

FINAL EXAM
 DECEMBER 2015

NATIONAL BOARD OF EXAMINATIONS

IMMUNOHEMATOLOGY & TRANSFUSION MEDICINE

PAPER – I

IMHT/D/15/15/I

Time : 3 hours

Max. Marks : 100

Important instructions:

- 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 answer 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) Platelet formation in human body and distribution in vivo. b) List possible interferences with platelet count on the Coulter. c) Explain the procedure to follow if there are platelet clumps in sample.	6 2 2
2.	a) Complement cascade in health. b) Mechanism of complement mediated haemolysis.	5 5
3.	a) Principles of flow cytometry using diagrams and flow charts. b) Uses of flow cytometry in current Transfusion Medicine Practice.	5 5
4.	Laboratory diagnosis of G6PD deficiency and discuss its importance in Transfusion Medicine.	10
5.	a) Mechanism of drug induced autoimmune hemolytic anaemia. b) Laboratory diagnosis of drug induced autoimmune hemolytic anaemia.	5 5
6.	a) What is reticulated platelet? b) Methods for detection of reticulated platelets. c) Its importance in platelet transfusion.	2 5 3
7.	a) Hardy Weinberg Principle. b) Its application in transfusion medicine.	5 5
8.	a) Structure and physiochemistry of immunoglobulin molecules. b) What are the different IgG subclasses and their function?	6 4
9.	Defect and laboratory tests used for the diagnosis of following disorders: a) Activated protein C. b) Hyperhomocysteinemia. c) Antiphospholipid syndrome.	3 3 4
10.	a) Explain how the fibrinolytic system removes clots. b) List activators and inhibitors of plasmin.	5 5
