

**BACHELOR OF SCIENCE (CBCS-2018 COURSE)**  
**T. Y. B. Sc. Sem-V : WINTER- 2022**  
**SUBJECT : MICROBIOLOGY : CLINICAL PATHOLOGY**

Day : Friday

Time : 02:00 PM-05:00 PM

Date : 9/12/2022

**W-18431-2022**

Max. Marks : 60

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**N. B. :**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Draw neat and labelled diagrams **WHEREVER** necessary.
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**Q. 1** Attempt **ANY TWO** of the following: (12)

- a) What are procoagulants? Describe the nomenclature of procoagulants.
- b) What is 'Rh blood grouping system'? Comment on 'Rh-incompatibility'.
- c) Define the term 'Jaundice' and comment on 'Congenital jaundice'.

**Q. 2** Attempt **ANY TWO** of the following: (12)

- a) What is 'Schizophrenia'? Discuss the 'Lipid hypotheses for development of Schizophrenia.
- b) Explain the cytology and significance of Neutrophils.
- c) Discuss the formation of 'platelet plug' and mention its significance.

**Q. 3** Attempt **ANY TWO** of the following: (12)

- a) Justify the statement that, 'Docosahexaenoic acid play significant role in the normal functioning of human brain, retina, lymphocytes and enzymes'.
- b) Describe 'Extrinsic pathway' for blood coagulation process.
- c) Explain the cytology and significance of 'Natural Killer cells'.

**Q. 4** Write short notes on **ANY THREE** of the following: (12)

- a) Aspartate transaminase test.
- b) Phenol sulfonaphthalein test.
- c) LDL cholesterol
- d) Hepatocellular jaundice

**Q. 5** Attempt **ANY FOUR** of the following: (12)

- a) Enlist common anticoagulants used in diagnostic laboratories.
- b) Comment on 'ABO blood grouping system'.
- c) Give the principle and use of 'Van Den Bergh Test'.
- d) Enlist plasma electrolytes and mention their normal level (concentration) in human blood.
- e) Justify the statement that 'hemoglobin regulates Bohr's effect and acts as a buffer in peripheral blood circulation.
- f) Explain the role of macrophages as 'Antigen Presenting Cells' (APC's).

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