

I. Answer any FIVE (5) questions of the following:

5 X 6 = 30

1. What is mean free path? Derive an expression for it.
2. State and explain second law of thermodynamics.
3. What are thermodynamic potentials? Write expressions.
4. Explain the Porus- Plug experiment.
5. Deduce Stefan's law from Planck's law of radiation.
6. Describe the working of Optical Pyrometer.
7. For a distribution of 2 identical particles in 4 equally probable energy states. Calculate the number of possible arrangements according to B-E statistics.
8. What is a black hole? Write a note on neutron star.

SECTION – B

II. Answer the following questions.

4 X 10 = 40

9. a) Give the postulates of kinetic theory of gases. Derive an expression for the viscosity of a gas on the basis of kinetic theory.

(OR)

b) What is T-S diagram? Find the expression for efficiency of a reversible Carnot's engine with the help of T-S diagram.

10. a) Explain the Joule-Kelvin effect. Derive expression for Joule-Kelvin co-efficient for an ideal gas and for a Vander wall's gas.

(OR)

b) Define refrigeration? Explain the principle of working of a vapour compression machine.

11. a) What is Planck's hypothesis? Derive Planck's formula for the distribution of energy in blackbody radiation.

(OR)

b) Define solar constant. Obtain an expression for calculating the temperature of sun with the help of solar constant.

12. a) Deduce Maxwell-Boltzmann velocity distribution for classical particles.

(OR)

b) State the conditions for the F-D statistics. Derive an expression for the F-D distribution.

**PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SCIENCE
B.SC.II SEMESTER EXAMINATIONS – 2022
MICROBIOLOGY
(Microbial Physiology and Biochemistry)**

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

I. Answer any FIVE (5) questions of the following:

5X6=30

1. Bacterial growth curve
2. Uptake of nutrients
3. phosphorylation
4. glycoxylate cycle
5. lock and key model
6. nucleotides
7. Buffers
8. SDS-PAGE

SECTION – B

II. Answer the following questions

4 X 10 = 40

9. a) Give a detail note on nutritional groups in microorganisms.

(Or)

- b) Explain the factors influencing the bacterial growth.

10. a) Discuss the TCA cycle with a neat diagram.

(Or)

- b).Define anaerobic respiration and explain in detail about nitrate respiration.

11. a) Give a detail note on carbohydrates and it's classification

(Or)

- b) Define Enzyme.Explain the characteristics of enzymes and their classification.

12. a) define chromatography? Explain the principle and applications of thin layer chromatography.

(Or)

- b) Define pH. Give a note on importance of pH in biological fluids.

Q.P. Code: 101217

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SOCIAL SCIENCES
B.A.II SEMESTER EXAMINATIONS – 2022
HISTORY
(History of India C.700-1526 CE)

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

I. Answer any FIVE (5) questions of the following:

5X4=20

1. Ellora (ఎల్లోరా)
2. Brihadishwara Temple (బృహదీశ్వరాలయం)
3. Razia Sultana (రజియాసుల్తానా)
4. QutubMinar (కుతుబ్మినార్)
5. Rudramadevi(రుద్రమదేవి)
6. Ramappa Temple (రామప్పదేవాలయం)
7. Chaitanya (చైతన్యం)
8. Mirabai(మీరాబాయి)
9. Harihara and Bukka (హరిహరమరియుబుక్క)
10. Aliya Rama Raya (అళియరామరాయలు)

SECTION – B

II. Answer the following questions.

5 X 10 = 50

11. a) Narrate the Pallavas contribution to art and architecture
(కళలుమరియువాస్తుశిల్పానికపల్లవులుచేసినకృషినివివరించండి.)
(Or)
b) What are the special features of local administration under the Cholas
(చోళులకాలంలో స్థానికస్వపరిపాలనగురించివివరించండి)
12. a) Explain the administrative and economic reforms that were introduced by AlauddinKhilji
(అల్లావుద్దీన్ఖిల్జీప్రవేశపెట్టినపరిపాలనమరియుఆర్థికసంస్కరణలువివరించండి)
(Or)
b) Critically analyse the character and policies of Muhammad Bin Tughlaq
(ముహమ్మద్బిన్తుగ్లక్పాలనమరియువిధానాలనువిమర్శనాత్మకంగావిశ్లేషించండి)

