

Code No: R05210505

R05**Set No. 2**

II B.Tech I Semester Examinations, November 2010

COMPUTER ORGANIZATION**Common to Information Technology, Computer Science And Engineering,
Computer Science And Systems Engineering****Time: 3 hours****Max Marks: 80****Answer any FIVE Questions
All Questions carry equal marks**

1. Design a circuit with half adder units to increment or decrement the content of a 4-bit register with RS flip-flops. [16]
2. (a) Explain serial arbitration (Daisy Chain).
(b) Explain parallel arbitration. [8+8]
3. (a) Explain the variety of techniques available for sequencing of microinstructions based on the format of the address information in the microinstruction. [8]
(b) Hardwired control unit is faster than microprogrammed control unit. Justify this statement. [8]
4. Explain the following with applications for each:
 - (a) ROM
 - (b) PROM
 - (c) EPROM
 - (d) EEPROM. [4+4+4+4]
5. (a) What are the Roles of Input output processor? Differentiate the Roles of IOP and primary processor?
(b) Explain how DMA is different from normal Interrupt method. [8+8]
6. Draw a flowchart to explain how two IEEE 754 floating point numbers can be added, subtracted and multiplied. Assume single precision numbers. Give example for each [16]
7. (a) Explain about various buses such as internal, external, backplane, I/O, system, address, data, synchronous and asynchronous. [10]
(b) Distinguish between high level and low level languages? What are the requirements for a good programming language? [6]
8. Explain array processors. Explain SIMD array processor organization in detail. [16]

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R05**Set No. 4**

II B.Tech I Semester Examinations, November 2010

COMPUTER ORGANIZATION**Common to Information Technology, Computer Science And Engineering,
Computer Science And Systems Engineering****Time: 3 hours****Max Marks: 80****Answer any FIVE Questions
All Questions carry equal marks**

1. (a) Explain the variety of techniques available for sequencing of microinstructions based on the format of the address information in the microinstruction. [8]
(b) Hardwired control unit is faster than microprogrammed control unit. Justify this statement. [8]
2. Draw a flowchart to explain how two IEEE 754 floating point numbers can be added, subtracted and multiplied. Assume single precision numbers. Give example for each [16]
3. Design a circuit with half adder units to increment or decrement the content of a 4-bit register with RS flip-flops. [16]
4. Explain the following with applications for each:
 - (a) ROM
 - (b) PROM
 - (c) EPROM
 - (d) EEPROM. [4+4+4+4]
5. (a) Explain about various buses such as internal, external, backplane, I/O, system, address, data, synchronous and asynchronous. [10]
(b) Distinguish between high level and low level languages? What are the requirements for a good programming language? [6]
6. (a) Explain serial arbitration (Daisy Chain).
(b) Explain parallel arbitration. [8+8]
7. (a) What are the Roles of Input output processor? Differentiate the Roles of IOP and primary processor?
(b) Explain how DMA is different from normal Interrupt method. [8+8]
8. Explain array processors. Explain SIMD array processor organization in detail. [16]

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R05**Set No. 1**

II B.Tech I Semester Examinations, November 2010

COMPUTER ORGANIZATION**Common to Information Technology, Computer Science And Engineering,
Computer Science And Systems Engineering****Time: 3 hours****Max Marks: 80****Answer any FIVE Questions
All Questions carry equal marks**

1. (a) What are the Roles of Input output processor? Differentiate the Roles of IOP and primary processor?
(b) Explain how DMA is different from normal Interrupt method. [8+8]
2. (a) Explain about various buses such as internal, external, backplane, I/O, system, address, data, synchronous and asynchronous. [10]
(b) Distinguish between high level and low level languages? What are the requirements for a good programming language? [6]
3. Design a circuit with half adder units to increment or decrement the content of a 4-bit register with RS flip-flops. [16]
4. Draw a flowchart to explain how two IEEE 754 floating point numbers can be added, subtracted and multiplied. Assume single precision numbers. Give example for each [16]
5. Explain array processors. Explain SIMD array processor organization in detail. [16]
6. (a) Explain the variety of techniques available for sequencing of microinstructions based on the format of the address information in the microinstruction. [8]
(b) Hardwired control unit is faster than microprogrammed control unit. Justify this statement. [8]
7. (a) Explain serial arbitration (Daisy Chain).
(b) Explain parallel arbitration. [8+8]
8. Explain the following with applications for each:
 - (a) ROM
 - (b) PROM
 - (c) EPROM
 - (d) EEPROM. [4+4+4+4]

Code No: R05210505

R05**Set No. 3****II B.Tech I Semester Examinations, November 2010****COMPUTER ORGANIZATION****Common to Information Technology, Computer Science And Engineering,
Computer Science And Systems Engineering****Time: 3 hours****Max Marks: 80****Answer any FIVE Questions
All Questions carry equal marks**

1. Draw a flowchart to explain how two IEEE 754 floating point numbers can be added, subtracted and multiplied. Assume single precision numbers. Give example for each [16]
2. (a) Explain about various buses such as internal, external, backplane, I/O, system, address, data, synchronous and asynchronous. [10]
(b) Distinguish between high level and low level languages? What are the requirements for a good programming language? [6]
3. Explain array processors. Explain SIMD array processor organization in detail. [16]
4. Design a circuit with half adder units to increment or decrement the content of a 4-bit register with RS flip-flops. [16]
5. Explain the following with applications for each:
(a) ROM
(b) PROM
(c) EPROM
(d) EEPROM. [4+4+4+4]
6. (a) What are the Roles of Input output processor? Differentiate the Roles of IOP and primary processor?
(b) Explain how DMA is different from normal Interrupt method. [8+8]
7. (a) Explain serial arbitration (Daisy Chain).
(b) Explain parallel arbitration. [8+8]
8. (a) Explain the variety of techniques available for sequencing of microinstructions based on the format of the address information in the microinstruction. [8]
(b) Hardwired control unit is faster than microprogrammed control unit. Justify this statement. [8]
