

Time allowed: 10 Minutes

# HAEMATOLOGY AND BLOOD BANKING HSSC-II

Version Number 1 8 9 5

### SECTION - A (Marks 10)

Note:	OMR	Answ		ompleted in the	be answered on the separately provided first 10 minutes and handed over to the d. Do not use lead pencil.			
<b>2</b> . 1	Choose the correct answer A / B / C / D by filling the relevant bubble for each question on the OMR							
	Answer Sheet according to the instructions given there. Each part carries one mark.							
	1)	Aver	age size of a mature erythrocyl	o ie:				
	• /	Α.	6.4 µm	В.	7.2 µm			
		C.	8.2 µm	D.	9.0 µm			
	2)		coloured red blood cells in a pe		•			
	-,	Α.	Hyperchromia	В.	Polychromia			
		C.	Normochromia	D.	Hypochromia			
	How many $\beta$ –chains are present in foetal haemoglobin?							
	,	Α.	4	B.	1			
		С.	2	D.	0			
	4)		h type of haemoglobin is prese					
	7)	A.	Hb F	ent in sickle cell and B.	Hb H			
		C.	Hb S	Б. D.	Hb A			
	5)	Anaemia due to deficiency of iron in body is <b>mor</b> phologically classified as:						
	٠,	A.	Macrocytic	B.	Microcytic			
		C.	Normocytic	D.	Normochromic			
	6)		h of the following is site for hen		Homosmome			
	٥,	<b>A</b> .	Brain	В.	Bone morrow			
		л С.	Kidneys	D.	Pancreas			
	7)	Which of the following diagnostic feature is present in most of the patients of CML?						
	• /	Α.	Myeloperoxidase	B.	Non-specific esterase			
		C.	Acid phosphatase	D.	Philadelphia chromosome			
	8)		h one is <b>NOT</b> a phase of blood		Timadopina omonocome			
	,	Α.	Neutral phase	В.	Saline phase			
		C.	Albumin phase	D.	Coomb's phase			
	9)		A treated blood sample is <b>NOT</b>					
	,	Α.	Direct Coomb's test	В.	Indirect Coomb's test			
		C.	Blood grouping	D.	Rh typing			
	10) What is the gauge of needle used for collecting blood in blood bank?							
	·	Α.	24	В.	12			
		C.	16	D.	20			



## HAEMATOLOGY AND BLOOD BANKING HSSC-II

Time allowed: 2:20 Hours

Total Marks Sections B and C: 40

Answer any twelve parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

### SECTION - B (Marks 24)

- Q. 2 Answer any TWELVE parts. The answer to each part should not exceed 2 to 4 lines. (12 x 2 = 24)
  - (i) How is blood circulated in our body?
  - (ii) Write down the composition of blood.
  - (iii) Write down procedure for reticulocyte count.
  - What is clinical significance of osmotic fragility test? (iv)
  - Define helmet cell and sickle cell. (v)
  - (vi) How is hemoglobin formed?
  - (vii) What is laboratory diagnosis for thalassemia?
  - (viii) Enumerate blood parasites.
  - (ix) How are thick and thin films used to diagnose malaria?
  - Write down indications for bone marrow aspiration. (x)
  - (ix) How do we obtain a bone marrow trephine specimen?
  - (xii) What are clinical features of acute myeloblastic leukemia?
  - (iiix) Explain tube technique of forward ABO grouping.
  - (xiv) What are different types of blood groups?
  - (xv)How is blood collected in blood bank?
  - (ivx) Differentiate between major and minor X-match.

### SECTION - C (Marks 16)

Note:	Attempt any TWO questions. All questions carry equal marks.		2 x 8 = 16)		
<b>Q</b> . 3	What is	s TLC? Write down its requirements, procedure, calculations and normal value.	(80)		
Q. 4	Define coagulation. What are clotting factors? Explain intrinsic and extrinsic pathways for coagulation.				
Q. 5	Write notes on any two of the following:				
	a.	Westergren's method of ESR	(04)		
	b.	Direct and Indirect Coomb's test	(04)		
	C.	Donor selection criteria	(04)		