

Course Code: BMD 226

Course title: Blood Transfusion and Techniques ii

SECTION A MCQ

1. Immediately after an acute transfusion reaction
 - a) All antibodies may be found in donors RBCs
 - b) RBCs are haemolysed
 - c) Perform elution test
 - d) RBCs are not haemolysed
2. Bombay phenotype individuals are
 - a) Secretors
 - b) Have antibodies A and B
 - c) Blood group O negative
 - d) Have antigen A and B
3. The phenotype O^h red cells are not agglutinated by
 - a) Anti K
 - b) Anti T
 - c) Anti M
 - d) Anti H
4. Fisher Race dce is equivalent to Weiners
 - a) rh_y
 - b) rhⁱⁱ
 - c) rh
 - d) Rh_z
5. 22% Bovine albumin is used in compatibility test to:-
 - a) Reduce zeta potential
 - b) Increase zeta potential
 - c) Decrease dielectric constant
 - d) Maintain zeta potential
6. Which of the following will give rise to all the four ABO blood groups?
 - a) A x A
 - b) A x O
 - c) AB x O
 - d) A x B
7. D^U test is done to:-
 - a) Confirm compatibility testing
 - b) All positive Rhesus grouping
 - c) Detect weak D antigen
 - d) Reverse grouping only

8. The terminal sugar for blood group B is:-
 - a) N- acetylgalactosamine
 - b) L- fucose
 - c) D-galactose
 - d) Oligosaccharide
9. Febrile blood transfusion reaction may be caused by:-
 - a) Pyrogens
 - b) Dextran
 - c) Microembolism
 - d) Sterile saline
10. The following conditions could give rise to Rhesus immunization:-
 - a) Infection
 - b) Pregnancy
 - c) Pollution
 - d) Anaemia
11. Genes that occupy the same loci are known as:-
 - a) Amorph
 - b) Alleles
 - c) Silent
 - d) Recessive
12. These antibodies are common in cold auto immune haemolytic anaemia
 - a) IgG
 - b) IgA
 - c) IgE
 - d) IgM
13. The indirect antiglobulin test is used to test red cells that have been sensitized:
 - a) In - vitro
 - b) In - vivo
 - c) After elution techniques have been carried out
 - d) With any IgM antibody
14. What amount of blood is usually taken from a blood donor?
 - a) 405 mls
 - b) 450 mls
 - c) 550 mls
 - d) 600 mls
15. Hydatid cyst fluid inhibit:-
 - a) Anti – A₁
 - b) Anti – I
 - c) Anti – P₁

- d) Anti - K_x
16. The X_g blood group system:
- Is a sex linked blood group system
 - Is carried by the Y- chromosome
 - Cause HDNB
 - Is carried by the autosomal chromosome
17. Which of the following enzyme is commonly used in blood bank:-
- D- galactose
 - L – acetyl chloride
 - Trypsin
 - Gloconate
18. Immune antibodies have the following characteristic:
- IgA
 - IgE
 - IgG
 - IgM
19. Which of the following are characteristics of anti- K
- Causes HDNB
 - Reacts best in saline
 - Does not react in AHG
 - can be produced in animals
20. The purpose of pooling O cells in antibody screening test is:
- To avoid lysis of the RBCs
 - To identify the antibodies
 - To avoid interference of ABO antibodies
 - To have as many as possible of antigenic sites

SECTION B

- Outline the D^u procedure (8 marks)
- List 4 basic blood components prepared in the blood bank and mention their indication (8 marks)
- Describe HDNB caused by ABO incompatibility including its treatment (8 marks)
- Differentiate between Direct coombs test and indirect coombs test (8 marks)
- Explain using practical example preparation of Red cell suspension (8 marks)

SECTION C

1. Explain the processes donated blood goes through from donor selection upto the time it is released for transfusion **(20 marks)**
2. Explain in details laboratory investigation of transfusion reaction **(20 marks)**