PGDCA/MSCCS-01/MCA-101

June - Examination 2019

MSCCS / PGDCA /MCA Ist Year Examination

Computer Fundamental and System Software

Paper - PGDCA/MSCCS-01/MCA-101

Time : 3 Hours]   **[Max. Marks :- 80**

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

Section - A $8 \times 2 = 16$
(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)   Give two differences between Complier and Assembler?

(ii)   What are Tracks, Sectors and Cylinders?

(iii) Convert $(246.125)_{10} = (?)_2$.

(iv) State DeMorgan's theorem.

(v)   List the necessary conditions for Deadlock.

(vi) What is Byte?

(vii) What is the use of critical section?

(viii) Name any two disk scheduling algorithms.

Section - B $4 \times 8 = 32$

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.

2) What is Unicode? Define some encoding mechanisms used in Unicode.

3) What is meant by OMR? Explain its functioning.

4) Define starvation and aging with respect to scheduling and its use.

5) How many types of user and groups are there in Linux? Explain with suitable examples.

6) Describe in brief the following desktop items, (i) My Computer (ii) Recycle Bin.

7) Explain the disk allocation methods (Contiguous allocation and Non Contiguous allocation) in brief.

8) What is the use of chmod command in Linux? Explain with suitable example.

9) What is a Paging? Explain Address Translation Architecture.

Section - C $2 \times 16 = 32$

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 16 marks.

10) What is Computer? Explain the classification of computers based on their size, cost & configuration.

11. Consider the following four processes as given below. Find their average waiting time and turn around time for the FCFS, SJF, and RR scheduling algorithms.

Process	Arrival Time	Burst Time
PI	0	8
P2	1	5
P3	2	9
P4	3	5

12. What is Logic Gate? Explain different types of Gates with standard logic symbols and truth tables.

13. Explain various types of DOS commands with wildcard characters with suitable example.

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