

Rajasthan Public Service Commission, Ajmer

Syllabus for Screening Test for the post of Sr. Demonstrator-Pathology Medical & Health Department

A. General Pathology :

1. Definition and scope of Pathology.
2. Cell injury and its manifestations.
3. Disturbances of pigment, Calcium and uric acid metabolism.
4. Necrosis and gangrene.
5. Disturbances of circulation i.e. thrombosis, embolism and infarction.
6. Disturbances of fluid and electrolyte balance pathogenesis of oedema with special reference to cardiac and renal oadema, ascites, transudate and exudate.
7. Pathology of shock.
8. Inflammation acute and chronic.
9. Process of repair.
10. Infective granulomata.
11. Immuno Pathology including general concept, classification, basis lesions and immuno-diagnostic methods with special reference to AIDS.
12. Disturbances of growth-atrophy, hypertrophy, hyperplasia, metaplasia, dysplasia, etc.
13. Neoplasia, Definition, carcinogenesis, characters, modes of spread, classification and laboratory diagnosis of malignancy, Tumour markers (IHC including CD markers).
14. Hereditary and diseases (including study of genetics.)
15. Radiation hazards.

B. Systemic Pathology :

1. Diseases of Cardio- Vascular system.
2. Diseases of Respiratorysystem.
3. Diseases of Stomach, intestines, liver and gall bladder.
4. Diseases of Kidneys, ureter and urinary bladder.
5. Diseases of Spleen and lymphnodes.
6. Diseases of Nervous system cerebro vascular diseases, meningitis, encephalitis and neoplasm.
7. Diseases of Skin, Soft tissues, Bones and joints.
8. Diseases of Thyroid, Pancreas, Adrenals and breast.

C. Haematology :

1. General haematological procedures.
2. Examination of Bone marrow in health and disease.
3. Anaemias-general consideration, classification.
4. Dyshaemopoitic anaemias - Definition, classification, pathogenesis, haematological and bone marrow changes and laboratory diagnosis.
5. Haemorrhagic disorders details same as above.
6. Haemolytic anaemias-details same as above.
7. Leukaemias and myeloproliferative disorders with Cyto chemistry & IHC markers.
8. Multiple myeloma and dys proteinaemias.

D. Clinical Pathology :

1. Examination of urine (i.e. complete urine analysis).
2. Examination of Cerebrospinal fluid.
3. Gastric functions tests
4. Renal function tests.
5. Liver function tests :
 - (a) Based on protein metabolism.
 - (b) Based on lipid metabolism including blood cholesterol.
 - (c) Based on carbohydrate metabolism-including blood glucose and glucose tolerance test.
 - (d) Based on pigment metabolism-including laboratory diagnosis of jaundice.
 - (e) Based on detoxifying functions.
6. Enzymes in clinical diagnosis.
7. Diagnostic cutaneous tests and other immunopathology tests.
8. Pregnancy tests.
9. FNAC, Cytology and sex chromatin evaluation.
10. Transfusion medicine – Blood grouping, cross matching & untoward reactions, Transfusion transmitted diseases, Blood components and uses.

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.