

Code No: B1108

R10**SET - 1****I B. Pharmacy I Semester Supplementary Examinations, February - 2020****COMPUTER PROGRAMMING**

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks

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1. a) Define Linker. Can a program written in a high-level language execute without a linker? Explain. (7M)  
b) Differentiate between declaration and definition. How memory is reserved using a declaration statement? (8M)
2. a) Explain in detail about Unary operators supported in C language. (8M)  
b) Write a C program to test if a given number is a power of 2. (7M)
3. a) What is a string constant? How do string constants differ from character constants? Do string constants represent numerical Values? (7M)  
b) List the iterative statements supported in C. Explain with their syntax. (8M)
4. a) Write in detail about one dimensional and two dimensional arrays. Also write about how initial values can be specified for each type of array? Explain how the above type of arrays can be stored in memory? (8M)  
b) Write a C program to count the number of times a given character appears in the string. (7M)
5. a) Write a function that copies a one-dimensional array of n elements into a two-dimensional array of k-rows and j-columns. The rows and columns must be a valid factor of the number of elements in the one-dimensional array i.e.,  $k * j = n$ . (8M)  
b) What is recursion? Explain the different types of recursion. (7M)
6. a) Explain the rules for pointer operations. (7M)  
b) Write a C program using pointers to read in an array of integers and print its elements in reverse order. (8M)
7. a) Discuss the Enumerated data types and their type conversions. (8M)  
b) Explain how the structure variable be passed as a parameter to a function with example. (7M)
8. a) What is a file? List and explain the formatted I/O functions. (8M)  
b) How does an append mode of a file differ from a write mode? Explain with an example. (7M)