PGDCA/MSCCS-01/MCA-101

December - Examination 2018

MSCCS / PGDCA /MCA I Year Examination

Computer Fundamental and System Software

Paper - PGDCA/MSCCS-01/MCA-101

Time : 3 Hours] **[Max. Marks :- 100**

Note: The question paper is divided into three sections A, B and C. Write answers as per given instructions.

Section - A $10 \times 2 = 20$

(Very Short Answer Questions)

Note: Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.

1) (i) What do you mean by refresh rate of display?

(ii) List any four characteristics of computer.

(iii) Convert $(B58)_{16} = (?)_{10}$.

(iv) List the various states of a process.

(v) What is memory compaction?

(vi) What is a page fault?

(vii) What is the use of **ls** command in Linux?

(viii) Name any four flavours of Linux.

(ix) What do you mean by term Plug and Play?

(x) Draw the structure of PCB (Process Control Block)

Section - B

$4 \times 10 = 40$

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 10 marks.

2) Write short note on Computer Languages.

3) What do you mean by optical storage Media? How it is different than Magnetic storage media?

4) What is modem? Explain its types.

5) Distinguish between File Allocation Table (FAT) and NTFS Windows File System.

6) Write a short note on Vi Editor.

7) Write an expression for the XOR and XNOR gate. Also define these gates with the appropriate logic diagrams and truth tables.

8) What is windows clipboard? Describe its usage and cut copy and paste operation.

9) What is laser printer? Explain its working.

Section - C

$2 \times 20 = 40$

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 20 marks.

10) What is deadlock? What are the necessary conditions of deadlock? Also discuss the methods used to prevent the deadlock in OS.

11) Discuss the features, advantages and structure of Linux Operating System.

12) What is Karnaugh map (K-map)? Minimize Boolean expressions: Z = f(A, B) = A.B' + AB using k-map.

13) Explain page replacement Algorithm (any two) with suitable example.