

**2406000102020601-S**  
**(SUPPLIMENTARY EXAM) FEBRUARY-2025**  
**SECOND MBBS**  
**PATHOLOGY ( PAPER - I ) ( NEW ) ( OMR )**

[Time: As Per Schedule]

[Max. Marks:100]

**Instructions:**

1. Fill up strictly the following details on your answer book
  - a. Name of the Examination: **SECOND MBBS**
  - b. Name of the Subject: **PATHOLOGY ( PAPER - I ) ( NEW ) ( OMR )**
  - c. Subject Code No: **2406000102020601-S**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

Student's Signature

**SECTION - I**

**Q.1 Multiple choice questions (\*no negative markings)**

**20**

**Each Question Carries One mark.**

1. All infarcts are usually:

- |                       |                      |
|-----------------------|----------------------|
| A. Wedge shaped.      | B. Square shaped     |
| C. Rectangular shaped | D. Circular in shape |

2. Most common opportunistic lung infection in AIDS patient is

- |                         |                    |
|-------------------------|--------------------|
| A. Pneumocystis carinii | B. Kaposi sarcoma  |
| C. candidiasis          | D. Histoplasmosis. |

3. IgE mediated allergy / Asthma is example of which hypersensitivity reaction

- |           |            |
|-----------|------------|
| A. Type-I | B. Type-II |
|-----------|------------|

C. Type-III

D. Type-IV.

4. The most common route of spread of infection to the brain is:

A. Via venous route

B. Via arterial route

C. Via lymphatics

D. Along nerves

5. Test useful for detection of HIV during window period:

A. ELISA

B. Western blot

C. CD4+ cell count

D. p24 antigen capture assay

6. Dystrophic calcification in Spleen is seen in which disease.

A. Sickle cell disease

B. Left Heart Failure

C. Fatty Liver

D. ARDS.

7. Diabetic foot is an example of:

A. Dry gangrene

B. Wet gangrene

C. Gas gangrene

D. Necrotising inflammation

8. Interstitial fluid collection during Congestive cardiac failure is called

A. Cystic collection

B. Exudate

C. Edema

D. Effusion.

9. Haematoxylin stains:

A. Nuclear chromatin material

B. RNA

C. Cytosolic components

D. Cell membrane components.

10. Most Important Antigen initiating graft rejection.

A. P24 Ag

B. polysaccharide

C. HLA antigen

D. TCR.

11. Type of Necrosis in pancreatitis.

A. Fat

B. Fibrinoid

C. Caspase

D. Coagulative

12. Which of the following is an Apoptosis inhibitor gene?

A. BCL-2

B. Rb

C. P53

D. C-Myc

13. Out of various free radical species, the following radical is most reactive:

A. Superoxide (O<sub>2</sub><sup>-</sup>)

B. Hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>)

C. Hydroxyl (OH<sup>-</sup>)

D. Nitric oxide (NO)

14. Correct sequence of Cell cycle is

A. G<sub>0</sub>-M-G<sub>2</sub>-S-G<sub>1</sub>

B. G<sub>0</sub>-G<sub>1</sub>-G<sub>2</sub>-S-M

C. G<sub>0</sub>-G<sub>1</sub>-S-G<sub>2</sub>-M

D. G<sub>0</sub>-G<sub>1</sub>-S-M-G<sub>2</sub>

15. For karyotyping, the dividing cells are arrested by Addition of colchicine in the following mitotic phase:

A. Prophase

B. Metaphase

C. Anaphase

D. Telophase

16. For Electron Microscopy Histopathology specimen are fixed in

A. Glutaraldehyde

B. 10% Ethyl alcohol

C. 10% picric acid

D. 10% buffered neutral formalin

17. Enzyme which prevents ageing is:

A. Catalase

B. Superoxide dismutase

C. Metalloproteinase

D. Telomerase

18. Bombay Blood group person have following ABO Blood group

A. "A" group

B. "B" group

C. "O" group

D. "H" group

19. Basement membrane consists of:

- A. Type I collagen
- B. Type II collagen
- C. Type III collagen
- D. Type IV collagen

20. All are autosomal dominant inherited cancer syndromes except:

- A. Retinoblastoma
- B. Xeroderma pigmentosum
- C. HNPCC
- D. Neurofibromatosis.

