RAN-2606000102026001-A / 2406000102020601

Second MBBS Examination September - 2026

Pathology (Paper 1)

Time: 3 Hours] **[Total Marks: 100**

સૂચના : / Instructions
(1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book

Seat No.:

Student's Signature

Section 1 : (20 Marks)

Instructions :
(1) Each questions carries one mark.
(2) Encircle the most appropriate option.
(3) All question are compulsory.

Q. 1. Multiple choice questions : **(20)**

1. Structure of DNA of the cell was described by
   A. Ruska and Lorres. B. Watson and Crick
   C. Nowell Hagerford D. Kary Mullis
2. Alzheimer's disease, cerebral plaques consist of:
   A. ATTR protein B. $A\beta_2$ M protein
   C. Aβ protein. D. Prion protein
3. Virchows triad for thrombosis include all EXCEPT:
   A. Stasis B. Endothelial Injury
   C. Hypercoagulability D. Platlet thrombus
4. For karyotyping, the dividing cells are arrested by addition of colchicine in the following mitotic phase:
   A. Prophase B. Metaphase
   C. Anaphase D. Telophase
5. Tubercle bacilli in caseous lesions are best demonstrated in:
   A. Caseous centre B. Margin of necrosis with viable tissue
   C. Epithelioid cells D. Langhans' giant cells
6. Typically, sarcoid granuloma has the following features except:
   A. Non-caseating granuloma
   B. Gianl cells have cytoplasmic inclusions
   C. Peripheral mantle of lymphocytes
   D. Fibroblastic proliferation at the periphery of a granuloma

7. Chikungunya is transmitted to humans by:
   A. Aedes
   B. Anopheles
   C. Culex
   D. Mansonia
8. Choristoma is :
   A. Normal tissue in abnormal site
   B. Normal tissue in excess at normal site
   C. Abnormal tissue at any site
   D. None of the above
9. Hypercalcaemia as a paraneoplastic syndrome is observed in the following tumours EXCEPT:
   A. Squamous cell carcinoma lung
   B. Small cell carcinoma lung
   C. Renal cell carcinoma
   D. Breast cancer
10. Phosphorylation of retinoblastoma gene:
   A. Inhibits cell replication
   B. Promotes cellular quiescence
   C. Stops cell cycle progression
   D. Promotes cell division
11. Obesity is due to:
   A. Hyperplasia of adipocytes only
   B. Hypertrophy of adipocytes only
   C. Hyperplasia as well as hypertrophy of adipocytes
   D. Fatty change in liver only
12. All of the following are X-linked recessive disorders except:
   A. Haemophilia A
   B. Haemophilia B
   C. G-6-PD deficiency
   D. Sickle cell anaemia
13. Hepar lobatum is seen in:
   A. Primary syphilis
   B. Secondary syphilis
   C. Tertiary syphilis
   D. Congenital syphilis
14. Class I HLA antigens are located on:
   A. All nucleated cells of the body
   B. B and T lymphocytes
   C. Macrophages
   D. Complement system
15. The following type of oedema is characteristically dependent oedema:
   A. Nephrotic edema
   B. Crumpled tissue paper Cytoplasm
   C. Granular Cytoplasm
   D. Clear Cytoplasm
16. Appearance of Cytoplasm seen in Gaucher Cells
   A. Foamy and Vaculated Cytoplasm
   B. Crumpled tissue paper Cytoplasm
   C. Granular Cytoplasm
   D. Clear Cytoplasm

17. Active hyperaemia is the result of:

A. Dilatation ofcapillaries B. Dilatation of arterioles

C. Venous engorgement D. Lymphatic obstruction

18. Connective tissue in scar is formed by the following types of fibrillar collagen

A. Type III, IV B. Type I, III

C. Type II, V D. Type V. VII

19. Enzymatic digestion is the prominent event in following type of necrosis;

A. Coagulative necrosis B. Liquefactive necrosis

C. Caseous necrosis D. Fat necrosis

20. All are growth promoting oncogenes EXCEPT:

A. FGF B. TGF-β

C. TGF-α D. PDGF

Section II : (40 Marks)

Instructions:

1) Draw neat and labelled diagram wherever necessary.
2) Figure to the right indicate full marks of the question
3) First 20 min has been allotted to the MCQ

Q. 2. Case Based Long Essay Question **(13×1=13)**

A 45 year old obese women with poorly controlled DM underwent elective abdominal hysterectomy. On 8th post operative day she developed fever and seropurulent discharge from surgical wound which gapped on coughing. Examination revealed separation of wound edges with wound infection. (2+2+4+5)

1. What are steps in repair?
2. Enumerate factors affecting wound healing.
3. Describe the complications of delayed wound healing.
4. Tabulate the differences between healing by primary and secondary intention.

Q. 3. Long Essay Questions (Attempt any three) **(9×3=27)**

1) Write a short note on" guardian of genome" and its role in Neoplasia
2) Define Inflammation. Enumerate the types of it with differentiating features and describe Chemical mediators of inflammation.
3) Enumerate blood components with their shelf life, storage and uses in clinical practice.
4) Cellular ageing

Section III : (40 Marks)

Q. 4. **Short notes (Attempt any 8)** **(5×8=40)**

1) Physical examination of urine
2) Define pathologic calcification. Enumerate its types and pathogenesis.
3) Enumerate the differences between benign and malignant tumor
4) Define embolism. Describe its causes and common types of embolisms.
5) Describe transfusion reactions. Enumerate the steps in the investigations of transfusion reactions.
6) Define necrosis . Describe in brief its type.
7) Describe etio-pathogenesis of meningitis. Enumerate the differentiating features of Pyogenic, Tuberculous and Viral meningitis based on CSF findings.
8) Describe the mechanism of Type III hypersensitivity reaction.
9) Enumerate the differences between necrosis and apoptosis
10) Discuss differential diagnosis of Granulomatous inflammation.

