

16527(D) 1 DEC 2016

MCA 1st Semester Examination

Fundamentals of IT and Digital Electronics (CBS)

MCA-102

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Candidates are required to attempt five questions in all selecting one questions from each section A, B, C & D of the question paper. Section E is Compulsory.

SECTION - A

1. (a) Describe briefly the basic concepts of Information technology. (6)
(b) What are the important characteristics of storage devices? Also explain the working of Compact disk (4)
2. (a) Discuss in brief about the classification of softwares and give two examples of each type of softwares (4)
(b) Explain the major function performed by an operating system. (4)
(c) List the main differences and similarities between DOS and UNIX (4)

SECTION - B

3. (a) What is the difference between sequential circuits and combinational circuits? (4)

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- (b) Formulate AND, OR, NOT, X-OR neither X-NOR Gates using NAND gate only (4)
- (c) Compare and contrast Floating point representation and fixed point representation (4)
4. (a) Verify the De Morgan's Theorem by means of truth table. Discuss the advantages and limitations of Karnaugh Map (6)
(b) Construct a 16-to-1 line multiplexer within two 8-to-1 line multiplexers and one 2-to-1 line Multiplexer (6)

SECTION - C

5. (a) How can you sort the text in table in MS-word? Explain with the help of example. (6)
(b) Explain with example the special effects to slides with graphics and animation. (6)
6. (a) How we can create and Run a Macro in MS-word? (6)
(b) Write a short note on the following :
(i) Slide Sorter
(ii) Preset animation
(iii) Slide transition
(iv) Notes page. (6)

SECTION - D

7. (a) What is an Electronic Spreadsheet? What are the advantages of using a spreadsheet? Name some of the commercially available spreadsheet packages. (6)

[P.T.O.]

(b) Explain the following:

(i) Excel formulae and functions.

(ii) Workbook file properties.

(6)

8. Write Short note on the following:

(i) Pivot Tables.

(ii) Macros.

(iii) Excel Databases.

(iv) Graphs and Charts.

(12)

SECTION - E

9. Answer the following:

(i) Format Painter.

(ii) How is NTFS different from Fat32?

(iii) What is Cluster?

(iv) When does a window XP use DPC?

(v) Debouncing circuits.

(vi) What is the functionality of XCopy, Dis Copy and Sys Commands in DOS?
(6×2=12)