M.Sc. 1st Semester Examination, 2010

REMOTE SENSING AND GIS

PAPER—RSG-104 (Gr.- A/B)

Full Marks : 40

Time : 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

Illustrate the answers wherever necessary

GROUP—A

(*Computer Fundamentals*)

[*Marks* : 20]

Answer any *two* questions

1. What is meant by 'Generation' in computer terminology? How many generation are there till now? State the basic features of each generation.

$1 + 2 + 7$

2. (a) What is algorithm ? What do you mean by flow-chart ? Discuss the basic symbols used in flowchart.

   (b) Draw a flowchart to find out the largest among three numbers.   (2 + 2 + 2) + 4

3. Draw a block diagram to illustrate the basic organisation of a computer system and explain the functions of various units of a computer system.   3 + 7

4. (a) What are machine language, assembly language and high-level language ?

   (b) What are the advantages and disadvantages of machine language over other types of languages ?   (2 + 2 + 2) + (2 + 2)

GROUP—B

(C *Programming*)

[*Marks*: 20]

Answer any *two* questions

1. (a) Explain the input and output statements in C language.

(*Continued*)

(b) Write a program in C to check whether a number is prime or not. $5 + 5$

2. (a) What do you mean by assignment statement ? Explain with an example.

(b) Discuss the if-else if statement taking appropriate example.

(c) Write a program in C to arrange a list of numbers in ascending order. $2 + 3 + 5$

3. (a) How is a looping structure formed in C language ? Explain it.

(b) Write a program in C to find the sum of the following series :

$$3 + 5 + 7 + ... + 999 .$$ $6 + 4$

4. (a) What is header file in C ? Why it is used ? What is conditional operators ?

(b) Write a program in C to find area of a circle. (radius in an Input value) $(1 + 2 + 2) + 5$

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