# Second Professional BHMS Degree Regular Examination, September, 2024

# Pathology and Microbiology (Hom UG-Path-M) Paper -1

### (2022 Scheme)

Time: 3 Hours Total marks: 100

- Answer all questions to the point neatly and legibly. Do not leave any blank pages between answers. Indicate the question number correctly for the answer in the margin space.
- Answer all parts of a single question together. Leave sufficient space between answers.
- Draw table/diagrams/flow charts wherever necessary.

# 1. Multiple Choice Questions

 $(10 \times 1 = 10 \text{ marks})$ 

The Answers to MCQ Questions (Q.No. i to Q. No. x) shall be written continuously on the first two writing sheets ( ie Page No. 3 & 4) only.

- i) Name the cell that releases Histamine during inflammation?
  - a) Eosinophils
  - b) Macrophages
  - c) Mast cells
  - d) Neutrophils
- ii) Which of the following protein is associated with primary (AL) amyloidosis?
  - a) Beta2 microglobulin
  - b) Immunoglobulin light chain
  - c) Serum amyloid(SAA)
  - d) Transthyretin
- iii) Which Vitamin is known as Retinol?
  - a) Vitamin A
  - b) Vitamin C
  - c) Vitamin D
  - d) Vitamin E
- iv) The embolism that can occur after a long bone fracture
  - a) Air
  - b) Amniotic fluid
  - c) Fat
  - d) Retrograde
- v) The haemoglobin that is markedly reduced in patients with Beta Thalassemia major
  - a) HbA
  - b) HbA2
  - c) HbF
  - d) HbS
- vi) The characteristic skin lesion associated with Rheumatic fever is
  - a) Erythema infectiosum
  - b) Erythema marginatum
  - c) Erythema multiforme
  - d) Erythema nodosum

- vii) Curschmann's spirals can be demonstrated in the sputum in
  - a) Bronchiectasis
  - b) Bronchial asthma
  - c) Chronic bronchitis
  - d) Emphysema
- viii) Which of the following is the most common cause of peptic ulcer?
  - a) Helicobacter pylori infection
  - b) Escherichia coli infection
  - c) Achalasia
  - d) Pyloric stenosis
- Ix) Which of the following is the primary risk factor for carcinoma of uterine cervix
  - a) Diabetes mellitus
  - b) Hepatitis B virus infection
  - c) Human papilloma virus infection
  - d) Smoking
- ix) Auspitz sign is characteristic of
  - a) Lichen planus
  - b) Psoriasis
  - c) Urticaria
  - d) Xeroderma pigmentosum

### **Short Answer Questions**

(8x5=40 marks)

- 2. Define Necrosis. List 4 contrasting features of Coagulative necrosis and Liquefactive necrosis.(1+4=5)
- 3. Define pathologic calcification. List 4 contrasting features of Dystrophic and Metaststic calcification.(1+4=5)
- 4. Enumerate 5 contrasting features of primary and secondary amyloidosis.
- 5. Explain Type IV Hypersensitivity with two examples
- 6. Enumerate 5 differences between Transudate and Exudate
- 7. Describe the aetiopathogenesis of Megaloblastic anaemia.
- 8. State 5 differences between Nephrotic oedema and Nephritic oedema.
- 9. Describe the aetiopathogenesis of Gout.

#### **Long Answer Questions**

(5x10=50 marks)

- 10.Explain Healing by first intention. List 6 complications of wound healing. (7+3=10)
- 11. Define Neoplasia. State 10 contrasting features of Benign and Malignant tumours. (2+8=10)
- 12. Define Embolism. Describe the aetiopathogenesis of thromboembolism.
- 13. Describe the term Liver cirhosis. Describe the morphology of alcoholic cirrhosis
- 14. A 35 year old woman presented with weakness, fatigue, dyspnoea on exertion and palpitations. On examination, she was anaemic. She has a history of excessive menstrual bleeding for the past few months.

- a) What is the probable diagnosis? (1)
- b) What are the expected epithelial tissue changes? (4)
- C) What are the biochemical tests for the confirmation (5)

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