13. a) Discuss the main features of Bhakti movement in Medieval India
(మధ్యయుగభారతదేశంలో భక్తి ఉద్యమం యొక్క ప్రధాన లక్షణాలను చర్చించండి.)
(Or)
b) Describe the impact of Islam on Indian Society and Culture
(భారతీయ సమాజం మరియు సంస్కృతిపై ఇస్లాం యొక్క ప్రభావాన్ని వివరించండి)
14. a) Describe the art and cultural services of the Kakatiya period
(కాకతీయుల కాలం నాటి కళా సాంస్కృతిక సేవలను వివరించండి)
(Or)
b) Give a brief account of the achievements of Rudramadevi
(రుద్రమదేవి సాధించిన విజయాల సంక్షిప్త వివరణ ఇవ్వండి)
15. a) Illustrate the socio economic and religious conditions under the Vijayanagara empire
(విజయనగర రాజుల కాలం నాటి సామాజిక ఆర్థిక మత పరిస్థితులను వివరించండి)
(Or)
b) Estimate the greatness of Sri Krishnadevaraya
(శ్రీకృష్ణదేవరాయల గొప్పతనాన్ని అంచనా వేయండి)

**PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SOCIAL SCIENCES
B.A. II SEMESTER EXAMINATIONS – 2022
GEOGRAPHY**

Paper II: Climatology and Oceanography

Time: 3 Hours

Max. Marks: 70

SECTION - A

I. Answer any Five from the following questions.

5 x 6 = 30

1. Stratosphere
2. Solar constant
3. Doldrums
4. Orographic rainfall
5. Continental shelf
6. Spring tides and neap tides
7. Oceanic salinity
8. Types of ocean currents

SECTION- B

II. Answer the following questions.

4 x 10 = 40

9. a) Explain the different layers of atmospheric structure?
(or)
b) Illustrate the factors affecting the solar insolation?
- 10.a) Explain the various atmospheric belts of the world?
(or)
b) Describe the Land and sea breezes with a neat diagram?
- 11.a) Write a note on the major oceanic relief features?
(or)
b) Explain the factors responsible for variation in ocean salinity distribution?
- 12.A) Explain about north Atlantic Ocean currents in detail?
(or)
b) What are the types of oceanic deposits? Explain any one

पिंगिलगवर्नमेंटमहिलाकलाशाला(आटोनोंमस)

वड्डेपल्लिहन्मकोण्डा

बि.ए, बी.काम, बी.यस.सी-सत्र-॥परिक्षा

हिन्दी

पत्र- ॥

Q.P. Code : 203

समय- 3 घण्टे

अंक- 70

भाग- अ

6X5=30

I. किन्हीं 6 (छः) के प्रश्नों का उत्तर दीजिए।

1) ताई कहानी से क्या प्रेरणा मिलती है? अपने शब्दों में लिखिए।

2) किन्हीं पाँच शब्दों के विलोम शब्द लिखिए।

1) पूर्ण

2) बाहर

3) प्राचीन

4) सुलभ

5) नया

6) असली

7) सुख

8) भला

3) "राजनीतिका बँटवारा" पाठ के आधार पर भैयाजी का चरित्रांकन कीजिए।

4) "वापसी" कहानी का उद्देश्य अपने शब्दों में बताइए।

5) किन्हीं (5) पाँच शब्दों के संधिविच्छेद कीजिए।

1) विद्यालय

2) सदाचार

3) अत्यंत

4) निर्मल

5) परमात्मा

6) निस्संतान

7) अनाथालय

8) गिरीश

6) विदेशों में विवेकानंद जी की क्या छापरही?

7) प्रदूषण से मानव को क्या हानियाँ हैं?

