

GANPAT UNIVERSITY

B. Tech Semester – V Computer Engineering
Regular Examination November/ December - 2011
CE- 505: COMPUTER ARCHITECTURE

Time: 3 Hours]

[Total Marks: 70

Instructions:

1. Attempt all questions.
2. Figures to the right indicate full marks
3. Each section should be written in a separate answer book

SECTION-I

1. (A) Explain Computer generation in details. [6]

(B) What is micro program? Explain symbolic micro program with a suitable example. [6]

OR

1. (A) Draw the block diagram of control unit of basic computer and explain it. [6]

(B) Explain micro instruction format with its fields. [6]

2. (A) Explain the addressing modes with figures. [6]

(B) Explain the following terms. [5]

1. Computer Architecture.

2. Micro Instruction.

3. Control word.

4. Routine.

5. Mapping.

OR

2. (A) Explain Memory stack organization. [6]

(B) Differentiate CISC vs. RISC. [5]

3. (A) Explain Direct address and Indirect address with necessary diagram. [6]

(B) Explain Register stack organization. [6]

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SECTION-II

4. (A) What is Pipelining? Explain it with an example. [6]
- (B) Explain Daisy chaining priority scheme and polling scheme for IO Interrupt. [6]

OR

4. (A) What is Hazard? Explain Control hazard. [6]
- (B) Explain UART with block diagram. [6]
5. (A) Explain Vector Processing and where it is used. [6]
- (B) Explain Serial and parallel communication in details. [5]

OR

- (A) Explain Instruction Pipelining in details. [6]
- (B) Explain Cache memory in details. [5]
6. (A) What is Cache memory? Explain associative mapping of cache memory. [6]
- (B) Explain DMA controller with diagram. [6]

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