

[Apr-24]

GITAM (Deemed to be University)

[CSEN2011]

GST/GSS/GSB/GSHS. Degree Examination

IV Semester

COMPUTER ORGANIZATION AND ARCHITECTURE

(Effective for the admitted batch 2021–22)

Time: 2 Hours

Max.Marks: 30

Instructions: All parts of the unit must be answered in one place only.

Section-A

1. Answer all Questions: (5×1=5)

- a) Define Register transfer language.
- b) Define Micro programmed control unit.
- c) What is stack?
- d) What are status register bits?
- e) What is auxiliary memory?

Section-B

Answer the following: (5×5=25)

UNIT-I

- 2. Draw one stage connections of an ALU and explain the operations performed by it.

OR

- 3. What way 2's complement subtraction is efficient over other kinds of subtraction techniques? Give your reasoning.

UNIT-II

- 4. What are the basic computer instructions? Explain in brief.

OR

- 5. Discuss about the design of Accumulator Logic with the help of a figure.

UNIT-III

6. Explain four types of instruction formats.

OR

7. Explain pipelining technique. Draw the general structure of four segment pipeline.

UNIT-IV

8. What is priority interrupt? Explain Daisy Chaining.

OR

9. Explain Asynchronous data transfer with Handshaking method.

UNIT-V

10. Discuss about set-associative mapping of cache memory.

OR

11. Explain in detail about magnetic disks.

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