



DE-1712

M. Sc. (I.T. & I.C.T.) (Programme) Examination
March / April - 2016
The Science of Programming

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दृष्टविक निशानीवाणी विगतो उत्तरवडी पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="M. SC. (I.T. & I.C.T.) (PROGRAMME)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="THE SCIENCE OF PROGRAMMING"/>	<input type="text"/>
Subject Code No. : <input type="text" value="1"/> <input type="text" value="7"/> <input type="text" value="1"/> <input type="text" value="2"/>	Section No. (1, 2,.....) : <input type="text" value="Nil"/>
Student's Signature	

1 Answer following questions in brief: (Any six) [18]

- (1) Differentiate between testing and debugging.
- (2) Explain various data types supported by QBASIC.
- (3) Differentiate between int() and fix() function with example.
- (4) What is assembly language? Explain its advantages and disadvantages.
- (5) Differentiate between compiler and interpreter.
- (6) What is jumping? Differentiate between forward jumping and backward jumping.
- (7) What will be output of the following:
 - (a) PRINT LEN(MID\$(LEFT\$("SGUNIVERSITY",5)+
RIGHT\$("PROGRAMME",4),3,6))
 - (b) PRINT VAL(MID\$("123verbS478",10,2))+3
 - (c) PRINT STR\$(567)+ "apple"

2 Answer following questions in detail: (Any Three) [18]

- (1) What is an array? Give its advantages. Explain one dimensional and two dimensional array with example.
- (2) What is Branching and Looping? Explain one entry controlled and exit controlled loop with example.
- (3) Explain DATE\$ and Time\$ functions with example.
- (4) Explain Subroutine with example. How is it different than user defined function?

3 Answer following questions in detail: (Any Three) [18]

- (1) Explain user defined data type in QBasic with example.
- (2) What is File? Differentiate between sequential and random file. Explain various mode in which file can be opened, with example.
- (3) What is flowchart? Explain it with its symbols, advantages and disadvantages.
- (4) Write a program to print occurrence of a particular character into a master string.

4 Answer following questions in detail: (Any four) [16]

- (1) Write a program to sort an array of 10 integers.
 - (2) Create an user defined data type for book (bid, bname, bauthor, bprice, bpublisher). Write a program to take an input of 10 different books and display information of books published by publisher "TATA".
 - (3) Write an UDF to check whether a given number is prime or not.
 - (4) Draw a flowchart to display sum of all odd digits in a given number.
 - (5) Write a program to generate a Fibonacci series upto N.
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