

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, FEBRUARY-2025**PATHOLOGY****PAPER - FIRST****[Time allotted: Three hours]****SET – A****[Max Marks: 100]****Q. 1. Multiple choice questions (Darken the single best response in OMR sheet. Time allotted 20 minutes) (20 x 01 = 20)**

1. Increase in size of cells is
 - a. Hyperplasia
 - b. Hypertrophy
 - c. Apoptosis
 - d. Necrosis
2. The normal myeloid erythroid ratio is
 - a. 1:1
 - b. 5:3
 - c. 3:1
 - d. 2:3
3. Atrophy results from
 - a. Decreased lipid synthesis
 - b. Decreased protein degradation
 - c. Decreased protein synthesis
 - d. Decreased lipid degradation
4. Calcification in necrotic tissue is called
 - a. Metastatic calcification
 - b. Dystrophic calcification
 - c. Calcinosis
 - d. Tumoral calcinosis
5. Barrett oesophagus shows
 - a. Columnar to squamous metaplasia
 - b. Transitional to columnar metaplasia
 - c. Squamous to columnar metaplasia
 - d. Columnar to transitional metaplasia
6. Reversible cell injury does not show
 - a. Plasma membrane blebbing
 - b. Swelling of mitochondria
 - c. Hydropic degeneration
 - d. DNA damage
7. Granulomas are observed in all **except**:
 - a. Amoeboma
 - b. Leprosy
 - c. Berylliosis
 - d. Tuberculosis
8. Fibrinoid necrosis is usually seen in
 - a. Tubercular infection
 - b. Gangrene
 - c. Acute pancreatitis
 - d. Immune reaction in blood vessels
9. Basement membrane has type----- collagen
 - a. I
 - b. II
 - c. III
 - d. IV
10. Autosomal recessive disorder includes
 - a. Sick cell anaemia
 - b. Huntington disease
 - c. Neurofibromatosis
 - d. Duchenne muscular dystrophy
11. Hemophilia A is
 - a. X linked recessive
 - b. X linked dominant
 - c. Autosomal recessive
 - d. Autosomal dominant
12. Example of type I hypersensitivity is
 - a. Schick test
 - b. Lepromin test
 - c. Montoux test
 - d. Casoni's test
13. Hereditary spherocytosis is due to
 - a. G6PD Deficiency
 - b. Intrinsic defect in red cell membrane
 - c. Deficient global synthesis
 - d. Extrinsic defect in red cell membrane
14. Bence Jones proteins are
 - a. Cryoglobulins
 - b. Heavy chains
 - c. Light chains
 - d. C reactive proteins
15. Paroxysmal nocturnal hemoglobinuria is due to
 - a. Acquired red cell defect
 - b. Congenital red cell defect
 - c. Autoimmune defect
 - d. Lead poisoning
16. Decreased platelet survival occurs in
 - a. Megaloblastic anemia
 - b. Aplastic anemia
 - c. Immune thrombocytopenia purpura
 - d. Myelodysplastic syndrome
17. Lysosomal rupture is
 - a. Irreversible injury
 - b. Reversible injury
 - c. No cellular injury
 - d. Both type of injury
18. Necrosis shows
 - a. Reduced cell size
 - b. Intact plasma membrane
 - c. Pyknosis
 - d. Intact cellular contents
19. Amyloid can be best seen under
 - a. Phase contrast microscope
 - b. Polarized microscope
 - c. Fluorescence microscope
 - d. Electron microscope
20. Cytokine responsible for angiogenesis
 - a. VEGF
 - b. TGF
 - c. FGF
 - d. IL-6

**PATHOLOGY
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Note: Attempt all questions in sequence.
Draw suitable diagrams (wherever necessary)

- Q. 2. Give reasons:** (5 x 2 = 10)
- Why neutrophils accumulation is seen at local site after acute inflammation
 - Toxic injuries are more common around portal areas in liver
 - Hemophilia A is commonly expressed in males
 - fava beans intake cause hematuria in some healthy males
 - Why sickle cell anemia patients are resistant to malaria
- Q. 3. Problem based question:**
- A 40 years female with multiple child birth presented with dyspnoea on exertion. She showed pallor on examination and aphthous ulcers. (4 x 2.5 = 10)
- What is the most common diagnosis?
 - What are the important causes leading to this condition?
 - Name two changes seen in RBC on general blood picture examination
 - Name one investigation which will confirm this diagnosis
- Q. 4. Write briefly on:** (4 x 6 = 24)
- Karyotyping
 - Coagulative Necrosis
 - Metaplasia
 - How will you communicate with patient to give report of any malignancy
- Q. 5. Structured question:** (2 x 10 = 20)
- Draw labelled microscopic diagram of epithelioid granuloma.
 - Discuss laboratory diagnosis of iron deficiency anemia.
- Q. 6. Write in brief:** (4 x 4 = 16)
- FAB classification of acute leukemia
 - Differences between leukemia and leukemoid reaction
 - Down's syndrome
 - Differences between apoptosis and necrosis