### SECTION -II

#### Q.2 Case based long essay questions

[13\*1=13]

A 40-year-old male who had a history of road traffic accident presented to the clinic with polytrauma and left thigh swelling.

Patient was not able to walk.

His x-ray showed comminuted displaced fracture of the shaft femur. After 2 days he developed sudden shortness of breath, confusion, and vomiting. He also developed petechial rashes

Lab findings - microscopic examination of urine showed fat globules.

- 1) What is your diagnosis based on the above clinical finding and lab investigation? 02
- 2) Describe aetiology and pathogenesis of given condition 02
- 3) Write consequences of given condition 04
- 4) Describe difference between Arterial thrombi and Venous thrombi 05

#### Q.3 Long essay questions. (Attempt any three)

9\*3=27

- 1) Define oedema. Discuss pathophysiology of oedema. Add a note on pulmonary oedema. [4+3+2]

- 2) Define Hypersensitivity reactions. Describe etiology, pathogenesis, and examples of Type- 4 Hypersensitivity reactions. [1+2+4+2]
- 3) Define Inflammation. Write in detail about vascular and cellular changes in inflammation. [4+3+2]
- 4) Describe etiology of Cell injury. Describe morphology of Cell injury. [3+6]

### SECTION-III

#### Q.4 Short notes (Attempt Any 8)

[8\*5=40]

- 1) Three opportunistic infections and two neoplasms associated with AIDS.
- 2) Microscopic Findings of Urine in Various Diseases.
- 3) Describe CSF picture in Pyogenic meningitis.
- 4) Down's syndrome.
- 5) Viral oncogenesis.
- 6) Septic shock
- 7) Enumerate Blood components and mention their uses and storage.
- 8) Granulomatous inflammation.
- 9) Etiopathology and sequelae of Obesity.
- 10) FISH (Fluorescence in situ Hybridization).

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**2406000102020602-S**  
**(SUPPLEMENTARY EXAM) FEBRUARY-2025**  
**SECOND MBBS**  
**PATHOLOGY (PAPER - II) (NEW) (OMR)**

[Time: As Per Schedule]

[Max. Marks: 100]

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Seat No

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Student's Signature

**SECTION - I**

**Q.1 Multiple choice questions (\*n ...gative markings)**

**20**

1. Which of the following are Vitamin K dependent clotting factors?  
a) II, VII, IX, X.                      b) II, VIII, X, XI  
c) I, II, V, VII.                         d) V, VII, IX, X.
  
2. Which hormones level increases in patient of Pheochromocytoma.  
a) FSH, LH                                b) Renin Angiotensin  
c) Epinephrine, Nor-epinephrine     d) Prolactin, growth hormone
  
3. Which of the following is the diagnostic test for Rheumatoid Arthritis?  
a) RA & IgE                                b) RA & HLA-B27.  
c) RA & IL-7                                d) RA & Anti-CCP
  
4. Councilman bodies are seen in:  
a) Wilson's disease                      b) Acute viral hepatitis  
c) Alcoholic hepatitis                    d) Autoimmune hepatitis

