

MBBS DEGREE - IIInd PROFESSIONAL - REGULAR**PATHOLOGY - PAPER - I****SECTION A - Multiple Choice Questions (MCQs)**

PAPER CODE : 2411130004 SET : D

Note: Choose one correct answer in the OMR sheet provided. No overwriting should be done.

Time: 20 Minutes (20 x 1 = 20 MARKS)

1. Microangiopathic hemolytic anemia is associated with which of the following conditions:
 - a) Thalassemia
 - b) Disseminated intravascular coagulation
 - c) Sick cell anemia
 - d) Pernicious anemia
2. The mediator primarily responsible for pain during inflammation is:
 - a) Bradykinin
 - b) Leukotriene B₄
 - c) Histamine
 - d) Tumor necrosis factor- α
3. Chronic lymphocytic leukemia (CLL) is most commonly diagnosed in which age group?
 - a) Adolescents
 - b) Young adults
 - c) Children
 - d) Older adults
4. Which type of white blood cell is most likely to be elevated during an allergic reaction?
 - a) Neutrophils
 - b) Eosinophils
 - c) Lymphocytes
 - d) Basophils
5. A 25-year-old male presents with tall stature, gynecomastia, and small testes. Chromosomal analysis reveals 47, XXY. Which of the following features is most characteristic of his condition?
 - a) Male infertility
 - b) Cardiomegaly
 - c) Intellectual disability
 - d) Microcephaly
6. Which of the following is an example of an autoimmune disease?
 - a) Tuberculosis
 - b) Rheumatoid arthritis
 - c) HIV/AIDS
 - d) Malaria

7. Which of the following is NOT a cardinal sign of acute inflammation?
- Swelling
 - Fever
 - Redness
 - Pain
8. Type II hypersensitivity reactions involve:
- Immune complex deposition
 - T-cell mediated cytotoxicity
 - Antibody-mediated cell destruction
 - Delayed-type hypersensitivity
9. A 40-year-old woman presents with memory impairment, irritability, and abdominal pain. She lives in an old house with peeling paint. Blood tests reveal microcytic anemia. What is the most likely diagnosis?
- Thalassemia
 - Lead poisoning
 - Hemochromatosis
 - Mercury poisoning
10. The key enzymes involved in the execution phase of apoptosis are:
- Cyclins
 - Kinases
 - Caspases
 - Ligases
11. HIV primarily targets which cells of the immune system?
- B lymphocytes
 - Neutrophils
 - T lymphocytes
 - Macrophages
12. Pancytopenia with hypercellular marrow is characteristic of:
- Aplastic anemia
 - Paroxysmal nocturnal hemoglobinuria
 - Myelofibrosis
 - Myelodysplastic syndrome
13. Autophagy is a cellular process involved in:
- Cell cycle progression
 - Cellular degradation
 - DNA replication
 - Protein synthesis
14. Cystic fibrosis is caused by:
- A chromosomal abnormality
 - Environmental factors
 - A single gene mutation
 - Unknown factors

15. Howell-Jolly bodies are seen in:
- a) Asplenia
 - b) Hemolytic anemia
 - c) Iron deficiency anemia
 - d) Megaloblastic anemia
16. The following is a hallmark of reversible cell injury:
- a) Mitochondrial swelling
 - b) Pyknosis
 - c) Karyorrhexis
 - d) Cytoplasmic eosinophilia
17. Telomere shortening is associated with:
- a) Cellular immortality
 - b) Cellular senescence
 - c) Increased cellular replication
 - d) Enhanced DNA repair
18. Which of the following is a reversible cell injury?
- a) Apoptosis
 - b) Cellular swelling
 - c) Necrosis
 - d) Liquefactive necrosis
19. How is Fresh Frozen Plasma stored?
- a) Refrigerated at 2–8°C
 - b) Frozen at –18°C or colder
 - c) At room temperature
 - d) Lyophilized
20. Sirtuins are a family of proteins involved in:
- a) Cellular senescence
 - b) Metabolic regulation
 - c) DNA repair
 - d) Oxidative stress