8) "डिष्टीकलेक्टरी" कहानी का उद्देश्य बताइये।

भाग - आ

4X10=40

II. प्रश्नों के उत्तर दीजिए।

9) अ) "ताई" कहानी के आधार पर रामेश्वरी के चरित्र की विशेषताओं को स्पष्ट कीजिए।

(or)

आ) "ताई" कहानी की कथावस्तु को संक्षेप में लिखिए।

10) अ) "राजनीतिका बँटवारा" पाठ की कथावस्तु को संक्षेप में लिखिए।

(or)

आ) "वापसी" कहानी के आधार पर गजाधर बाबू का चरित्रांकन कीजिए।

11) अ) "सेवा" कहानी का सारांश लिखिए।

(or)

ओ) "सिलिया" का चरित्र - चित्रण कीजिए।

12) अ) "पर्यावरण प्रदूषण" का अर्थ क्या है? अपने शब्दों में लिखिए।

(or)

ओ) "सिलिया" कहानी का सारांश लिखिए।

समाप्त

**PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
B.A., B.COM, B.SC. II SEMESTER EXAMINATIONS – 2022
ENGLISH II**

Time: 3 Hours

Max.Marks:70

Answer the following questions in serial order

SECTION - A

4x5=20

I. Answer any four of the following

1. Write correct suffixes and prefixes to the following words.

a) violence, b) pronged c) lead d) spoon e) happy

(ness, multi, ful, mis, non)

2. Write suitable Synonyms to Any Five of the following.

a) remedy b) delicate c) seldom d) negotiate

e) achieve f) formally g) excel h) scheduled

3. Identify the kinds of sentences of the following.

a) What a wonderful performance!

b) Does Latha speak Marathi?

c)Let us go to Library.

d)Who is coming to see us today?

e) They are studying well.

4. Correct the following sentences and rewrite them.

a) She has sent her application yesterday.

b) The Cheese is rich in vitamin D

c)I am waiting here for two hours to meet my friend.

d)The girls sat down besides the lake.

e) The furniture in the house belong to the Land lord

5. Fill in the blanks with suitable prepositions.

a) Did you read the article ----- the applications of biotechnology.

b) Manu has been living in Mumbai-----2019.

c) Sudha sits -----Saroj and Madhu.

d) They are sorry -----having disturbed you.

e) Leela does all her work -----great care.

6. Fill in the blanks with suitable tenses

a) -----you-----your record work? (finish)

b) Hurry up. The taxi -----for us(wait)

c) The earth -----around the sun(revolve)

d) Suresh -----type letters for last two hours(type)

e) The man jumped off the bus, while it -----(move)

7. Read the following passage and answer the following questions.

Jadav Payeng was born in 1963. At the age of sixteen, he began planting trees on a deserted island, and over the next few decades, an entire forest grew out of his efforts. He devoted his youth and most of his life to this mission -reducing erosion by planting trees and tending to land. His forest became known as Moloi forest, after Jadav's nick name, Molai. In the past decade, Jadav has been given a number of awards and been made the subject of documentaries and books about environmental conservation. In 2015, he was awarded the Padma Shri Award.

In 1979, during the monsoon, 16-year-old Jadav saw a pile of snakes washed upon a sandbar after the floods in the Brahmaputra River. They were scorched to death in the heat that came after the rains. The sight filled him with horror, and drove him to wonder whether humans too would die the same way with out shade and tree cover. He asked nearby villagers for help because he could see that the land around them was being eroded and damaged at a great rate. Their advice was to plant trees, as many as possible, especially trees like bamboo which would be able to survive difficult weather. Jadav took their advice to heart, and never looked back. Driven by his mission, he stopped going school and focussed only on the task at hand -to plant more trees every day.

Answer the following questions.

1) The word "scorch" means-----

2) Which forest is named after Jadav payeng's nick name?

3) For which mission Jadav payeng devoted his youth and life?

4) What was the advice given by the villagers to reduce land erosion?

5) Why Jadav Payeng has been subject to many documentaries and books?

8. Read the following passage and answer the questions given below.

As Rajnesh walked home after school one day, he suddenly felt faint with hunger knew his mother would not have any food ready for him at home. He grew desperate and went from house to house asking for food. Finally, a girl gave him a glass of milk. When he tried to pay her, she refused and sent him on his way. Years later the girl, a grown woman, fell very sick and could not find any one who could cure her. Finally, she went to a large hospital with the city's greatest doctor. The doctor

spent months, treating the woman until she was finally cured. The woman was happy but was also afraid she could not pay the bill. When the hospital handed the bill to her, she opened to read, "Paid in full, with a glass of milk".

