**B.Sc.,,(Computer Science):1st Year : Theory Paper-1**

**PC Software and C Programming**

Time:3 Hours Max,Marks:100

 Section-A

 Answer all Questions 4x15:60

1. a) Draw the block diagram of a Computer and explain all its parts in detail.

 b) Explain the functions of an operating system.

 OR

 c) Discuss in detail about RAM , ROM, and Cache memories.

 d) What are the different types of input devices? Explain.

2. a) Explain Mail Merge concept in MS-Word and give an example.

 b) Explain the Macros concept in MS-Word.

 OR

 c) Describe the steps to create a presentation using auto content wizard in MS-Power

 Point.

 d) Describe the methods to insert, delete, print and copy slides in MS-Power Point.

3. a)What are the engineering and math functions in MS-Excel?

 b) Describe about different charts of MS-Excel.

 OR

 c) What are the steps for creation of database in MS-Access Explain?

 d) Write short notes on Excel graphics.

4 .a) What are thee control statements of C language? Explain.

 b) Write a program to find the roots of a quadratic equation.

OR

 c) How are multi-dimensional arrays defined in C? Explain.

 d) Write a program in C to multiply two n x n matrices.

 SECTION-B

 Answer any FIVE questions 5x4:20

5) What are the different types of Programming Languages?

6) What is recycle bin? What is its functionality?

7) How do we create a table of 5 rows and 6 columns using MS-Word?

8) What is slide master view in MS-Power Point?

9) How do you create relationships in MS-Access?

10) Name four text functions of MS-Excel.

11) Give an example of recursive unction.

12) What are the relational operators in C language?

SECTION-C

Answer All questions

 10x2=20

14) How to change font size and style in MS-Word.?

15) What is the difference between the DOS internal and external commands?

16) Give an example to use? Operator in C.

17) What is Const qualifier in C

18) What is time function in MS-Excel?

13) Define a Macro in MS-Word.

19) How do we number a slide in MS-Power POINT ?

20) Give an example query in MS-Access?

21) How do we give comments in C?

22) How do we hide the rows of a table in MS-Excel?

1st B.A. Public Administration

(Modified Curriculum W. E.F. 2008-09)

Paper –I Introduction to Public Administration

MODEL SQUESTION PAPER

Time: 3 Hours Max. Marks:100

 SECTION-A

 4x15=60

Answer all Questions

1. a) Define Public Administration and discuss its nature and scope.

 b) Describe Woodrow Wilson’s views on Politics Administration dichotomy.

2. a) Critically examine the classical approach.

 b) Describe Mayo’s Human relations theory.

3. a) Discuss the Prismatic theory of Fred Riggs.

 b) Describe the importance of Public Administration in the Context of Globalization,

 Privatisation and liberalization.

4. a) Discuss the views of Max Weber on Bureaucracy.

 b) Describe the importance of Communications in the Organization.

 SECTION-B

 5x4=20

Answer any 5 Questions

5) X Theory and Y Theory.

6) Marx on Bureaucracy.

7) New Public Administration.

8) Public Relations.

9) Administrative Planning.

10) Public Policy.

11) Kinds of Leadership & Theories.

12) Importance of Supervision.

 SECTION-C

Very Short answer Questions.

 13) F.W.Taylor

14) Governance

15) POSDCORB

16) Traite theory

17) Downsizing

18) Simon

19) Facts – Values

20) Transitia

21) Bazar-Canteen Model:

22) Sala.

MODEL QUESTION PAPER

Ist B.Sc., DEGREE EXSDAAMINATIONS

PAPER-II – CHEMISTRY

PAPER I INORGANIC, ORGANIC, PHYSICAOL AND GEENESRAL CHEMISTRY

(REVISEED SYLLABUS AND MODEL QUESTION PAPER W.E.F.2009)

(Time: 3 Hours) Max Marks : 100

Answer all four questions from Section A, Any five questions from Section B and all ten

Questions from Section C

Section A (4x15=60Marks)

UNIT—1 (INORGANIC CHEMISTRY)

1) a) What are Silicones ? How they are classified ? Discuss their preparation and uses?

