

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

**CLASS: BSc. (MLT)  
BRANCH: BMLT**

**SEMESTER : II  
SESSION : SP/2025**

**SUBJECT: BMT207 IT SKILLS**

**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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|--|-----|-----------|-----------|
| Q.1(a) Discuss the key characteristics, electronics components used and major advancements in each generation from the First Generation to the Third Generation of computers.  | [5] | CO<br>CO1 | BL<br>III |
| Q.1(b) What is the Central Processing Unit (CPU)? Explain its components and functions. Also differentiate between Primary and Secondary memory.   | [5] | CO1       | IV        |
| Q.2(a) Convert the following Decimal no. into Binary no.<br>740, 592, 451.625, 48.750, 165.225<br>Convert the following Binary no. into Decimal no.<br>1110, 10101, 1111111011, 1011111, 1000001                           | [5] | CO2       | II        |
| Q.2(b) Perform the following binary addition:<br>10001 + 11101, 10111 + 110001, 11001 + 10111, 100+11, 11101+10001<br>Perform the following binary subtraction:<br>11001-1000, 11010-1100, 11111-1101, 10111-111, 1001-101 | [5] | CO2       | III       |
| Q.3(a) Define computer network with its types. Also explain any four communication devices   | [5] | CO3       | III       |
| Q.3(b) Write notes on the followings:<br>i. Internet, ii. URL, iii. WWW, iv. Web browser, v. Web server  | [5] | CO3       | III       |
| Q.4(a) Describe Information and Network security. What are the 3 Principles of Information Security?   | [5] | CO4       | III       |
| Q.4(b) What is network security authentication explain with common authentication methods? Also describe software vulnerability.   | [5] | CO4       | III       |
| Q.5(a) How computer play important role in medicine? Explain any four applications area of computer in medicine.   | [5] | CO5       | II        |
| Q.5(b) What do you understand by Computer Assisted Decision Making (CADM) in medicine? Explain with example.   | [5] | CO5       | III       |

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