- A) What did Rajnesh get from the girl?
- B) The words written on the paper is?
- C) Find out the word from the passage which means "frantic"?
- D) What did the Rajnesh pay to the girl?
- E) Who is the doctor in the story?

Section - B

II. Answer the following questions:

5x10=50

9. a) Describe author's initial visit to the photographer.

Or

b) How does Leacock comment on profession of photography?

10. a) What is the difference between good manners and good breeding according to Jonathan swift's essay "A Treatise on Good manners and Good breeding"?

Or

b) Describe how Jonathan swift frequently relies on humour to make his point in his essay.

11. a) Examine the poem "Ode on solitude" as an introspective and self revelatory

one

Or

b) Explain the theme solitude in the poem "Ode on Solitude"

12. a) Sketch the character of Natalya in the one act play "The Proposal".

Or

b) Briefly outline the movements of the play from happy movements to tense movements to its final resolution.

13) a) Write a dialogue between two strangers introducing themselves to each other in a formal context. (Dialogue between two individuals at National seminar)

Or

b) Write a note on "WORD STRESS" With examples

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF COMMERCE
B.COM II SEMESTER EXAMINATIONS – 2022
FINANCIAL ACCOUNTING II

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

Answer any FIVE (5) questions of the following:

(5 X 4 = 20)

1. What do you mean by Accommodation Bills?
2. Ramu draws a bill on Shyam payable after three months for Rs, 15,000/- and shyam accepted it. Ramu discounted the bills with his bank at 9% p.a. on the due date bill is honoured. Pass the journal entries in the books of Ramu and Syam.
3. What is a Proforma Invoice?
4. Ajay sends goods on consignment to Rakesh. The terms are that Rajesh will receive 10% commission on the invoice price (which is cost plus 25%) and 20% of any price realised above the invoice price. Ajay sends goods whose cost is Rs. 2,00,000/-. Rakesh sold 3/4th of the goods for Rs. 3,00,000/-. Ascertain the commission payable to Rakesh.
5. Joint Venture Vs Partnership.
6. Ram and Shyam enter into a joint venture and keep separate set of books. Pass the journal entries the their books for i) Joint bank account opened by Ram contributing Rs. 3,00,000/- and Shyam contributing Rs. 2,00,000/-, ii.) Expenses paid form joint bank account Rs. 1,50,000/- iii) Expenses paid buy Ram Rs. 30,000/- iv) Commission to Shaym Rs. 20000/-.
7. What is Single Entry System? What are its defects?
8. From the following information you are required to calculate total purchases.

	Rs.
Opening balance of Bills Payable	50,000/-
Opening Balance of Creditors	60,000/-
Closing Balance of Bills of Payable	70,000/-
Closing Balance of Creditors	40,000/-
Cash paid to creditors during the year	3,02,000/-
Bills payable discharged during the year	89,000/-
Returns outwards	12,000/-
Cash purchases	2,58,000/-

9. Explain capital and revenue expenditure.

10. Ascertain the income towards subscription for the year 2021 on the basis of the following information.

Subscription received in 2021 (including Rs. 4000/-of 2020) Rs.25,000/-

Subscriptions in arrears on 31-12-2020 Rs. 500/-

Subscriptions outstanding for 2021 Rs. 1,800/-

Subscriptions received in advance as on 31-12-2020 Rs. 3,000/-

Subscriptions received in advance as on 31-12-2021 Rs. 1,200/-

SECTION – B

Answer the following questions.

(5 X 10 = 50)

11 a) What is a Bills of Exchange? Distinguish between a Promissory Note and Bills of Exchange.

(Or)

b) Suresh accepted a bill of Raj for Rs. 25,000/- payable after three months on 1st June, 2021. Raj endorsed the bill to Hari in settlement of his debt for Rs. 26,000/-. Hari discounted the bill with his bank for 24,800/-, the bill was honoured on the due date. Pass the journal entries in the books of all the parties.

12 a) How do you value the unsold stock on the Consignment?