 Or

 b) What are Grignard Reagents? Discuss their preparation and Synthetic applications?

UNIT—2 (ORGANIC CHEMISTRY)

2) a) i) Explain the types of bond Fission with examples

 ii) Explain Markowni Koff’s Rule with suitable example.

 Or

 b) Explain the general Meschanism of Nitration and Sulphonation Discuss the

 mechanism of Friedal Crafts alkylation reaction

UNIT—3(PHYSICAL CHEMISTRY)

3) a) How do real Gases deviate from ideal behaviour?

 Derive Vander Wall’s equation of State

 Or

 b) Derive Bragg’s Equation. Discuss the Structural elucidation of NaCl

UNIT—4 (GENERAL CHEMISTRY)

4. a) What are bonding and anti bonding molecular orbitals? Explain Paramagnatic

 Character of O2 with the help of M.O. theory

b) i) Discuss the isomerism of Tartaric Acid

 ii) Discuss the conditions for the existence of Optical isomerism in Organic

 Compounds

Section B (5x4=20 Marks)

5) Discuss the diagonal relationships between Lithium and Magnesium

6) Write the preparation of Hydrozine and Hydroxyl Amine

7) Write notes on Baeyer’s Strain theory

8) Explain the stability of Carbonium lons

9) Explain the application of Liquid Crystals for LCD Devices

10) State and Explain Nernst distribution law

11) Explain the importance of Quantum Numbers

12) Write a note on D.L and R.S configuration

Section C (10x2 = 20 Marks)

13) What is Inorganic Benzene? Give its structure

14) Wriste the stuructures of CIF3 and IF7

15) Write Diel’s Alder Reaction

16) Explain the Acidic nature of Acetylene

17) Draw the chair and Boat Conformers of Cyclohexane

18) What is meant by gold Number

19) Write any two differences between Physical Adsorption and Chemisorption

20) What are Emulsions and Gels?

21) Name the Group Reagents in Semi Micro Qualitative Analysis?

22) What is “racemisation” and “resolution”?

MODEEL QUESTION PAPER

B.Sc., Degree Biotechnology 1st year theory examinations

Paper—1 : Cell Biology & Genetics

Time: 3 Hours Max. Marks: 100

SECTION-A (4x15=60 marks)

Answer ALL questions, Choosing ONE question from each unit

UNIT-1

1. (a) Write an essay on the eukaryotic cell cycle and explain the different stages of

 Mitosis.

 OR

 (b) Describe the ultra structure of eukaryotic cell.

UNIT – II

2. (a) Discuss the Mendel’s laws of inheritance and explain the factors that contribute to

 The success of Mendel’s experiments.

 OR

 (b) Explain the terms – linkage, recombination and crossing over, Describe the

 Exceptions to the Mendelian principle of independent assortment.

UNIT-III

3. (a) Give an account of the model proposed by Watson and Crick for the structure of

 DNA

 OR

 (b) Describe the experiments which conclusively established DNA as the genetic

 Material.

 UNIT-IV

4. (a) What is student’s t-test and t-distribution? Describe the properties and application Of t-distribution in statistical testing.

 OR

 (b) Describe the different nucleic acid protein data bases. How can these be used forData mining for different purposes

SECTION –B (5x4=20 marks)

Answer any Five of the following questions

5. Describe chromosome and chromatin. Do chromosomes always have the same

 Appearance during a cells life?

6. Define meiosis and explain its significance.

7. Do segregation and independent assortment proceed during mitosis, meiosis or both?

 Explain.

8. What is linkage mapping?

9. What are the different forms of DNA?

10. How thymine dimmers are formed in DMNA and how they are repaired?

11. Write a note on analysis of variance.

12. What do you understand by bioinformatics ands data bases?

SECTION-C (10x2=20)

Answer ALL questions

13. Differentiate between plant and animal cells?

14. What is interphase?

15. Explain the difference between gene and allele.

16. What is X-linked inheritance?

17. Which radio active isotopes were used by Hershey and chase i8n their experiments

 For labeling T2 bacteriophage? Give reasons.