RAN-2606000102026002 / 2406000102020602

IInd M.B.B.S. Examination August - 2026

Pathology (Paper - II)

Time: 3 Hours] **[Total Marks: 100**

સૂચના : / Instructions
(1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book

Seat No.:

Student's Signature

Section 1 : (20 Marks)

Instructions :
(1) Each questions carries one mark.
(2) Encircle the most appropriate option.
(3) All question are compulsory. No negative marking.

Q. 1

1. Hemoglobin Bart's is composed of
   A. 4 alpha chain B. 4 gamma chain
   C. 4 beta chain D. 4 delta chain
2. BCR-ABL hybrid gene is present in
   A. Burkitt's Lymphoma B. Retinoblastoma
   C. Breast carcinoma D. Chronic myeloid leukaemia
3. RBC cast is seen in
   A. Minimal change disease B. Renal vein Thrombosis
   C. Blader schistosomiasis D. Rapidly progressive Glomerulonephritis
4. Commonest histological finding in Benign Hypertension.
   A. Proliferative endarteritis B. Necrotizing arteriolitis
   C. Hyaline arteriosclerosis D. Cystic medial necrosis
5. Pleural mesothelioma is associated with
   A. Asbestosis B. Berylliosis
   C. Silicosis D. Bagassosis
6. Tear drop cells are seen in
   A. Myelofibrosis B. CML
   C. CLL D. AML
7. Mallory bodies are composed of
   A. Fat droplet B. Mitochondria
   C. Lysosomal Enzymes D. Intermediate filament

8. Best test for assessment of iron status is
   A. Transferrin B. Ferritin
   C. Serum iron D. Hemoglobin
9. Mosi common site of carcinoid is
   A. Liver B. Ileum
   C. Appendix D. Pancreas
10. Transverse Ulcer are seen in
   A. Typhoid B. Amebiasis
   C. Tuberculosis D. Ulcerative colitis
11. Most appropriate IHC marker for GIST
   A. CD 34 B. CD117
   C. Vimentin D. CD 45
12. Most common cause of intra cerebral haemorrhage
   A. Diabetes mellitus B. Trauma
   C. Hypertension D. Iatrogenic
13. Chronic carrier stage is not found in
   A. Hepatitis B B. Hepatitis C
   C. Hepatitis A D. Hepatitis A & B
14. Gleason's grading is used for
   A. Breast Carcinoma B. Prostate Carcinoma
   C. Pancreatic Carcinoma D. Colon Carcinoma
15. Schiller Dual Bodies are seen in
   A. Teratoma B. Choriocarcinoma
   C. Yolk cell tumour D. Seminoma
16. BRCA 1 gene located on chromosome
   A. Chromosome 13 B. Chromosome 17
   C. Chromosome 11 D. Chromosome 22
17. Calcitonin is marker of thyroid
   A. Papillary carcinoma B. Medullary carcinoma
   C. Anaplastic carcinoma D. Adenocarcinoma
18. Granulomatous inflammation is found in
   A . Ulcerative colitis B. Crohn's disease
   C. Amoebiasis D. Giardiasia
19. All of the following are invasive carcinoma of breast except
   A. Colloid carcinoma B. Lobular carcinoma
   C. Comedocarcinoma D. Medullary carcinoma
20. AML with gum infiltration, hepatosplenomegaly is most likely to be
   A. M2 B. M5
   C. M3 D. M4

Section II : (40 Marks)

Instructions:

1) Draw neat and labelled diagram wherever necessary.
2) Figure to the right indicate full marks of the question
3) First 20 min has been allotted to the MCQ

Q. 2. **Case Based Long Essay Question** **(13×1=13)**

A 50 years male presented with complaint of Evening rise of fever, weight loss, night sweats and productive cough.
ESR 80 mm, X-ray showed cavitary lesion in apical area and Sputum is showing Acid fast bacilli.
What is your probable diagnosis? (2 Marks)
Describe etiopathogenesis, gross and microscopic finding of it.(4+7)

Q. 3. **Long Essay Questions (Attempt any three)**

(9×3=27)

1) Describe etiopathology and morphological finding of Myocardial infarction.
2) Classify Anemia. Describe etiopathology, peripheral smear and bone marrow picture and confirmatory diagnostic test of megaloblastic anemia.
3) Define and classify cirrhosis. Describe etiology &morphology of biliary cirrhosis.
4) Describe etiopathogenesis and morphological finding of Benign and malignant Nephrosclerosis

Section III : (40 Marks)

Q. 4. **Short notes (Attempt any 8)** **(8×5=40)**

1) Describe difference between leukemia and leukemoid reaction
2) Describe pathogenesis and laboratory diagnosis of type 2 diabetes
3) Difference between gastric ulcer and duodenal ulcer
4) Fibroadenoma of breast
5) Basal Cell Carcinoma
6) Benign Prostatic Hyperplasia
7) Gaiter
8) Giant cell tumor of bone
9) Crohn disease.
10) What is informed consent and informed refusal. Discuss with example.