(Or)

b) Uday electronics sent 100 LED TV sets on consignment basis to Vamshi. The cost of each TV was Rs. 30,000/- but the consignor prepared the proforma invoice at 25% above the cost. The company spent Rs. 8000/- on packing. While taking delivery of the TVs vamshi had spent Rs. 9,500/- as freight and cortage. By the end of the year Vamshi sold 80 TVs @ 41,000/- each. He paid Rs. 11,000/- as godown rent. He was entitled to a commission of 5% on sales. Prepare consignment account and Vamshi's account.

13. a) Define joint venture and explain its feature and Advantages.

(Or)

b) Ajay and Bharath enter into a joint venture, agreeing to share profits and losses in proportion of $\frac{4}{5}$ th and $\frac{1}{5}$ th respectively. Ajay supplies goods to the value of Rs. 50,000/- and incurs expenses amounting to Rs. 4000/-. Bharath supplies goods to the value of Rs. 40,000/- and his expenses amount to Rs. 3,000/-. Bharath sells goods on behalf of the joint venture for Rs. 1,20,000/- charging commission @ 5% of value realised. The amount due is settled by bank draft. Show the necessary accounts in the books of both the parties.

14 a) What do you mean by single entry system? How does single system differ from the double entry system?

(Or)

b) Madhukar keeps his books on single entry system the position of his business as on 1st april 2021 was as follows.

	Rs.
Sundry creditors	17,000
Premises	50,000

Stock	25,000
Debtors	20,000
Furniture	2,000

Receipts		Rs.	Payments		Rs.
From Sundry debtors	45,000		Bank of overdraft (on 1-4-2021	10,000	
Cash sales	55,000		Expenses	55,000	
			Drawings	3,000	
			Payment to creditors	20,000	
			Cash in hand	3,000	
			Cash at Bank	9,000	
		-----		-----	
		1,00,000		1,00,000	
		-----		-----	

Closing balances:

Stock Rs. 30,000, Debtors Rs. 25,000, Creditors Rs. 22,000, Depreciation on furniture by 15% and premises by 10%. Provision for doubtful debts is to be made 5%/ Prepare Trading and Profit & Loss Account for the year ended 31st March 2022 and Balance sheet as on the date.

15 a) Receipts & payment account Vs income and Expenditure account.

(Or)

b) The following Receipts and Payment account is prepared by Rudra Society for the year ended Dec. 31, 2021.

Rudra Cross Society
Receipts and Payment Account
For the year ended Dec. 31, 2021

Receipts	Amount	Payment	Amount
To Balance b/d:		By Utilities Expense	5,000
Cash	35,000	By Salaries Expense	45,000
Bank	50,000	By Honorarium	15,000
To Donation	25,000	By Computer	30,000
To Subscription	20,000	By Rent Expense	7,500
To Life Mem. fee	15,000	By Furniture	4,000
To Interest on Bond	1,000	By Supply	6,000
To Entrance Fees	10,000	By Bonds	20,000
		By Balance c/d:	
		Cash- 8,500	
		Bank- 15,000	23,000
	1,56,000		1,56,000

Additional Information:

Subscription Received includes ₹ 2,000 for 2020 and ₹3,000 for 2020.

Subscription Outstanding on Dec. 31, 2021 is ₹ 4,000

Subscription received in advance in 2020 is ₹1,000 that is subscription for 2021.

Computer was Purchased on April 1, 2021 and Furniture on 1 July 2021.

The Society had other fixed assets ₹150,000 as on Jan. 1 2021.

Depreciation Rate on Fixed Assets and Furniture is 10% per year and on Computer 15% per Year.

The Govt. Bonds is purchased on 1 July 2021 and rate of interest is 12% per year.

Outstanding Salary is ₹ 5,000 for 2021 and Donation is general Donation.

From the above information Prepare Income and Expenditure account of Rudra Society.

