

P.G. Diploma in Computer Graphics and Animation  
First Semester  
CGA-14: Computer Fundamentals

Time allowed: 3 Hours

Max. Marks: 80

**NOTE:** Attempt five questions in all, including Question No. IX (Section-E) which is compulsory and selecting one question each from Section A-D.

x-x-x

### Section A

- I. (a) What is an Operating system? Explain its applications and services.  
(b) Differentiate the following:
  - i. Loaders and Linkers
  - ii. Compilers and Assemblers
  - iii. Bit, Byte and Word(8,8)
- II. (a) Explain the role of character codes ASCII and EBCDIC in the working of a computer.  
(b) Convert the following
  - i)  $(10011)_2$  into Octal and Decimal system
  - ii)  $(2322)_8$  into Binary and Decimal system(8,8)

### Section B

- III. (a) What is memory? Describe different types of memories used in a computer system.  
(b) How data is organized on a disk? Also differentiate between disk and tape on the basis of technology and speed. (8, 8)
- IV. Write short note on the following.
  - i. Instruction Execution Cycle
  - ii. Virus Detection and Prevention(8, 8)

### Section C

- V. (a) Write purpose, syntax and examples of the following: SCANDISK, XCOPY, UNDELETE, DELTREE commands  
(b) Write the role of 'Network Neighborhood' and 'Accessories' in Windows OS. (8, 8)
- VI. (a) Write the syntax and examples of file management commands in UNIX.  
(b) What is a process? Which commands are used to manage them in UNIX? (8, 8)

### Section D

- VII. (a) What is the role of paragraph and page formatting in Word Processing? Write steps to perform these operations.  
(b) Write commands and steps for the following:
  - i) Opening and creating documents
  - ii) Saving a document
  - iii) Printing a document(8,8)
- VIII. (a) What is a spreadsheet? Write all the steps and commands to prepare, save and retrieve a worksheet by taking suitable example.  
(b) Explain the main features of Presentation Software. Also describe Design templates. (8,8)
- IX. **Write Short Answers**
  - a. Differentiate between warm and cold booting.
  - b. Differentiate between VGA and SVGA.
  - c. What is Seek time?
  - d. Write steps to rename a Folder in Windows OS.
  - e. Describe any two Statistical functions available in Spreadsheet software.
  - f. Describe Print Preview.
  - g. What is an Interrupt?
  - h. How can we empty the Recycle Bin?(8\*2)