

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: BSc MLT
BRANCH: MLT**

**SEMESTER : V
SESSION : MO/2024**

SUBJECT: BMT5015 HEMATOLOGY AND BLOOD BANKING

TIME: 3 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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			CO	BL
Q.1(a)	Write the classification of anaemia. How cardiac features and ECG are affected in anemic patient.	[5]	CO1	BL3
Q.1(b)	Discuss clinical features, hematologic findings, bone marrow examination and biochemical investigations of acute lymphoblastic leukemia (ALL).	[5]	CO1	BL2
Q.2(a)	Normal range of bleeding time vary with methods used, explain the reason. Discuss properties and functions of platelets.	[5]	CO2	BL3
Q.2(b)	Explain prothrombin time (PT) determination.	[5]	CO2	BL2
Q.3(a)	Enlist etiology of Disseminated Intravascular Coagulation (DIC). Mention clinical manifestation and lab diagnosis of DIC.	[5]	CO3	BL1
Q.3(b)	Discuss mechanism of DIC.	[5]	CO3	BL2
Q.4(a)	Define cytogenetics. Write in short on applications of cytogenetics.	[5]	CO4	BL1
Q.4(b)	Explain various techniques used for cytogenic studies.	[5]	CO4	BL2
Q.5(a)	Write the principle of ABO blood grouping system. Write on importance of blood grouping.	[5]	CO5	BL2
Q.5(b)	Discuss ABO blood grouping by tube method.	[5]	CO5	BL2

:::22/11/2024:::M