

B.SC(IT) SEMESTER - 2 (NEP-2020) Examination**JUNE – 2024****Computer Organization and Architecture (Multidisciplinary Course)****Time: 2:00 Hours****Marks: 50****Instructions:**

1. All questions are compulsory.
 2. Figures to the right indicate marks.
-

Que.1 Answer the following questions. (Any Two) (10)

- 1) List Out all the logic gates and explain any two of them in brief
- 2) Explain DeMorgans Theorem in brief.
- 3) Explain Block diagram of Digital Computers
- 4) Explain Three Variable K Map With Suitable example (sum of product)

Que.2 Answer the following questions. (Any Two) (10)

- 1) Explain SR Flipflop in brief
- 2) Explain Full Adder in Brief
- 3) Explain JK Flip Flop in Brief
- 4) Explain Half Adder in Brief

Que.3 Answer the following questions. (Any Two) (10)

- 1) Explain any 5 Integrated circuits
- 2) Explain 2 to 4 line decoder in brief
- 3) Explain 4 to 1 line multiplexer in brief
- 4) Explain Register with its type in brief

Que.4 Answer the following questions. (Any Two) (10)

- 1) Explain any 5 Registers for the Basic Computer
- 2) Explain Major components of CPU in brief
- 3) Explain Reverse Polish Notation with its types in brief
- 4) Explain Stack Organization in brief

Que.5 Answer the following questions. (Any Two) (10)

- 1) Explain block diagram of computer with I/O processor.
- 2) Explain the Auxiliary memory , cache memory , Main Memory in brief
- 3) Explain DMA Controller in brief
- 4) Explain ROM chip block diagram.
