## BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (MID SEMESTER EXAMINATION MO/2024)

CLASS: BMLT SEMESTER: V
BRANCH: BMLT SESSION: MO/2024

SUBJECT: BMT5107 SEROLOGY & VIROLOGY

TIME: 02 Hours FULL MARKS: 25

## **INSTRUCTIONS:**

- 1. The question paper contains 5 questions each of 5 marks and total 25 marks.
- 2. Attempt all questions.
- 3. The missing data, if any, may be assumed suitably.
- 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates

Q.1(a) Q.1(b)	Differentiate Active and Passive artificial immunity with examples. Explain Granulocytes with diagram.	[2] [3]	CO 1,4 1,4	4
Q.2(a) Q.2(b)	Discuss the following: (a) Epitope, (b) Opsonization Explain Primary and Secondary response of Antibodies.	[2] [3]	1,4 1,4	2 2
Q.3(a) Q.3(b)	Discuss the following: a) PAMPs and PRR, b) Toll like receptor 1 & 2 Describe Inflammation process with diagram.	[2] [3]	1,4 1,4	2 2
Q.4(a) Q.4(b)	Explain the following: a) Digestion process of Phagocytosis, b) MX protein Describe classical pathway of complement activation.	[2] [3]	1,4 1,4	2 2
Q.5(a)	Complete the following: a) +CD <sub>4</sub> +TCR> Ag+ MHC II+ b) MHC I> $\alpha$ 1, $\alpha$ 2, $\alpha$ 3,	[2]	1,4	4
Q.5(b)	, , , , , , , , , , , , , , , , , , ,	[3]	1,4	3

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