

Roll No.

C

CBB-2944-T
M.C.A. Second Semester
(End Semester)
Examination-2019

COMPUTER SCIENCE & APPLICATION

Paper : CSA-CC-221
(Computer Architecture)

Time : Three Hours]

[Maximum Marks : 60

Note :- Attempt all questions from Sections **A**, any four questions from Section **B** and any three questions from Section **C**.

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SECTION - A

(Objective Type Questions) 1×10=10

Note :- All questions are compulsory. Choose correct answer of the following :

1. (1) Binary equivalent of decimal number 2.35 is :

(a) 11.0111

→ (b) 10.0101

(c) 10.1111

(d) 11.1111

(2) Program counter is a :

(a) Cell in ROM

(b) Buffer

— (c) Register

(d) Device of I/O

(3) Which of following code uses 7 bit to represent a character :

(a) EBCDIC

✓ (b) BCD

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(c) GRAY

(d) ASCII

(4) Registrors are used for :

(a) Temporary storage

— (b) Storing the instruction

(c) Permanent storage

(d) Local address

(5) Speed of computer is measured in :

— (a) FLOPS

(b) BAUD

(c) SYPS FLOPS

(d) None of the above

(6) The programmable interval timer is :

— (a) 8251

(b) 8250

(c) 8253

(d) 8275

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(7) Which memory is volatile :

- (a) RAM
- (b) ROM
- (c) EPROM
- (d) PROM

(8) Which memory is related to fasted access by CPU :

- (a) CD
- (b) DVD
- (c) EPROM
- (d) Cache memory

(9) Dot matrix is a type of :

- (a) Tape
- (b) Printer
- (c) Disk
- (d) Bus

(10) Find the odd one out amongst following—

- (a) Mouse
- (b) Touch screen
- (c) Light pen
- (d) Printer

SECTION - B

(Short Answer Type Questions) 4×5=20

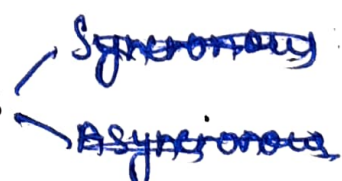
Note :- Attempt any **four** questions. Each question carries **five** marks.

- ② Discuss the error detection codes.
- ③ Compare the logic micro operations and shift micro operations.
- 4. Explain type of interrupts with examples.
- 5. Explain the instruction format and addressing modes.
- ⑥ How input-output processor works ?
- ⑦ What are memory management hardwares ?

SECTION - C

(Long Answer Type Questions) $3 \times 10 = 30$

Note :- Attempt any **three** questions. Each question carries **ten** marks.

8. Discuss the Von Neumann model and bus system model. How binary codes and fixed point representations are made ?
9. Explain the followings :
- (a) Arithmetic algorithms and operations
 - (b) Decimal operations
10. Discuss registers, instruction codes, instruction cycles, memory based instructions used in organisation of a computer system.
11. Explain the following in terms of input-output organisation :
- (a) Peripheral devices
 - (b) Data transfer modes 
12. Write a note on different types of memories used in a computer system.