M 2277

Reg. No. : .....

Name : .....

III Semester B.A./B.Sc./B.Com./B.B.A./ B.B.A. T.T.M./B.B.M./B.C.A./ B.S.W./B.A. Afsal-Ul-Ulama Degree (CCSS – Reg./Supple./Improve.) Examination, November 2012

3B07 BCA : COMPUTER ORGANIZATION (BCA Core Course)

Time : 3 Hours Max. Weightage : 21

***Note** : 1) Answer **all** Sections.*

*2) Answer for a question, irrespective of Section shall be awarded grade **A (4), B(3), C(2), D(1)** or **E (0)**.*

SECTION – A

Answer **all** questions. Weightage for a bunch of **four** questions is **1**.

I. 1) Computer Memory

a) Performs all calculations
b) Receives input data
c) Is extremely limited
d) Is better than human memory

2) ROM is composed of :

a) Magnetic cores
b) Microprocessors
c) Photoelectric cells
d) Floppy disks

3) In virtual storage, program segments stored on disk during processing are called :

a) Sections b) Partitions c) Pages d) Sectors

4) It loses its stored information in a very short span of time though computer is under working.

a) PROM b) SRAM c) DRAM d) EPROM

II. 5) XGA Monitor (Extended Graphics Array) pixels range is

a) 640×480 b) 640×800 c) 1024×768 d) 768×64

6) 1 Tera Byte (1 TB) is equivalent to

a) 2^{30} b) 2^{35} c) 2^{40} d) 2^{45}

7) Equivalent Hexadecimal fraction is of decimal equivalent $(A9.328)_{16} = (\ ?\ )_{10}$

a) 162.1972 b) 165.1972 c) 167.1972 d) 169.1972

8) $(101100.1011111)_2$ to hexadecimal is

a) $(2A.BE)_{16}$ b) $(2B.BE)_{16}$ c) $(2C.BE)_{16}$ d) $(2D.BE)_{1}$

(2×

SECTION – B

Answer **any 5** questions. Weightage **1 each :**

9) What are the significant features 2's compliment ?

10) Define an instruction. What are different instruction formats ?

11) What are the functions of DMA ?

12) Compare and contrast RISC and CISC.

13) List out the properties of virtual memory.

14) Distinguish between Associate Memory and Auxiliary Memory.

15) What is meant by Cache Memory ?

16) What are the modes of transfer ? **(5×**

SECTION – C

Answer **any 5** questions. Weightage **2 each :**

17) What is BCD ? Discuss the 8421 code and invalid codes.

18) Explain with suitable example fixed point representation.

19) How do you handle multiple interrupts ?

What are the problems facing, when implementing pipelining ? Briefly explain.

68 × 640 Mention properties of peripheral devices.

Explain the key characteristics of Memory Systems.

45

How I/O Bus and interface modules are connected ?

; = (?)$_{10}$ Discuss the different types of micro instructions. **(5×2=10)**

69.1972

SECTION – D

2D.BE)$_{16}$ swer **any one** question. Weightage **4 :**

(2×1 With neat diagram discuss the properties, functions and uses of components of Digital Computer.

With suitable example explain Various Addressing Modes of 8086. **(1×4=4)**

(5×1