

**PGDCA-01/PGDCA-101/
MSCCS-01/MSCCS-101/
MCA-101**

June/December – Examination 2020

**PGDCA/MSCCS (Previous)/MCA
(Ist Year) Examination**

Computer Fundamental and System Software

**Paper : PGDCA-01/PGDCA-101/
MSCCS-01/MSCCS-101/MCA-101**

Time : 2 Hours]

[Maximum Marks : 80

Note :- The question paper is divided into two Sections A and B. Write answers as per the given instructions.

Section–A

8×2=16

(Very Short Answer Type Questions)

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

1. (i) What do you mean by refresh rate of CRT ?
- (ii) Convert $(1101101)_2 = (?)_8$.
- (iii) Give any *two* applications of barcode.
- (iv) Draw the truth table for the XOR gate with standard logic symbol.
- (v) What do you mean by Thrashing ?
- (vi) What do you mean by System call ?
- (vii) Why is cache memory used in computer systems ?
- (viii) What is the full form of NTFS ?

Section-B

4×16=64

(Short Answer Type Questions)

Note :- Answer any *four* questions. Answer should not exceed **200** words. Each question carries 16 marks.

2. Explain hard disk tracks, sectors and cylinders with graphical illustration.
3. What are the necessary conditions for deadlock ? Explain with suitable examples.
4. Explain various operations performed by the control panel in the Windows operating system.

5. What is OCR ? Explain its working.
6. Write a short note on ASCII code.
7. What is Karnaugh map (K-map) ? Explain considering the expression :
 $Z = f(A, B) = A' \cdot B' + A \cdot B' + A' \cdot B$.
8. What is Printer ? Explain different types of printers.
9. Explain the directory structure of the Linux file system.