

RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER
Syllabus for Screening Test for the post of
Assistant Professor - Biochemistry
Medical & Health Department

1. Cell : Structure, organelles, bio-molecules & functions.
2. Chemistry, metabolism & Inborn errors of:
 - (a) Carbohydrates
 - (b) Lipids
 - (c) Amino Acid & Proteins
 - (d) Nucleotides
3. Bio-energetics & oxidative phosphorylation
4. Enzymes
5. Vitamins
6. Mineral Metabolism
7. Metabolism of xenobiotics
8. Acid-base balance & pH
9. Electrolyte & water balance
10. Organ function tests: Liver, Kidney, thyroid, pancreas
11. Heme synthesis & Breakdown
12. Nutrition & diet
13. Hormones
14. Free radicals & Antioxidants
15. Environmental Biochemistry
16. Immunochemistry
17. Molecular biology, techniques, genetics:
 - DNA replication, repair
 - Transcription & Translation
 - Inheritance, mutations and Regulation of gene expression
 - Recombinant DNA technology and Gene therapy
 - Molecular diagnostics
18. Biochemistry of cancer
19. Biochemistry of AIDS and HIV
20. Signal Molecules and Growth Factors
21. Tissue proteins in Health and Disease
22. Applications of Isotopes in Medicine
23. General Techniques for Separation, Purification and Quantitation of biochemical compounds
24. Screening of Metabolic disorders

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Note :- Pattern of Question Paper

1. Objective type paper
2. Maximum Marks :100
3. Number of Questions :100
4. Duration of Paper : Two Hours
5. All questions carry equal marks.
6. There will be Negative marking.

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