Roll No. .....

Total No. of Questions : 11] [Total No. of Printed Pages : 4

RJ-394

M.Sc. 1st Semester (NEW) Examination - 2018

COMPUTER SCIENCE

Paper–MSCS-103

Computer Organisation and Architecture

Time : 3 Hours] [Maximum Marks : 85

Note : ***Attempt all the questions.***

Section–A

(Objective Type Questions)

Note : *Objective type 10 Questions of 1 mark each.* $10 \times 1 = 10$

1. Choose the correct answer.

(i) MFC stands for .....
- (a) Memory Format Caches
- (b) Memory Function Complete
- (c) Memory Find Command
- (d) Mass Format Command

(ii) ..... bus structure is usually used to connect I/O devices.
- (a) Single bus
- (b) Multiple bus
- (c) Star bus
- (d) RAM bus

http://www.onlinebu.com

(iii) The small extremely fast, RAM's are called as.....
- (a) Cache
- (b) Heap
- (c) Accumulators
- (d) Stack's

(iv) Which memory device is generally made of semi-conductors?
- (a) RAM
- (b) Hard-disk
- (c) Floppy disk
- (d) CD disk

(v) A Source program is usually in .....
- (a) Assembly language
- (b) Machine level language
- (c) High - level language
- (d) Natural language

(vi) The 8-bit encoding format used to store data in a computer is .....
- (a) ASCII
- (b) EBCDIC
- (c) ANCI
- (d) USCII

(vii) The ..... format is usually used to store data.
- (a) BCD
- (b) Decimal
- (c) Hexadecimal
- (d) Octal

(viii) The control unit controls other units by generating:
- (a) Control Signals
- (b) Timing Signals
- (c) Transfer Signals
- (d) Command Signals

(ix) __ are numbers and encoded characters, generally used as operands.

http://www.onlinebu.com

http://www.onlinebu.com

(a) Input (b) Data
(c) Information (d) Stored values

(x) The ALU makes use of ..... to store the intermediate results.

(a) Accumulators (b) Registers
(c) Heap (d) Stack

Section–B
(Short Answer Type Questions)

Note : Short Answer Type 5 Questions of 5 marks each with Internal choice. $5 \times 5 = 25$

2. Explain T Flip - Flop.

or

Explain Adder and subtractor.

3. What is instruction code? Explain.

or

What is intrupt? Explain it with it's type.

4. Explain the computer languages.

or

Explain the Register Transfer language.

5. Differentiate between RISC and CISC.

or

Explain the Direct Memory Access (DMA).

6. What is Pipelining? Explain.

or

Explain the Term Multiprocessor.

http://www.onlinebu.com

Section–C
(Long Answer Type Questions)

Note : Long Answer Type 5 Questions of 10 marks each with Internal Choice. $5 \times 10 = 50$

7. Simplify the following function to find the POS solution using k-map.

$F(A, B, C, D) = \Sigma (0, 1, 2, 6, 8, 9, 10)$

or

Explain working of J–K Flip–Flop using Block diagram.

8. What are the various Micro operation? Explain them.

or

Explain the Instruction Cycle with suitable diagram.

9. Explain the Terms:

(i) Machine Language
(ii) Assembler
(iii) Compiler
(iv) Interpreter

or

What is Addressing mode? Explain the type of addressing modes.

10. What is computer memory? Explain the different types of memory.

or

Explain the Associative mapping with example.

11. Explain the Asynchronous Data Transfer.

or

What are the various modes of Transfer? Explain them

http://www.onlinebu.com