



JB-3095
Second Year B. Sc. Examination
April/May – 2013
IDS : Programming Methodology

Time : Hours]

[Total Marks : 70

Instructions :

(1)

<p>નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : Second Year B. Sc.</p> <p>Name of the Subject : IDS : Programming Methodology</p> <p>Subject Code No. : 3 0 9 5 Section No. (1, 2,.....): Nil</p>	<p>Seat No. : <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/></p> <div style="border: 1px solid black; border-radius: 15px; height: 60px; display: flex; align-items: center; justify-content: center; margin-top: 10px;">Student's Signature</div>
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- (2) Figures to the extreme right indicate full marks.
- (3) Q. 1 is compulsory.
- (4) Assume data if necessary.
- (5) Symbols have their usual meaning.

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|----------|---|-----------|
| 1 | Answer in brief : | 14 |
| | (a) What is a function ? | |
| | (b) What is the use of the following functions :
(i) getchar (), (ii) Puchar (). | |
| | (c) What is a flowchart ? | |
| | (d) What are the relational and logical operators of 'c' ? | |
| | (e) What is the use of continue statement ? | |
| | (f) What is 'recursion' ? Explain briefly with reference to 'c' function ? | |
| | (g) What is the use of while loop ? | |
| 2 | (a) Discuss the dynamic memory allocation with its advantages and disadvantages. | 8 |
| | (b) Write a program to find the result of the following series :
$1 + 2 + 3 + 4 + \dots + n$ | 6 |

OR

- 2 (a) Discuss the relationship between array and pointer. 8
(b) Write a program that interchanges the odd and even elements of an array. 6

- 3 (a) Explain briefly the following : 8
(i) for loop
(ii) Multiple if-else.
(b) Write a program in 'c' to find the area of the rectangle. 6

OR

- 3 (a) Explain how to pass a one dimensional array to a function. 8
(b) Write a program to read and print name of college and university. 6
- 4 (a) Write a program in 'c' to determine whether a number is an odd or not. 8
(b) What is the difference between local and global variables. 6

OR

- 4 (a) What is the use of the following functions : 8
(i) strcmp ()
(ii) strcpy ()
(b) Write a program to produce the following output on the screen : 6

```
          1
         2  3
        4  5  6
       7  8  9  10
```

- 5 Write short note on : (any two) 14
(a) Bitwise operators.
(b) Arithmetic operators.
(c) Ternary operator.
(d) Go to statement.