

M.B.B.S. SECOND PROFESSIONAL EXAMINATION, DECEMBER-2024**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. APTT is not elevated in
 - a. DIC
 - b. Vit K deficiency
 - c. ITP
 - d. von Willebrand disease
2. Malarial pigment seen in spleen is
 - a. Hemosiderin
 - b. Hemazoin
 - c. Hematin
 - d. Hepsidin
3. Parvovirus B19 infection is associated with
 - a. Fanconi Anemia
 - b. G6PD deficiency
 - c. PNH
 - d. Red cell aplasia
4. Which is not an indication for giving whole blood:
 - a. Exchange transfusion in neonates
 - b. Chronic renal failure
 - c. Acute Myeloid leukemia
 - d. Hypovolemic shock
5. The enzyme involved in Xenobiotic metabolism
 - a. Cytochrome p224
 - b. Cytochrome p450
 - c. Cytochrome p53
 - d. Cytochrome p 115
6. Which of the following is not a cause of hemolytic anemia
 - a. Aplastic anemia
 - b. G6PD deficiency
 - c. Thalassemia minor
 - d. Malaria
7. Which Immunoglobulin can cross the placenta
 - a. IgA
 - b. Ig G
 - c. Ig M
 - d. Ig E
8. SLE belongs to which type of hypersensitivity reaction
 - a. I
 - b. II
 - c. III
 - d. IV
9. Virchow cells are seen in
 - a. Thyroid
 - b. Brain
 - c. Skeletal muscles
 - d. Skin
10. Tuberculosis is not usually seen in which organ
 - a. Parotid gland
 - b. Skin
 - c. Thyroid gland
 - d. Urinary bladder
11. Which of the following is not a tumor suppressor gene
 - a. P53
 - b. APC
 - c. BCL2
 - d. RB
12. Which of these tumors can metastasise
 - a. Glioma
 - b. Osteoclastoma
 - c. Chondroblastoma
 - d. Meningioma
13. Blood sample collection for doing ESR by Wintrobe method should be done in which vial
 - a. Fluoride
 - b. EDTA
 - c. Heparin
 - d. Oxalate
14. What is the normal reticulocyte count
 - a. 0.2-2%
 - b. 10-12 %
 - c. 20%
 - d. >75%
15. White infarct is seen in
 - a. Lungs
 - b. Small intestine
 - c. Kidney
 - d. Forearm
16. Which type of fibril protein is seen in hemodialysis associated Amyloidosis
 - a. AA
 - b. ATTR
 - c. A β
 - d. A β 2m
17. At which point of cell cycle do cyclins have a role?
 - a. G1-S
 - b. G2-M
 - c. S-G2
 - d. M-G1
18. n MYC amplification is seen in :
 - a. Glioblastoma
 - b. Wilms tumor
 - c. Multiple myeloma
 - d. Neuroblastoma
19. Which virus is commonly associated with nasopharyngeal carcinoma
 - a. HIV
 - b. EBV
 - c. HPV
 - d. CMV
20. Which is the most common route of HIV transmission
 - a. Mother to infant
 - b. Drug abusers
 - c. Needle prick
 - d. Sexual

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

- Q. 2. Give reasons why:** (5 x 2 = 10)
- Blood for glucose estimation is collected in grey vacutainer.
 - Nutmeg liver is seen in chronic congestion.
 - There are increased chances of pulmonary embolism following prolonged immobilization.
 - Brown atrophy of heart can be seen in old age
 - Massive splenomegaly is seen in CML
- Q. 3. Problem based question:** (2+4+2+2=10)
- 45Y/F presented with bilateral ovarian mass with ascites and yellowish discolouration of sclera. She's a known case of Carcinoma breast and is presently on chemotherapy.
- What is your diagnosis?
 - Describe pathophysiology of spread of cancer
 - Discuss lab diagnosis of cancer.
 - Enumerate metastatic sites of carcinoma breast
- Q. 4. Write briefly:** (4 x 6 = 24)
- Chemical mediators of inflammation
 - Lab diagnosis of HIV/AIDS
 - Cellular basis of aging
 - Steps of tissue processing in histopathology lab.
- Q. 5. Structured questions:**
- Discuss pathogenesis of granuloma formation and briefly discuss the differential diagnosis of granulomatous diseases. (5+5=10)
 - Discuss wound healing and factors affecting healing. (5+5=10)
- Q. 6. Answer as indicated:** (4 x 4 = 16)
- Write differences between reversible and irreversible cell injury.
 - SN on Hb electrophoresis and its uses
 - SN on Pulmonary embolism
 - SN on Iron absorption
