

U.G. 3rd Semester Examination - 2020

STATISTICS

[HONOURS]

Paper : STAT-H-CC-T-7

(Statistical Computing using
C/C++ Programming)

Full Marks : 25 (20+5)

Time : $2\frac{1}{2}$ Hours*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in
their own words as far as practicable.**Notations and symbols have their usual meaning.*1. Answer any **two** questions: $5 \times 2 = 10$

- a) What do you mean by keywords in C compiler? Write any ten such keywords available in C. $1+4$
- b) Explain the concepts with suitable examples
i) enumerated data type and ii) derived data type. $2\frac{1}{2} + 2\frac{1}{2}$
- c) Discuss do-while loop in C. Hence write a C

program for counting digits of an integer number. $1+4$

- d) What is pointer variable? What will be the output of the following program: [suppose address of 'a' is 1006]

```
# include <stdio.h>

int main()

{

float a = 13.5;

float *b, *c;

b = & a;

c = b;

printf ("%u %u %u/n", &a, b, c);

printf ("%f%f%f%f%f/n", a, *(&a),
*&a, *b, *c);

return 0;

}  $1+4$ 
```

2. Answer any **one** question: $10 \times 1 = 10$

- a) What is nested loop in C? Describe nested if-else with an example. Hence write a C program to find the grade corresponding to a given marks of a student by considering the following grade structure (assume that the marks are of integer type):

Marks	0-30	31-45	46-60	61-75	76-100
Grade	E	D	C	B	A

2+2+6

- b) Distinguish between in-built function and user-defined function in C. Describe how you create a writable data file and store outputs in it. Give examples of functions which have 'arguments with return values' and 'no arguments but returns a value'.

[Internal Assessment: 5]