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SOCIAL SCIENCES
B.A. II SEMESTER EXAMINATIONS – 2022
ECONOMICS
(Macro Economics)

Time: 03:00 Hours

Max. Marks: 70

SECTION – A**I. Answer any FIVE (5) questions of the following:****(5 X 4 = 20)**

1. Importance of Macro Economics
2. Difference between GDP and GNP
3. Concept of Multiplier
4. Wage Cut policy
5. Limitations of marginal efficiency of capital
6. Determinants of Money supply
7. Concept of Philips curve
8. Stagflation
9. Discount Rate
10. Monetary Policy

SECTION – B**II. Answer the following questions.****(5 X 10 = 50)**

11. a) Define the National Income. Explain the components of National Income
(Or)
b) Describe the measurement methods of National Income
12. a) Write the Keynesian theory of Income and employment
(Or)
b) Describe the factors that determine the consumption function.
13. a) What are the determinants of Investment.
(Or)
b) Explain the Neo- Classical theory of Interest.
14. a) Define the money. Explain the functions of Money.
(Or)
b) Describe the Cambridge version of quantity theory of money
15. a) Explain the causes and consequences of Inflation.
(Or)
b) Write the phases of Trade Cycle.

B.A. II – SEMESTER EXAMINATIONS - 2022
ECONOMICS
(Macro Economics)

Time: 3 hours

Max Marks: 70

SECTION – A

ఈ క్రింది వానిలో ఏవేని ఐదు ప్రశ్నలకు సమాధానములు వ్రాయుము
ప్రతి ప్రశ్నకు (4) నాలుగు మార్కులు (5 × 4 = 20)

- 1) స్థూల అర్థశాస్త్రము ప్రాధాన్యత
- 2) స్థూల దేశీయ ఉత్పత్తి, నికర దేశీయ ఉత్పత్తి మధ్యగల బేధము
- 3) గుణకము భావన
- 4) వేతనాల కోత
- 5) ఉపాంత మూలధన సామర్థ్యము - పరిమితులు
- 6) ద్రవ్య సప్లయ నిర్ణయకాలు
- 7) ఫిలిప్పస్ వక్రరేఖ భావన
- 8) స్టాగ్ ఫ్లేషన్
- 9) డిస్కాంట్ రేటు
- 10) ద్రవ్య విధానము

SECTION – B

ఈ క్రింది ప్రశ్నలకు సమాధానములు వ్రాయుము. ప్రతి ప్రశ్నకు (10) మార్కులు (5 × 10 = 50)

- 11) (ఎ) జాతీయాదానూన్ని నిర్వచించి, జాతీయాదాయ భాగాలు వివరించండి.
(లేదా)
(బి) జాతీయాదాయాన్ని కొలిచే పద్ధతులు తెల్పండి.
- 12) (ఎ) కీన్స్ ఆదాయ, ఉద్యోగితా సిద్ధాంతమును వ్రాయండి.
(లేదా)
(బి) వినియోగ ఫలమును నిర్ణయించే నిర్ణయకాలు తెల్పండి.
- 13) (ఎ) పెట్టుబడి నిర్ణయకాలు వ్రాయండి.
(లేదా)
(బి) నవ్యసాంప్రదాయ వడ్డీ సిద్ధాంతమును వివరించండి.
- 14) (ఎ) ద్రవ్యమును నిర్వచించి, ద్రవ్యం విధులను వివరించండి.
(లేదా)
(బి) కేంబ్రిడ్జ్ ద్రవ్యరాశి సిద్ధాంతము వివరించుము.
- 15) (ఎ) ద్రవ్యోల్బణమునకు కారణాలు మరియు పర్యవసానాలు వ్రాయుము.
(లేదా)
(బి) వ్యాపార చక్రాల వివిధ దశలను వ్రాయండి.

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SCIENCE
B.SC.II SEMESTER EXAMINATIONS – 2022
COMPUTER SCIENCE
(Programming in C++)

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

I. Answer any FIVE (5) questions of the following:

5 X 6=30

1. What are the Datatypes in C++?
2. Define Inline Functions?
3. Define Class?
4. What is Constructor?
5. Define Abstract Base Class?
6. What are Streams in C++?
7. Define Class Templates?
8. Write about 'try' and 'catch' expressions?

SECTION – B

II. Answer any FOUR (4) questions from the following

4 X 10 = 40

9. a) Explain various tokens of C++?
(Or)
b) What is Function and explain how to declare a function in C++ with example?
10. a) What is Object Oriented Programing? Explain its benefits and applications?
(Or)
b) Explain overloading of Unary and Binary Operators with an example?
11. a) Define Inheritance and explain various types of Inheritance?
(Or)
b) Define Polymorphism and explain its types with examples?
12. a) Explain about the exceptions with arguments?
(Or)
b) Define Templates? Explain types of Templates in C++?

