PGDCA/MSCCS-01/MCA-101

December - Examination 2016

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) Name some storage devices.
 - (ii) What is byte?
 - (iii) What do you mean by volatile memory?
 - (iv) Give two applications of bar codes.
 - (v) Draw the logic symbol for inverter.
 - (vi) State de Morgan's theorem.
 - (vii) List the content of PCB (Process Control Block).

- (viii) Explain Cd command in Linux.
- (ix) What is i-node?
- (x) Suppose +6132.789 is a decimal number. Find its mantissa and exponent part in floating point representation.

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) Discuss the characteristics of computer.
- 3) Compare low level language and high level language with example.
- 4) Write short note on Tracks, Sectors and Cylinder.
- 5) What is laser printer? Explain its working.
- 6) What is process? Describe various states of a process and state transition.
- 7) What is critical section? Why process entry to critical section is restricted? Explain.
- 8) What is disk scheduling? Explain main objectives of disk scheduling.
- 9) What do you mean by fragmentation? Differentiate external and internal fragmentation.

(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 threads? Explain advantages, types and issue related to threading.
- 11) Discuss the advantages of Linux? How Linux handle the users? Explain.
- 12) Explain the block diagram of computer. Also explain any three input and output devices.
- 13) Write short note on the following:
 - (i) Virtual memory
 - (ii) K-map.