

11. The number of Segment register consist in Pentium processor is _____.
- Three
 - Five
 - Six
 - Eight
12. How many memory locations can 14 address bits access?
- 16,384
 - 8,192
 - 4096
 - 14
13. Conversion of an octal number 7432_8 to a binary number is
- 1111000110111_2
 - 111100011010_2
 - 110011010111_2
 - 111111111000_2
14. In PowerPC processor, there are 32 general purpose register each of size _____.
- 8 bits
 - 16 bits
 - 32 bits
 - 64 bits
15. Call/Return behavior of PowerPC is determined by a register, called _____.
- Condition Register
 - Count register
 - Link register
 - Exception register
16. Which of the following is NOT match properly?
- | | Processor | Year of Development |
|----|-----------|---------------------|
| 1. | IBM | 1973 |
| 2. | VAX | 1978 |
| 3. | SPARC | 1987 |
| 4. | PowerPC | 1990 |
- 1
 - 2
 - 3
 - 4
17. The number of general purpose register in MIPS R10000 processor is _____.
- 8
 - 16
 - 32
 - 64
18. Two assessment factors are used to mitigate the controversy between RISC vs. CISC. They are _____ & _____.
- Register number & Memory capacity
 - Speed & Performance
 - Quantitative & Qualitative
 - Perfective & Quantitative
19. SPARC processor was developed by _____.
- Motorola
 - Intel Co.
 - IBM Co.
 - Sun Microsystems
20. The design issue of Superscalar processor utilize of _____.
- RISC
 - Instructions pipelines
 - More registers
 - SPARC

(PART-B : Descriptive)

Time : 2 hrs. 40 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

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|--|----------|
| 1. What do you mean by bus? What are the different types of busses that a processor has? Explain PCI bus. | 2+1+7=10 |
| 2. a. Explain the hardware architecture of Intel 8085 microprocessor.
b. What are the controversy between CISC and RISC technology? | 5+5=10 |
| 3. Explain primary memory, secondary memory and cache memory. State what type of memory is used for each of these memories. | 7+3=10 |
| 4. What do you mean by control unit? Explains hardwired control unit with block diagram. | 3+7=10 |
| 5. a. What are the basic characteristics of CISC technology?
b. Write an assembly program to add two numbers. | 5+5=10 |
| 6. What do you mean by computer instruction? Explain the basic computer instruction format. | 3+7=10 |
| 7. a. Explain the function of DMA controller in memory transfer with block diagram.
b. Explain the register organization of a Pentium processor with a block diagram. | 5+5=10 |
| 8. a. Explain the functions of IOP.
b. Discuss interrupt driven data transfer mode of computer. | 5+5=10 |

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