

B.Sc. Semester - 6 (CBCS) Examination
March/April-2024 (NEW COURSE)
BioChemistry, Cytology, Instru. (Core (New))

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que.1(A) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (07)
1. Give the classification and structure of polysaccharide with suitable examples.
 2. Describe Glyconeogenesis.
- Que.1(B) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (04)
1. Write a short note on Monosaccharide.
 2. Write a Short note on Fattyacids.
- Que.1(C) ANSWERS THE FOLLOWING QUESTIONS. (ANY THREE OUT OF FIVE) (03)
1. is the isomer of Glucose.
 2. Give any two examples of Disaccharide.
 3. Give any two examples of unsaturated Fattyacids.
 4. The Process of Glycolysis Occurs in which part of the cell?
 5. β - oxidation is also known as.....
- Que.2(A) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (07)
1. Describe Different type of Configuration of protein in detail.
 2. Give the classification and nomenclature of Enzyme.
- Que.2(B) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (04)
1. Write a short note on Urea Cycle.
 2. Write a short note on: Factors affecting enzyme catalyzed reaction.
- Que.2(C) ANSWERS THE FOLLOWING QUESTIONS. (ANY THREE OUT OF FIVE) (03)
1. Give any two examples of positive charged amino acid.
 2. Give any two examples of Fibrous Protein.
 3. α -helix and β -sheet are the type of of protein.
 4. Apoenzyme and Prosthetic group complex to form Active form of Enzyme, is known as.....
 5. The enzymes involved in feedback inhibition are called.....
- Que.3(A) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (07)
1. Describe phenomenon of meiotic division prophase-1 in detail.
 2. Give the principle, procedure and application of paper chromatography.
- Que.3(B) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (04)
1. What is cancer? Describe types of cancer.
 2. Write a short note on phenomenon of Mitosis.
- Que.3(C) ANSWERS THE FOLLOWING QUESTIONS. (ANY THREE OUT OF FIVE) (03)
1. During which phase of mitosis chromosomes get arranged on the equatorial plane?
 2. During which phase of prophase 1 of meiosis, The pairing of homologous chromosomes take place?
 3. are cancers in which excessive production of lymphocytes by lymph nodes and spleen.
 4. List out the proteins presents in the cytoskeleton of microfilaments.
 5. The technique Electrophoresis is used for the seperation of.....

- Que.4(A) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (07)
1. Describe Molecular Structure of Gene.
 2. Describe ultrastructure and function of metaphase chromosome.
- Que.4(B) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (04)
1. Write a short note on Deletion and Duplication.
 2. Write a short note on Colour blindness as human hereditary traits.
- Que.4(C) ANSWERS THE FOLLOWING QUESTIONS. (ANY THREE OUT OF FIVE) (03)
1. Which Ionizing radiations are known as Mutagenic Agents?
 2. In structure of DNA both Polynucleotides strands remain separated byDistance.
 3. Which type of RNA carries the information from the DNA in the nucleus of the cell to the cytoplasm where the proteins are made?
 4. technique is useful for Prenatal Screening and sex prediction.
 5. The Chromosomal ends are known as the.....
- Que.5(A) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (07)
1. Describe process of Translation in detail.
 2. Describe different phases of PCR technique.
- Que.5(B) ANSWERS THE FOLLOWING QUESTIONS. (ANY ONE OUT OF TWO) (04)
1. Write a short note – Modes of DNA Replication.
 2. Write a short note-Southern Blotting Technique.
- Que.5(C) ANSWERS THE FOLLOWING QUESTIONS. (ANY THREE OUT OF FIVE) (03)
1. What are the application of Northern blotting technique?
 2. Which codon is considered as a initiator codon?
 3. Which mode of DNA replication is widely accepted?
 4. List out any three enzyme participated in the process of DNA replication.
 5. List out the steps of PCR Technique.
