

# 2019 Scheme

Q.P. Code: 213001

Reg. no.: .....

## Second Professional MBBS Degree Supplementary (SAY) Examinations

March 2025

### Pathology - Paper I

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

(1x20=20)

The MCQ questions (Q.No. i to Q.No. xx) shall be written in the space provided for answering MCQ questions at page No. 51 of the answer book (the inner portion of the back cover page (PART III)). Responses for MCQs marked in any other part/page of the answer book will not be valued

Question Numbers i – v are Single Response Type

- One of the following cytokine is a powerful chemo attractant
  - Interleukin -8
  - Interleukin -2
  - Interleukin -6
  - Interleukin -4
- In Bernard-Soulier Syndrome there is defect of platelet
  - Adhesion
  - Aggregation
  - Secretion
  - Activation
- Leukocyte alkaline phosphatase is markedly reduced in:
  - Acute Lymphoblastic Leukaemia
  - Acute Myeloblastic Leukaemia
  - Chronic Myeloid Leukaemia
  - Chronic Lymphocytic Leukaemia
- The most common cause for male hypogonadism is
  - Klinefelter's syndrome
  - Turner's syndrome
  - Down's syndrome
  - Edward's syndrome
- Erythrophagocytosis is a feature of:
  - Shigella infection
  - Salmonellosis
  - Amoebiasis
  - Cholera

Question numbers vi - x are multiple response type questions. Read the statements & mark the answers appropriately.

- Multinucleate giant cells are seen in
  - Bronchiectasis
  - Tuberculosis
  - Sarcoidosis
  - Xanthomas
  - 1, 2 and 3 are correct
  - 2, 3 and 4 are correct
  - 1, 3 and 4 are correct
  - 1, 2 and 4 are correct
- Prolonged Bleeding time is seen in
  - Thrombocytopenia
  - Von Willebrand's disease
  - Haemophilia A
  - Aspirin therapy
  - 1, 2 and 3 are correct
  - 2, 3 and 4 are correct
  - 1, 3 and 4 are correct
  - 1, 2 and 4 are correct
- Nitric Oxide is synthesized by
  - Neurons
  - Endothelial cells
  - Hepatocytes
  - Monocytes.
  - 1, 2 and 3 are correct
  - 2, 3 and 4 are correct
  - 1, 3 and 4 are correct
  - 1, 2 and 4 are correct
- Peripheral appetite suppressing signals includes
  - Leptin
  - Adiponectin
  - Obestatin
  - Ghrelin
  - 1, 2 and 3 are correct
  - 2, 3 and 4 are correct
  - 1, 3 and 4 are correct
  - 1, 2 and 4 are correct
- Identification of plasmodium falciparum in the peripheral smear include
  - Schizont forms
  - Small thin ring forms of the parasite inside the RBC
  - Banana shaped gametocytes
  - Multiple ring forms in a single RBC
  - 1, 2 and 3 are correct
  - 2, 3 and 4 are correct
  - 1, 3 and 4 are correct
  - 1, 2 and 4 are correct

Question numbers xi – xv consists of two Statements-Assertion (A) and Reason (R). Answer these questions by selecting the appropriate options given below.

- (A): Nucleic Acid Testing (NAT) is a better screening method in blood banking  
(R): Low antibody levels are detected by NAT
  - Both A & R are correct and R is the reason for A
  - Both A & R are correct but R is not reason for A
  - A is correct R is incorrect
  - A is incorrect R is correct
- (A): Hepatocytes are labile cells  
(R): Hepatocytes can re-enter the cell cycle and regenerate themselves
  - Both A & R are correct and R is the reason for A
  - Both A & R are correct but R is not reason for A
  - A is correct R is incorrect
  - A is incorrect R is correct

xiii. (A): Metastatic Calcification is seen in Hyperparathyroidism  
 (R): Serum calcium levels are normal in dystrophic calcification.  
 a) Both A & R are correct and R is the reason for A      b) Both A & R are correct but R is not reason for A  
 c) A is correct R is incorrect      d) A is incorrect R is correct

xiv. (A): Gandy Gamna Bodies are seen in chronic venous congestion of Spleen  
 (R): Chronic venous congestion of spleen causes right sided heart failure.  
 a) Both A & R are correct and R is the reason for A      b) Both A & R are correct but R is not reason for A  
 c) A is correct R is incorrect      d) A is incorrect R is correct

xv. (A): von Willebrand factor is synthesized by Hepatocytes  
 (R): von Willebrand factor is a carrier protein for factor VIII  
 a) Both A & R are correct and R is the reason for A      b) Both A & R are correct but R is not reason for A  
 c) A is correct R is incorrect      d) A is incorrect R is correct

**Question Numbers xvi– xx are based on case scenarios. Read the statements and mark the answers accordingly.**

A 26 year old women with third degree burns developed septic shock. With 24hours she was bleeding from all needle puncture sites, with extensive ecchymoses and petechiae and GI Bleeding. Lab studies showed Hb-6gm/dl., platelet count 64000/cu mm., PT 20 seconds, PTT 50 seconds and D-dimer Positive.

xvi. What is your most probable clinical diagnosis

a) Acute Leukaemia      b) Immune thrombocytopenia  
 c) Disseminated Intravascular coagulation      d) Anaphylactic shock

xvii. Which one of the following investigation is diagnostic

a) Platelet Count      b) Prothrombin time      c) Thrombin Time      d) D – dimer test

xviii. The drop in the amount of Hemoglobin is mostly due to

a) Ineffective erythropoiesis      b) Acute blood loss  
 c) Aplasia of the marrow      d) Nutritional deficiency

xix. The most common morphology of red blood cells seen in the peripheral smear of the above case is

a) Microcytes      b) Schistocytes      c) Dystocytes      d) Codocytes

xx. Fibrin degradation products have

a) Potent anticoagulant effect      b) Platelet aggregation effect  
 c) Prothrombotic effect      d) Endothelial activation effect

**Long Essays.**

(2x10=20)

2. A 50 year old person was admitted to the hospital with complaints of intermittent fever for the past two weeks. He underwent a surgical procedure. The surgical wound has not healed. On examination Febrile, Pulse rate – 102/mt, dyspnoea present, drowsy, urine output less than 100ml/ 24 hours. Blood sample sent for culture and sensitivity. CBC – Hemoglobin 8g/dl, total WBC count -18000/cmm.

a) What is your provisional diagnosis  
 b) Describe briefly the etiopathogenesis of this condition  
 c) What are the various organ changes seen in this condition  
 d) Enlist the stages of this condition

(2+3+3+2)

3. Define Leukaemia. Classify Acute Myeloblastic Leukaemia as per WHO classification. Describe the peripheral smear and bone marrow findings with illustrations in a case of Acute Myeloid Leukaemia.

(2+3+2+3)

(6X6=36)

**Short Essays.**

4. Type II hypersensitivity reaction  
 5. Role of Chemical Carcinogens  
 6. Laboratory Diagnosis of Thalassemia  
 7. Granulomatous inflammation  
 8. Opportunistic Infections  
 9. Factors Influencing Wound Healing

**Short Answers.**

(6x4=24)

10. Enlist two common indications and two absolute contraindications for bone marrow aspiration study  
 11. Enumerate four common laboratory tests done to confirm Multiple Myeloma  
 12. Enlist Four common types of Necrosis with suitable clinical examples  
 13. Name the four cardinal principles of Biomedical Ethics  
 14. Enlist four common anticoagulants used in a Hematology laboratory  
 15. Mention four common stains used to demonstrate Amyloid in the tissues

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