

# 2019 Scheme

Q.P. Code: 213001

Reg. no.: .....

Second Professional MBBS Degree Supplementary Examinations

July 2022

Pathology - Paper I

(General Pathology and Hematology including Clinical Pathology)

Time: 3 Hours

Total Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers
- Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

## Long Essays

(2x15=30)

1. A seven-year-old boy presented to the hospital with breathlessness and severe pallor. On examination he had stunted growth, frontal bossing, mild icterus and moderate splenomegaly. History of repeated blood transfusions was present. Investigations revealed Hb- 3gm%, TLC – 5600/cu.mm, platelets – 3.0 lakhs/cu.mm. Peripheral smear showed microcytic hypochromic blood picture with marked anisopoikilocytosis, many target cells and reticulocyte count of 5%.
  - (a) What is the likely diagnosis and why
  - (b) What is the pathogenesis of this condition
  - (c) What are the laboratory investigations needed in such a case to diagnose the disease and the expected results
  - (d) How do you classify this disease based on its clinicohematological profile. (2+4+6+3)
2. Define shock. Classify shock. Discuss the etiopathogenesis of septic shock. Discuss the morphology of various organs in shock (1+4+5+5)

## Short essays

(5x8=40)

3. Pictorially describe the extrinsic and intrinsic pathway of coagulation. Mention the tests used in their assessment with their normal ranges and utility in individual deficiencies of coagulation factors
4. What are the causes of polycythemia. Write a note on Polycythemia Vera
5. What are free radicals. Give examples each of oxygen- and non-oxygen derived free radicals and how they cause injury.
6. List the components of Virchow's triad. Describe how each of the components leads to thrombosis with suitable examples
7. Define granulomatous inflammation. Describe the pathogenesis and morphological features of any one type of granuloma (5x4=20)

## Short answers

8. Define amyloid. Name the stains used for demonstration of amyloid.
9. Laboratory diagnosis of Von Willebrand disease
10. Type 1 Hypersensitivity reaction
11. Leucoerythroblastic blood picture – definition and causes
12. Discuss chemical carcinogenesis with examples (10x1=10)

## Objective type questions

13. Type of necrosis seen in myocardial infarction is \_\_\_\_\_.
  14. Stain used to demonstrate myeloblasts in acute leukemia is \_\_\_\_\_.
  15. Autoantibody in Sjogren's disease is \_\_\_\_\_.
  16. The fixative used for cervical cytology smear is \_\_\_\_\_.
  17. What is the cytogenetic abnormality seen in Burkitt Lymphoma
  18. What is LE cell
  19. Name two oncogenic viruses and the malignancy they cause
  20. What is Lyon hypothesis
  21. Name two anticoagulant and their use
  22. What is the difference between hypertrophy and hyperplasia
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