



TECHNICAL UNIVERSITY OF MOMBASA
FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

UNIVERSITY EXAMINATION FOR:

BMLS

Type unit code: **BLOOD TRANSFUSION**

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2016

TIME: 2

DATE: Pick Date **May** Pick Year

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of Choose Nochoose Sect/Quest. Attempt Choose instruction.

Circle the correct answer in section

Section A 30 marks

Q1 The donor for blood blood group O Rh+ve is:

- a) AB Rh+
- b) BRh+
- c) ARh+
- d) AB Rh =ve
- e) D Rh +ve

Q2 The antibody which has the ability of Crossing the placenta int the fetal circulation is

- a) IgA
- b) IgD
- c) IgM
- d) IgG
- e) IgH

Q3 When a baby is born jaundiced the reason is probably:

- a) Due to hemolytic disease of the new born
- b) The baby may be having malaria
- c) The baby has typhoid
- d) The baby is premature
- e) None of the above

Q4 Hydrops is a condition that is associated with

- a) Neonatal hemolysis
- b) Inutero hemolysis
- c) Inutero prenatal hemolysis
- d) Hemolytic diseases of the new born
- e) None of the above

Q5 The risk of getting a baby with HDNB is associated with

- a) Parents with haploid HbS
- b) Parents with diploid Hbs
- c) Parents with Hemoglobin C
- d) Parents who do not have low hemoglobin levels
- e) Parents with high hemoglobin levels

Q6 The test used to determine HDN is

- a) Direct coombs test
- b) Indirect coombs test
- c) Sahli method
- d) Total blood count
- e) ESR

Q7 To prevent pregnant mother from reacting with blood of incompatible husband the following is used

- a) Administration of Rhogum
- b) Administration of Anti IgG serum
- c) Administration of IgM
- d) Administration of IgD
- e) None of the above

Q8 The shelf-life of donor blood in the laboratory is

- a) Three weeks
- b) One week
- c) Four days
- d) Two weeks
- e) 28 days

Q9 Du test is recommended in case of

- a) Rh negative slide blood grouping
- b) Rh positive tube blood grouping
- c) ABO blood grouping cases
- d) Blood group O patient
- e) Blood group O Rh –ve patients

Q10 The human antibodies found in donors of blood group AB are:

- a) Antibody (A)
- b) Antibody (B)
- c) Antibody (A&B)
- d) No antibodies found
- e) None of the above

Q11 In a chronic infection the antibody found in high concentration is

- a) IgM
- b) IgD
- c) IgA
- d) IgG
- e) IgE

Q12 The only antibody known to have the ability of crossing the placenta to fetal circulation is

- a) IgE
- b) IgM
- c) IgG
- d) IgA
- e) IgD

Q13 Why not all antibodies are Immunoglobulins

- a) Antibodies are particles
- b) Antibodies are proteins
- c) Some antibodies are not immunogens.
- d) They are all the same in structure
- e) All immunoglobulins are immunogens

Q14 When blood group O donor gives blood to Blood group AB patient

- a) The anti- A & B antibodies in the donor blood will not react
- b) The anti A & B antibodies in the donor blood is destroyed
- c) The reaction that will occur is Not clinically significant
- d) The recipient antigens are not responsive
- e) None of the above

Q15 During blood transfusion the donor blood should be tested among others for

- a) HIV
- b) Hepatitis B
- c) Syphilis
- d) Malaria
- e) All the above

Q16 All antenatal mothers and their spouses should be tested for Rhesus blood group antigen because:

- a) In case the husband is Rh _ve there is a danger of the fetus getting paternal antigens
- b) In case the mother has Rh antigen there is a danger of getting a baby with sickle cell disease
- c) In case the husband is Rh+ve there is the danger of getting a baby with HDN
- d) They should all be of the same blood group
- e) None of the above

Q17 Exchange transfusion is a procedure for children born with:

- a) Jaundice
- b) Malaria
- c) Syphilis
- d) Hemolytic disease of the newborn
- e) TB

Q18 Before a donor is allowed to donate Hb concentration is tested by using:

- a) Zinc sulphate solution
- b) Copper sulphate solution
- c) Iodine solution
- d) Landau-Adams method
- e) Leishman method

Q19 When a child is born with genetic disorder he may be treated using

- a) Immunosuppressants
- b) Cord blood
- c) Bone marrow replacer
- d) Blood group O Rh +ve
- e) None of the above

Q20 The severe form of Hemolytic disease of the newborn is known as:

- a) Newborn disease
- b) The cancer of the newborn
- c) Erythroblastosis foetalis
- d) Newborn anaemia
- e) Newborn challenge

Q21 When an Rh –ve mother has an Rh +ve Husband

- a) She has 100% chance of having a baby with HDN
- b) She has 75% chance of having a baby with HDN
- c) She has 25% chance of having a baby with HDN
- d) She has no chance of having an abnormal baby
- e) She would always expect an abnormal baby

Q22 When a Rh _ve mother has been immunized by the Rh +ve husband

- a) Only the first born will be affected
- b) Only the second born will be affected
- c) May be the last born will be affected
- d) None of them will be affected
- e) All of them will be affected

Q23 Compatibility test is done in all blood donor and recipient

- a) To quickly transfuse during emergencies
- b) To prevent hemolytic disease of the Newborn
- c) To separate male and female blood
- d) To use some of the blood for media preparation
- e) None of the above

Q24 For a safe transfusion to take place the following test may be done

- a) ABO and RH typing
- b) Antibody screening
- c) Cross matching between recipients serum and donor cells
- d) Cross match between recipients cells and donor serum
- e) All the above

Q25 Compatibility testing must be done 3 day before the scheduled transfusion in

- a) Emergencies
- b) A patient with a previous blood component transfusion
- c) Accident cases
- d) Delivery cases
- e) All conditions

Q26 Forward typing means

- a) Testing patients Red cells with Anti A and anti B
- b) Testing patients serum with known cell
- c) Testing and transfusing
- d) Testing all the donated blood
- e) None of the above

Q27 The antisera that are used in clinical laboratory include

- a) Anti - E
- b) Anti – A & B
- c) Anti –C & c
- d) Anti – e & K
- e) All the above

Q28 The serum of O blood group contains:

- a) A antigens
- b) B antigens
- c) D antigens
- d) A antibodies
- e) A and B antibodies

Q29 The donor for Blood group O Rh –ve recipient is

- a) Blood group O Rh + ve
- b) Blood group AB +ve
- c) Blood group A +ve
- d) Blood group O Rh –ve
- e) None of the above

Q30 Dú +ve Test means

- a) The blood being tested is Rh +vr
- b) The blood being tested is useless
- c) The blood being tested can be given to a rhesus _ve mother
- d) The blood being tested can immunize a rhesus negative mother
- e) Tne blood being tested cannot be used anymore

Section B 30 marks

Q31 Describe in detail the procedure for the forward and reverse compatibility and comment on your results.

20 marks

Q32 Fill in the blank spaces and for each indicate their compatibility 20 marks

RBC + Anti-A	RBC + Anti-B	Serum + A cells	Serum + B cells	ABO Group	Compatible RBCs	Compatible Plasma
+	-	-	+	A	A,O	
-	+	+	-	B		B,AB
+	+	-	-		AB,A,B,O	
-	-	+	+	O		O,A,B,AB