18. Explain the semi conservative model of DNA replication.

19. What is binomial distribution?

20. Explain the term BLAST.

21. What is the genetic material of Tobacco Mosaic Viru

22. What is the function of topoisomerases?

ANDHRA UNIVERSITY

BIOCHEMISTRY MODEL QUESTION PAPER

PAPER-I BIOMOLECULES AND ENZYMOLOGY(With effect from March,2009)

Time: 3 Hours Max. Mdarks:100

SECTION-A

Answer any FOUR of the following

(4x15=60)

1. (a) What are Carbohydrates? Describe the reactions of Monosacharides?

 Or

 (b) Explain the structure and properties of Phospholipids?

2. (a) Write a note on structural organizations of Proteins?

 Or

 (b) Write a note on Protein Sequencing?

3. (a) Describe the DNA double helix structure?

 Or

 (b) What are Porphyrins? Explain the structure and properties of heme?

4. (a) Describe the factors affecting the enzyme Catalysis?

 Or

 (b) Write a note on allosteric enzymes?

SECTION—B

Answer any FIVE of the following

 5x4=20

5. ISO enzymes

6. Naturally occurring peptides

7. Fluid mosaic model

8. Mutarotation

9. Enzyme Specificity

10. Amino Sugars

11. Denaturation of Proteins

12. Chlorophyle

SECTION—C

Answer ALL Questions

Define the following 10x2=20 Marks

13. Zymosen

14. Anomers

15. Micelles

16. Peptide bond

17. TmDraw the structures of the following.

18. Lactose

19. Cholesterol

20. Tryptophan

21. Guanine

22. Protoporphyrin IX

Model Question Paper

PAPER-I ; INTRODUCTORY MICROBIOLOGY

SECTION-A

Answer all Questions, All Questions Carry Equal Marks. (4x15=Marks)

1. a) Describe in detail the importance and applications of Microbiology.

 Or

 b)Write an essay on electron Microscopy?

2. a) What is sterilization? Discuss the physical methods of sterilization used in

 Microbiological laboratories.

 Or

 b) Write short notes on

 1. Autoclave 2. Micromanipulator 3. Membrane Fitter.

3. a) Describe and differentiate Prokaryotes from Eukaryotes.

 Or

 b) Give an account on the general characteristics and classification of viruses.

4. a) Give an account of the classification and general characteristics of carbohydrates.

 Or

 b) Mention the principle and applications of chromatography.

SECTION-B

Write Short Notes on any FIVE of the following.

 (5x4=20 )

5. Biopesticides

6. Single Cell Proteins (SCP)

7. Joseph Lister

8. Lyophilization

9. Domain System

10. Capsule

11.Tyndallization

12. Archaebacteria

SECTION-C

Answer all question (10x2=20Marks)

13. Acridine dyes

14. Cryopresentation

15. Magnetosomes

16. Mollicutes

17. Sanitizer

18. Germicide

19. L-forms

20. Nucleoid

21. Viroids

22. Bacteriosstat.

Ist B.Sc. ZOOLOGY MODEL QUESTION PAPER

(For the students admitted from the academic year 2008-2009)

Paper-I, Biology of Invertebrates & Cell Biology

Time : 3 Hours Max. Marks:100

Section-A

Answer all the four questions (one question from each unit)

 4x15=60

1. a) Describe the process of conjugation in Paramecium and add a note on its

 Significance.

 Or

 b) Write an essay on the life history of Fasciola hepatica.

2. a) Discuss the affinities and systematic position of Peripatus

 Or

 b) Describe the water vascular system in Star fish

3. a) Write an essay on the structure and function of Mitochondria

 Or

 b) Describe the process of Meiosis and its significance

4. a) Describe the General characters and classification of Amino acids.

