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M

Reg. No. : .....

Name : .....

VI Semester B.Sc. Degree (CCSS – Reg./Supple./Improv.) Examination, May 2015

CORE COURSE IN COMPUTER SCIENCE

6B15 CSC : Computer Organization

Time : 3 Hours

Max. Weightage : 21

SECTION – A

(Answer **all** questions. Weightage for a Bunch of **4** questions is **1**.)

1. A gray code is
   a) a binary weight code
   b) arithmetic code
   c) code which exhibits a single bit change between two successive code
   d) alphanumeric code

2. The instruction fetch phase ends with
   a) placing the data from the address in MAR into MDR
   b) placing the address of data into MAR
   c) completing the execution of data and placing its storage address into MAR
   d) Decoding the data in MDR and placing it in IR

3. Floating point representation is used to store
   a) Boolean values
   b) Whole numbers
   c) Real integers
   d) Integers

4. Computers use addressing mode techniques for _____
   a) giving programming versatility to the user by providing facilities as pointers to memory counters for loop control
   b) to reduce no. of bits in the field of instruction
   c) specifying rules for modifying or interpreting address field of the instruction
   d) all the above

P.T.O.

5. In a program using subroutine call instruction, it is necessary.
   a) initialise program counter
   b) clear the accumulator
   c) reset the microprocessor
   d) clear the instruction register

6. The performance of cache memory is frequently measured in terms of a quantity called
   a) Miss ratio
   b) Hit ratio
   c) Latency ratio
   d) Read ratio

7. Which of the following interrupt is non maskable ?
   a) INTR
   b) RST 7.5
   c) RST 6.5
   d) TRAP

8. What characteristics of RAM memory makes it not suitable for permanent storage ?
   a) Too slow
   b) unreliable
   c) it is volatile
   d) too bulky

(2×1=2)

SECTION – B

(Answer **any five** questions. Weightage **1** for **each**.)

9. What are the uses of interrupts ?
10. What do you mean by DMA channel ?
11. What are the characteristics of RAM and ROM ?
12. What is an instruction ?
13. Explain micro instruction.
14. List out the advantages of RISC.
15. Distinguish between Static RAM and Dynamic RAM.
16. What is content addressable memory ?

(5×1=5)

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SECTION – C

(Answer **any five** questions. Weightage **2** for **each**.)

17. Represent the given binary number in a single precision floating point number 01011010010001.

18. Explain relative addressing mode.

19. What is direct mapping ?

20. List the differences between a subroutine call and an interrupt.

21. State advantages of memory mapped I/O over I/O maped I/O.

22. What are advantages you got with virtual memory ?

23. Give notes on Daisy chaining priority.

24. Differentiate between synchronous and asynchronous data transfer method. **(5×2=10)**

SECTION – D

(Answer **any one** question. Weightage **4** for **each**.)

25. What is ROM ? Discuss the different ways in which ROM can be programmed.

26. Explain about different types of data representation. **(1×4=4)**
