

M.Sc.

2016

2nd Semester Examination

BIOMEDICAL LABORATORY SCIENCE AND MANAGEMENT

PAPER—BLM-203

Full Marks : 40

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer question no.1 and any three from the rest.

1. Answer any five questions of the following : 5×2

(a) What is the cold agglutinin ?

(b) What is all antibody ?

(c) What do you mean by blood group subtypes ?

(Turn Over)

- (d) What do you mean by pheresis ?
- (e) What is the minimum age of blood donation and minimum criteria of physical condition of donar ?
- (f) What are the different categories of compatability testing ?
- (g) What do you mean by sensitization of red cells.
- (h) Write the full from of REACT and SPAA.
2. (a) State the significance of forward and reverse grouping ?
- (b) How do you perform reverse grouping ?
- (c) What do you mean by cardinal rule in blood blank ?
- (d) What do you mean by secretors and adjuvant ?
3+2+1+(2+2)
3. (a) Describe the formation of B antigen with diagram.
- (b) Discuss the role of FUT in the development of Hh system.
- (c) What is the difference between Bombay O and Para-Bombay O.
4+4+2

4. (a) Discuss about Fishes-Race nomenclature.
- (b) Mention world wide variation of RhD gene.
- (c) What is the relationship between two locus haplotypes and Fisher DCE notation — enumerate through diagrammatic representation.
5. (a) What is apheresis? Describe with different types of centrifugation technique.
- (b) How do you prepare platelets and fresh frozen plasma and mention its significance.
- (c) Mention different types of complications of blood transfusion. 4+(2+2)+2
6. (a) Why minor cross matching of blood is of less importance?
- (b) How do you screen the blood with reference to the presence of all antibodies for cross-matching?
- (c) State the merits and demerits of cross-matching.
- (d) Describe the method of major cross-match test.