



(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 150214

Roll No.

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B. Pharm.

(SEM. II) THEORY EXAMINATION, 2014-15
COMPUTER FUNDAMENTALS AND PROGRAMMING

Time : 3 Hours]

[Total Marks : 80

SECTION - A

1 Answer any four parts of the following: **4x4=16**

- (a) What do you mean by a digital computer?
Draw a neat schematic diagram of a digital computer and explain its various components.
- (b) Write short note on generation of Computer languages with suitable examples.
- (c) Describe the various secondary storage devices together with their characteristics.

- (d) What do you understand by a Computer Network? Discuss the advantages and disadvantages of using Computer Network.
- (e) What are the various functions performed by operating system? Explain.
- (f) Explain briefly :—
 - (i) Boolean algebra
 - (ii) Business data processing.

2 Attempt any four of the following : **4x4=16**

- (a) What is data communication? Explain the methods of data communication in detail.
- (b) Explain the difference between Bridges, Routers and Repeaters.
- (c) Write down the application of Computer Network.
- (d) Explain the software of Computer program. Write down the steps of computer program.
- (e) Draw the flowchart for addition of two numbers.
- (f) What is decision table? Explain the role of decision table in computer programming.

3 Answer any two parts: **8×2=16**

- (a) (i) Discuss various data types and operators used in 'C' language.
- (ii) Write a program in 'C' language to check whether a given number is prime or not.
- (b) Write a program in 'C' language to count the frequency of vowels in a given sentence. (The sentence must be of at least 20 characters long.)
- (c) (i) Write short notes on various conditional statements in 'C' language.
- (ii) Write a program in 'C' to count the number of characters in a text file.

4 Attempt any two of the following: **8×2=16**

- (a) Write a program in FORTRAN to add two matrices of 3×3 .
- (b) Write a program in Fortran 77 to sort the given numbers in ascending order.
- (c) Describe the following in reference to Fortran 77:
 - (i) Input-output format specification
 - (ii) GoTo and continue statements.

5 Write short notes on any two parts of the $8 \times 2 = 16$ following:

- (a) Database Management System.
- (b) MS-Access.
- (c) Application of Computers in Pharmaceutical and Clinical studies.