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SCIENCE
B.SC. II SEMESTER EXAMINATIONS – 2022
DATA SCIENCE
(Problem Solving and Python Programming)

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

I. Answer any FIVE (5) questions of the following:

5 X 6 = 30

1. Define Pseudo Code and Algorithms
2. Write about Type Conversion with examples
3. Define Function and Explain how to call a function
4. Define String and Explain how to declare a String
5. Write about List Operations
6. Explain about command line arguments
7. Write how to Create Objects in Python
8. Explain about Encapsulations

SECTION – B

II. Answer the following questions:

4 X 10 = 40

9. a) Discuss in detail about Python Programming
(Or)
b) Explain different Control Flow statements
10. a) Explain different types of functions with examples
(Or)
b) Discuss in detail about String Methods
11. a) Write about Lists in detail
(Or)
b) Define an Exception? Explain how to handle Exception
12. a) Discuss in detail about Object –Oriented Programming
(Or)
b) Write short notes on i) Inheritance ii) Polymorphism

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF COMMERCE
B.COM II SEMESTER EXAMINATIONS – 2022
BUSINESS LAWS

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

I. Answer any FIVE (5) questions of the following:

(5 X 4 = 20)

1. Contract without consideration is void
2. Novation
3. Sale by description
4. National Consumer Commission
5. Trade Marks
6. TRIPS
7. Corporate Social Responsibility
8. Public Limited Company
9. Contributors
10. Amalgamation

SECTION – B

II. Answer the following questions.

(5 X 10 = 50)

11. a) Define Contract? Explain various types of contracts?
(Or)
b) Write about modes of discharge of a contract?
12. a) Differentiate between Contract of Sale and Agreement to Sell?
(Or)
b) What are the objectives of Consumer Protection Act-1986?
13. a) Define Caveat emptor and explain the Exceptions to it?
(Or)
b) What are the rights of Copy rights owner?
14. a) Explain Different kinds of Meetings?
(Or)
b) What are the Qualifications and Disqualifications of Directors of Company?
15. a) Explain the procedure and provisions of Compulsory Winding up of Company?
(Or)
b) Explain the different modes of Winding up of Company?

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SCIENCE
B.Sc. II SEMESTER EXAMINATIONS – 2022
Chemistry

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

I. Answer any FIVE (5) questions of the following:

(5 X 6 = 30)

1. Discuss the structures of oxides of phosphorus.
2. Explain the structures of XeF₆, XeO₃ and XeO₄.
3. Explain how you will synthesise allyl chloride from propane.
4. Write the mechanism of Gattermann reaction.
5. Write a note on conductometric titrations.
6. Determine the solubility product of a sparingly soluble salt.
7. State and explain Raoult's law of dilute solutions.
8. Explain Co-precipitation and Post-precipitation.

SECTION – B

II. Answer the following questions.

(4 X 10 = 40)

9. a) What are interhalogen compounds? Explain the structures of BrF₃, BrF₅ and IF₇.

(Or)

b) What are d-Block elements? Explain Complex formation property and Catalytic property of d-Block elements.

10. a) Discuss S_N1 reaction with mechanism and stereochemistry by taking suitable example.

(Or)

b) Give a brief note on Clemenson's reduction and Wolf-Kishner reduction with examples.

11. a) Write a brief note on Arrhenius theory of electrolyte dissociation and its limitations?

(Or)

b) What is Galvanic cell? Explain construction and working of Galvanic cell.

12. a) Define elevation in boiling point and derive the relation between molecular weight of solute and elevation in boiling point.

(Or)

b) Explain Plane of symmetry, Center of symmetry, Alternate axis of symmetry with examples.

**PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SCIENCE
B.SC. II - SEMESTER EXAMINATIONS – 2022
APPLIED NUTRITION
(Nutritional Biochemistry)**

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

I. Answer any FIVE (5) questions of the following:

5 X 6 = 30

1. Anti sterility vitamin (E – Vitamin)
2. Pyridoxine
3. Anemia
4. Fluorosis
5. Japanese water therapy
6. Regulation of water balance
7. Enzyme inhibitors
8. Enzymes classification

SECTION – B

II. Answer the following questions.

4 X 10 = 40

9. a) explain about water soluble vitamins.
(Or)
b) Write a note on A, D, E, K vitamins sources and affect of its deficiency.
10. a) Define antioxidants and explain about role of zinc and selenium as antioxidants
(Or)
b) Describe about micro and macro minerals and effects of its deficiency
11. a) Write a note on electrolyte balance
(Or)
b) Explain about abnormalities of water balance
12. a) Explain about general mode of action of thyroxin hormones
(Or)
b) Write a note on pancreas adrenal gland structure and functions

**PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SCIENCE
B.SC. II SEMESTER EXAMINATIONS – 2022
BIOTECHNOLOGY
(Biological Chemistry and Microbiology)**

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

I. Answer any FIVE (5) questions of the following:

5 X 6 = 30

1. Glycogen structure
2. TMV
3. Glyoxalate Cycle
4. Substrate level phosphorylation
5. Classification of Microorganisms
6. Transmission electron microscopy
7. Hepatitis Virus
8. Bacterial Nutrition

SECTION – B

II. Answer the following questions.

4 X 10 = 40

9. a) Add a detailed note on protein structural organization
(Or)
b) Discuss about the different type of Enzyme inhibitions with examples
10. a) Describe the beta oxidation pathway of fatty acids
(Or)
b) Discussed the significance of the various steps in the gluconeogenesis pathway.
11. a) Discuss the physical and chemical sterilization methods.
(Or)
b) Write about the historical development and contributors of microbiology
12. a) Discuss the bacterial growth curve and factors its effects
(Or)
b) Describe the general characteristics and structure of micro algae and fungi

PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
FACULTY OF SCIENCE
B.SC. II SEMESTER EXAMINATIONS – 2022
BOTANY

(Gymnosperms, Taxonomy of Angiosperms and Ecology)

Time: 03:00 Hours

Max. Marks: 70

SECTION – A

I. Answer any FIVE (5) questions of the following:

5 X 6 = 30

1. Write any Six General Characters of Gymnosperms
2. Describe the L.S of Gnetum Ovule.
3. Types of Classification
4. Herbarium
5. Any six Economic Importance of Fabaceae Family
6. Asteraceae Flower
7. Food Chain
8. Hydrosere

SECTION – B

II. Answer any FOUR (4) questions from the following

4 X 10 = 40

9. a) Describe the Pinus needle Transverse Section with neat Labeled Diagram
(Or)
b) Give an account of Types of Fossils and Fossilization
10. a) Give an account of Bentham & Hooker Classification
(Or)
b) Write an account of Embryology and Cytotaxonomy in relation to Plant Taxonomy
11. a) Describe the Fabaceae family with technical terms
(Or)
b) Give an account of Euphorbiaceae family with Economic Importance
12. a) Describe the Components of Ecosystem
(Or)
b) Describe the Ecological Adaptations of Hydrophytic Plants

**PINGLE GOVT. COLLEGE FOR WOMEN (AUTONOMOUS)
WADDEPALLY, HANUMAKONDA
B.A.,B.COM,AND B.SC
II SEMESTER EXAMINATIONS – 2022
ABILITY ENHANCEMENT COURSE (AECC)
Basic Computer Skills (FOC)**

Time: 2 Hours.

Max. Marks: 40

Section-A

Answer any FOUR (4) questions of the following

4x5=20 M

1. What is Computer? Explain Characteristics of Computer
2. What is Softcopy? Explain any two softcopy devices
3. Write about Cache Memory
4. Explain Binary Number System with example
5. Explain Venn Diagram with example
6. Explain about Middleware

Section-B

Answer the following questions

7. A) Explain Basic Computer Organization with neat Diagram

2x10=20 M

(Or)

- B) Explain Secondary Storage Devices

8. A) What is Number System? Explain the procedure to convert Decimal to Binary and Octal to Binary number system

(Or)

- B) What is Logic Gate? Explain AND, OR, NOT Logic gates