 Or

 b) Describe the structure of DNA with reference to Watson and Crick model.

Section-B

Answer any five (short answer question) out of Eight (2 questions from each unit)

 5x4=2Marks

5. Syconoid canal system.

6. Polychaeta

7. Cephalic appendages of prawn.

8. Pearl formation

9. Fluid mosaic model.

10. Lampbrush chromosome.

11. Phospolipids.

12. Polysaccharides.

Section-C

Answer all (10 very short answer) questions

(3 from Unit—1, 3from Unit—II, 2 from unit –III and 2 from unit—IV)

 10x2=20 Marks

13. Statocyst

14. Atoll

15. Phasmids

16. Mysis.

17. Osphradium

18. Tornaria

19. Lysosomes.

20. Symport

21. m – RNA

22. Structure of Glucose

Model Question Paper

B.Sc., (Computer Science) : Ist Year: Theory Paper-1

PC Software and C Programming

Time: 3 Hours Max. Marks: 100

SECTION-A

Answer all questions

 4x15=60 Marks

1. a) Draw the block diagram of a Computer and explain all its parts in detail.

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 Or

 c) Discuss in detail about RAM, ROM and Cache memories.

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 b) Write a program to find the roots of a quadratic equation.

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 c) How are multi-dimensional arrays defined in C? Explain.

 d) Write a program in C to multiply two n x n matrices.

SECTION-B

Answer any FIVE questions

 5x4=20Marks

5. What are the different types of Programming Languages?

6. What is recycle bin? What is its functionality?

7. How do we create a table of 5 rows and 6 columns using MS-Word?

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9. How do you create relationships in MS-Access?

10. Name four text functions of MS-Excel.

11. Give an example of recursive unction.

12. What are the relational operators in C language?

SECTION-C

Answer All questions

 10x2=20 Marks

13. Define a Macro in MS-Word.

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21. How do we give comments in C

22. How do we hide the rows of a table in MS-Excel?

Model Question Paper

(B.A./B.Sc./B.Com Programs with computer course as core subject )

Ist Year: Theory Paper-I

Computer Skills

Time: 3 Hours Max. Marks: 100

SECTION—A

Answer ALL Questions

 4x15 = 60 Marks

1. a) Draw the block diagram of a computer and explain all its parts in detail.

 b) Discuss how the characters, integers and fractions are represented in computers.

 Or

 c) Discuss in detail about computer and memory devices.

 d) If a tape is recorded at 6250 dpi and there are 9 tracks on it, what is the capacity

 of a 2400 ft. tape?

 e) Convert the decimal number 257 to binary.

2. a) Draw the diagram of AND, OR and NOT gates and realize the 3- bit subtractor

 Using AND, OR and NOT gates.

 b) If A, B are Boolean Variables then Prove that (A+B). (A+C) =A+B.C

 Or

 c) Discuss about assembly language and high level language.

 d) What are the functions of an operating system? Explain.

3. a) Discuss, in detail about microcomputers.

 b) Write short notes on data communications and networks.

 Or

 c) Discuss, in detail, about computer generations and their classification.

 d) Write short notes on computer network topologies.

4. a) Discuss, in detail, about Internet.

 b) What is Domain name system? List at least 5 famous domain names with their

 functionality.

 Or

 c) What is World Wide Web? Discuss in detail about it.

 d) How do we create an e-mail account? What are the operations of e-mail?

 Explain.

SECTION-B

Answer any FIVE Questions

 5 x 4 = 20 Marks

5) Convert the binary number 1010101 to decimal equivalent.

6) Draw the diagram of NAND Gate.

7) Explain how signed numbers are represented in computers.

8) What is time sharing?

9) What is an URL? Explain.

10) Find the hexadecimal equivalent of the decimal number 41819.

11) What is ASCII? How many bits per character does ASCII code use?

12) What is an Assembler? Explain.;

SECTION-C

Answer ALL Questions

 10x2=20 Marks

13) What is a sector in a hard disk?