5. Kimmelsteil- Wilson nodules are diagnostic hall mark of \_\_\_\_
- a) Infective Endocarditis    b) Diabetic Nephropathy  
c) Malignant Hypertension    d) Hemolytic Uremic Syndrome.
6. Atypical pneumonia can be caused by following microbial agents except?
- a) Mycoplasma pneumonia                      b) Legionella pneumophilla  
c) Human corona virus                      d) Klebsiella pneumonia
7. Red cell distribution width (RDW) used for estimation of:
- a) Poikilocytosis                      b) Anisocytosis  
c) Hypochromia                      d) Macrocytosis
8. Mucinous cystadenoma of ovary arises:
- a) From cystic teratoma                      b) From Sex Cord Stromal cells  
c) From surface coelomic epithelium.    d) From ectopic mucinsecreting glands
9. Transverse ulcers are seen in
- a) Typhoid                      b) Amebiasis  
c) Tuberculosis                      d) Ulcerative colitis.
10. Verocay bodies are seen in
- a) Meningioma    b) Medulloblastoma  
c) Glioma                      d) Schwannoma
11. Most common Test to diagnose Choriocarcinoma
- a) Beta HCG                      b) AFP  
c) CA125                      d) PSA
12. All are obstructive lung disease except \_\_\_\_
- a) Bronchial Asthma    b) Emphysema  
c) Bronchiectasis                      d) Interstitial Fibrosis.

13. Hepatic Encephalopathy is due to
- a) Hypoxic damage from ischaemia
  - b) Thromboembolic phenomena
  - c) Toxic damage from ammonia
  - d) Hepatopulmonary Syndrome
14. Direct Coombs Test detects which antibody
- a) Autantibody attached on RBC
  - b) Antibody to "O" Positive RBC
  - c) Autoantibody in serum
  - d) None of above
15. Hyperthyroidism is seen in
- a) Late stage of Hashimoto's thyroiditis
  - b) Goitre
  - c) Grave's disease
  - d) Thyroidectomy.
16. In Good pasture disease, the antigen is
- a) DNA
  - b) Collagen IV of Basement membrane.
  - c) Bacterial Products
  - d) cationic proteins.
17. Pleural mesothelioma is associated with
- a) Asbestosis
  - b) Silicosis
  - c) Bagassosis
  - d) Berylliosis
18. Which type of breast carcinoma is characterized by "Indian file pattern of tumor cells.
- a) Infiltrating Duct carcinoma
  - b) Medullary carcinoma
  - c) Tubular carcinoma
  - d) Invasive lobular carcinoma.
19. Earliest histological change in myocardial infarction
- a) macrophage infiltration
  - b) Coagulative necrosis
  - c) Waviness of fibres
  - d) Neutrophilic infiltration



20. Cell of origin Responsible for Fibrosis in Cirrhosis is:

- a) Hepatic cells
- b) Ito cells
- c) Kupffer cells
- d) Cholangiocytes.

#### SECTION - II

**Q.2 (LONG ASSAY QUESTION -CASE Based).**

13

53-year-old Alcoholic patient presents to medical emergency with confusion, lethargy and hematemesis. Patient has visible ascites and Jaundice. Investigation Revealed very low protein, Reverse A: G ratio, increased Prothrombin Time(PT) and APTT. on routine check-up found blood pressure and Sugar levels are normal.

1. What is most likely diagnosis in this case?
2. If Biopsy is taken from liver. What Histopathological Findings would you expect to see.?
3. Other Etiology /Differential Diagnosis of this condition.
4. Necessary lab investigation to rule out other differential diagnosis.

**Q.3 Long assay question. (Any Three). (9 marks each)**

27

1. Define Atherosclerosis. Describe etiology, pathogenesis, and morphological features of Atherosclerosis.
2. numerate common Tumors of Female Genital Organs & write about carcinoma of cervix.
3. Chronic Myeloid leukaemia -Describe clinical feature, blood and bone marrow findings and Lab investigation.
4. Classify Hemolytic Anaemia. Etiopathogenesis and blood picture of Beta Thalassemia Major.

SECTION -III

Q.4 SHORT NOTE. (ANY EIGHT) (5 marks each)

40

1. Blood and Bone marrow findings of megaloblastic anemia
2. Renal Function Tests.
3. Define Emphysema and morphology of various types of Emphysema.
4. Classify Bone Tumours. Write about Giant cell Tumor.
5. Etiopathogenesis of Intestinal adenocarcinoma
6. Tumour Markers.
7. Enumerate Thyroid Tumours and describe Papillary Carcinoma.
8. Epithelial Skin Tumours
9. FAB classification of Leukaemia
10. Phyllodes Tumour.

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