

The West Bengal University of Health Sciences
3rd BMLT September, 2023 Examination

Subject: Blood Bank and Special Hematology

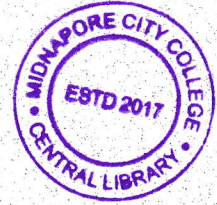
Time: 3 hrs.

Full Marks: 100

Attempt all questions

1. Answer the following : 20 x 1
- a) All of the following are transfusable components that can be derived from donated blood, except:
i) Platelets. ii) Plasma. iii) Cryoprecipitated AHF. iv) Agranulocytes.
- b) Red cells and whole blood must always be stored at a temperature between:
i) $+2^{\circ}\text{C}$ to $+6^{\circ}\text{C}$. ii) 0°C to $+2^{\circ}\text{C}$. iii) -8°C to $+0^{\circ}\text{C}$. iv) -15°C to -8°C .
- c) At the time of platelet release reaction, alpha granules contain:
i) ADP. ii) Histamine. iii) Epinephrine. iv) All of above.
- d) Endothelial injury is of significance in:
i) Arterial thrombi. ii) Platelet plugging. iii) Blood clot. iv) Cardiac surgery.
- e) No specific esterase staining technique is used to confirm:
i) AML-7. ii) AML-4. iii) AML-9. iv) CML.
- f) CML is a kind of :
i) Erythroid cell disorder. ii) Myeloid series disorder.
iii) Lymphoid disorder. iv) None of above.
- g) Saturated Copper sulphate is used for determination of:
i) Blood group. ii) Rh typing. iii) Haemoglobin. iv) Coomb's test.
- h) CLL is a malignancy of mature WBC & which cells are related?
i) Platelets. ii) Lymphocytes. iii) Neutrophils. iv) Basophils.
- i) ALP is present in the cytoplasm of:
i) Lymphocytes. ii) Neutrophils. iii) Eosinophils. iv) Platelets.
- j) The surface of RBC contain:
i) Plasma protein. ii) Antibodies. iii) Antigens. iv) Enzymes.
- k) Human blood group system is discovered by Landsteiner in:
i) 1800 AD. ii) 1900 AD. iii) 1910 AD. iv) 1780 AD.
- l) A person is carrying blood group A, so plasma consists:
i) Anti- B antibodies. ii) Anti- A antibodies.
iii) Anti- AB antibodies. iv) Anti- Rh D antibodies.
- m) A person is able to donate blood in Blood Bank whose Hb is minimum:
i) 10 gm%. ii) 1.5 gm%. iii) 14 gm%. iv) 15 gm%.

P.T.O



- n) The platelets is responsible for formation of:
- i) Intrinsic prothrombin activator.
 - ii) Extrinsic prothrombin activator.
 - iii) Calcium activator.
 - iv) All of the above.
- o) Prothrombin activator that is formed in intrinsic & extrinsic pathways converts Prothrombin to:
- i) Throbmin.
 - ii) Fibrinogen.
 - iii) Calcium.
 - iv) Thromboplastin.
- p) Which type of test is performed for Blood grouping in the lab?
- i) Genotype.
 - ii) Phenotype.
 - iii) Offspring system.
 - iv) Hereditary.
- q) In case leukemia reaction, the TLC is:
- i) Highly increased.
 - ii) Moderately increased.
 - iii) Normal count.
 - iv) Markedly decreased.
- r) Du conformation test is done for detection of:
- i) ABO group.
 - ii) RH typing.
 - iii) Coomb's reation.
 - iv) Cross matching.
- s) Which is the following condition cause leukaemoid reaction?
- i) Down's syndrome.
 - ii) Symon's disease.
 - iii) HIV.
 - iv) Hbs Ag.
- t) Which is the following as example for haemorrhagic disorders?
- i) Thrombosis.
 - ii) Von Willebrand disease.
 - iii) P. Vera.
 - iv) Arteriosclerosis.

2. Write short notes on the following :

5 x 2

- a) Thrombosis.
- b) ITP.
- c) Hemophilia.
- d) Leukaemia.
- e) Blood donor.

3. Write short notes on **any six** of the following :

6 x 5

- a) Du confirmation.
- b) Rejection of donor.
- c) Platelet rich plasma.
- d) Coagulation factors.
- e) Titration of Anti D.
- f) CML.
- g) Forward blood group.
- h) Cytochemistry for Acute leukemia.

4. Answer **any one** of the following questions :

1 x 10

2+8

- a) What is Rh Anti- D? How do you perform indirect commb's test?
- b) Differentiate in between CML & AML.

10

5. Answer **any two** of the following questions :

2 x 15

5+5+5

- a) Give the PBF features of CML. Write the importance of peroxidase test? How do you select a donor?
- b) How do you prepare antisera in the lab? Write in details about post transfusion reaction.
- c) What is pilot tube? Write about various methods for disposal of materials in blood bank.

7+8

15