14) What is cache memory?

15) What is a compiler?

16) What is UNIX?

17) What does edu stand for in the address manipal. Edu?

18) What is a transponder?

19) What does kbps stands for?

20) What is ISP?

21) What is hyper text?

22) What is ROM?

ANDHRA UNIVERSITY

B.Sc., Degree Course, First Year, 2008-2009

Part-II Subject: ELECTGRONICS

Paper-I, Circuit Analysis and Electronic Devices

Model Paper as per the revised syllabus with effect from 2008—2009

Time: Three Hours Maximum: 100 Marks

Section-A (4x15=60 Marks)

Answer ALL questions (Internal Choice)

1. a) State and Prove Thevenin’s Theorem.

 Or

 b) Define complex number. Explain how complex number can be used to express

 sinusoidal quantities.

2. a) Draw LCR series resonating circuit and obtain expression for resonating

 Frequency.

 Or

 b) What is a high pass filter? Discuss the frequency response of an R-C high pass

 filter with necessary mathematical theory.

3. a) Explain the forward and reverse bias V-I characteristics of a P-N junction diode.

 Or

 b) Draw the necessary circuit to study input and output characteristics of BJT in CE

 configuration experimentally and explain the cut off, active and saturation

 regions.

4. a) What do you understands by transfer characteristic? Draw the circuit necessary

 To study the transfer and out characteristics of FET and explain the same.

 Or

 b) What do you understand by LDR? Explain the structure and operation of LDR.

Section B, (5x4 = 20 marks)

Answer any FIVE (out of eight)

5. State Krichoff’s Laws.

6. State Milliman theorem (I and II).

7. What is a filter?

8. What do you understand by resonance in an electrical circuit?

9. What do you mean by depletion region in a p-n junction?

10. Define h-parameters.

11. Distinguish JFET and MOSFET.

12. What is a relaxation oscillator?

Section C, (10 x 2 = 20 marks)

Answer ALL (No Choice)

13. When a circuit can be wattles?

14. State Maximum Power Transfer Theorem.

15. What is a RC differentiator?

16. What do you know about ‘Bandwidth’?

17. What is a tunnel diode?

18. What is ‘basing a transistor’?

19. Mention two advantages of FET over BJT.

20. Mention two applications of SCR.

21. A capacitor of capacity 0.5 micro farads and resistance 10 mega ohms is charged

 To a potential difference of 10 volts. Find the time constant.

22. In a RC high pass filter R = 1 kilo ohm, C =0.01 micro farads. Find its cut off

 Frequency.

PART – II GEOGRAPHY

(Common core Scheme)

PAPER –I FUNDAMENTAL OF PHYSICAL GEOGRAPHY

(Revised Model Question Paper w.e.f. 2008)

Time: 3 Hours Max: 100 Marks

SECTION – A (4 x 15 = 60 Marks)

Answer ALL Questions

UNIT – I

1. (a) Discuss the wegeners theory of continental drift.

 Or

 (b) Write an essay on Earth Quakes.

 UNIT – II

2. (a) Account for the erosional features of fluvial cycle.

 Or

 (b) Write a note on Glacial Topography.

 UNIT – III

3. Write an essay on structure and extent of atmosphere.

 Or

 Give an account about cyclones.

 UNIT –IV

4. (a) Explain the pattern of Pacific Ocean current.

 Or

 (b) What is ocean deposit? Explain.

 SECTION –B (5x4=20 Marks)

Answer any five of the following.

5. Oxbow lake

6. Isostacy

7. Physical weathering

8. Rocks

9. Precipitation

10. Anticyclones

11. Spring and neap tides

12. Salinity

SECTION—C (10x2=20 Marks)

(Answer all question)

Very short answer not excreding 3 lines

13. Trade winds

14. Riftvalley

15. Magma

16. Lapsrate

17. Rain shadow region

18. Inversion of temperature

19. Tides

20. Pelagic deposits

21. Lithosphere

22. Lagoon