

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

**CLASS: BMLT  
BRANCH: BMLT**

**SEMESTER : 5th  
SESSION : MO/2024**

**SUBJECT: BMT5107 SEROLOGY & VIROLOGY**

**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)	Explain various types and immune response of antibody.	[5]	1 2
Q.1(b)	Discuss structure and chemical properties of antigen.	[5]	1 2
Q.2(a)	Enlist toll like receptors and their mode of action.	[5]	1,2 3
Q.2(b)	Discuss types and immune response of interferon.	[5]	1,2 2
Q.3(a)	Discuss T cell receptor in detail.	[5]	1,2 2
Q.3(b)	Differentiate T-independent & T-dependent Humoral immunity with diagram.	[5]	1,2 4
Q.4(a)	Differentiate Active & Passive agglutination with one example of each.	[5]	1,2 4
Q.4(b)	Explain the principle and procedure of VDRL test.	[5]	1,2 2
Q.5(a)	Discuss the following: a) flavi virus b) coliphage c) prions d) Lyssa virus e) capsomers	[5]	3,4 2
Q.5(b)	Explain ELISA with different methods.	[5]	3,4 2

**.....25/11/2024 M:.....**