

IMMUNO-HEMATOLOGY & TRANSFUSION MEDICINE
PAPER-I

IHTM /D/17/15/I

TIME : 3 HOURS
MAX. MARKS : 100

- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space*
- *Answer all the parts of a single question together.*
- *Start the question to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

Write Short notes on:

- | | | |
|-----|--|-------|
| 1. | a. Regulatory T cells (Tregs) | 5+5 |
| | b. Their role in Immune Tolerance | |
| 2. | a. Describe pathophysiology of shock. | 5+5 |
| | b. Describe roles of various expanders. | |
| 3. | a. Iron metabolism in healthy individual | 5+5 |
| | b. Biochemical markers of iron deficiency | |
| 4. | a. Molecular structure of Hepatitis B virus (HBV) | |
| | b. Importance of HBV mutants in transfusion medicine | 5+5 |
| 5. | a. Membrane attack complex (MAC) in complement activation | 5+5 |
| | b. Antibody mediated hyperacute rejection of solid organ transplant | |
| 6. | a. Schematic illustration of common inheritance patterns | 5+5 |
| | b. General properties of Autosomal Recessive disorders | |
| 7. | a. Mechanism of fibrinolysis | 5+5 |
| | b. Natural anticoagulants | |
| 8. | a. Types of Hypersensitivity reactions | |
| | b. Applied aspects of Type I hypersensitivity reaction in Transfusion Medicine | 5+5 |
| 9. | a. Laboratory diagnosis of G6PD deficiency | 5+5 |
| | b. Applied aspects in Transfusion Medicine | |
| 10. | a. What is reticulated platelet? | 2+3+5 |
| | b. Describe methods of its detection. | |
| | c. Its relevance in Transfusion Medicine | |
