

Time: Three Hours**Max. Marks: 100 Marks****PATHOLOGY – PAPER I (RS-4)****Q.P. CODE: 1026****(QP contains two pages)**

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS**2 x 10 = 20 Marks**

1. 40 year old farmer admitted to the hospital with high fever. He gives history of an injury to his left leg resulting in an ulcer 15 days ago. On examination his pulse is 110/min, blood pressure is 70/50 mmHg
 - a) What is your diagnosis?
 - b) Describe the stages of this condition
 - c) Discuss the pathophysiology of the above condition
2. 3 years old female child admitted to paediatric ward with long history of pallor and passing high coloured urine. There is a history of consanguineous marriage among parents. On examination child has pallor, stunted growth, icterus and enlarged spleen.
 - a) What is your diagnosis?
 - b) Describe the molecular pathogenesis of this condition
 - c) Discuss the lab diagnosis of the above condition

SHORT ESSAYS**8 x 5 = 40 Marks**

3. Pathologic calcification
4. Arachidonic acid metabolites
5. Lepromatous leprosy
6. Type I hypersensitivity
7. Mechanism of metastasis
8. Chronic myeloid leukemia
9. Von Willebrand's disease
10. Discuss phagocytosis

SHORT ANSWERS**10 x 3 = 30 Marks**

11. Name three endogenous pigments
12. Fate of primary tuberculosis
13. Advantages of FNAC
14. Fate of thrombus
15. Tumor markers
16. Rickets
17. CSF findings in pyogenic meningitis
18. Stages of ESR
19. Coomb's test
20. Systemic causes for delayed wound healing

Multiple Choice Questions
10 x 1 = 10 Marks

- 21 i) All of the following are special stains for fat **EXCEPT**
- Sudan dyes
 - PAS
 - Osmic acid
 - Oil Red O
- 21 ii) 30 year old male on pure vegetarian diet presents with listlessness, tingling and numbness in his limbs. On lab evaluation his bone marrow shows presence of megaloblasts. Megaloblasts can be seen in
- Iron deficiency anaemia
 - Haemolytic anaemia
 - Vit B12 deficiency anemia
 - Hereditary Spherocytosis
- 21 iii) The DNA Oncogenic virus implicated in cervical carcinogenesis is
- Human papilloma virus
 - Herpes virus
 - POX virus
 - Hepatitis B virus
- 21 iv) Which of the following disease is X linked recessive inheritance
- Sickle cell anemia
 - Adult polycystic kidney
 - Haemophilia
 - Hereditary Spherocytosis
- 21 v) Which of the following is a tumor suppressor genes
- RB
 - PDGF
 - RAS
 - EGF
- 22 i) Delayed type of hypersensitivity resulting in the formation of a granuloma is typically seen in
- Type I hypersensitivity reaction
 - Type II hypersensitivity reaction
 - Type III hypersensitivity reaction
 - Type IV hypersensitivity reaction
- 22 ii) Which of the following antibodies is likely to identified on laboratory testing in a patient with systemic lupus **erythematosus**
- Anti DS DNA
 - SS-A
 - SS-B
 - Jo-1
- 22 iii) In cases of renal failure on long term hemodialysis which of following type of amyloid is seen
- Amyloid light chain (AL)
 - Amyloid associated protein (AA)
 - Amyloid beta 2 microglobulin (Abeta2m)
 - Beta amyloid protein (A beta)
- 22 iv) ESR is raised markedly in
- Multiple myeloma
 - Malaria
 - Acute myeloblastic leukemia
 - Haemophilia
- 22 v) Type of antibodies usually seen in chronic ITP are
- Ig A
 - Ig M
 - Ig E
 - Ig G
