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Reg. No. :

Code No. : 20987

Sub. Code : GMCS 11/
GMSE 11

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2014.

First Semester

Computer Science – Main

INTRODUCTION TO COMPUTERS AND
PROGRAMMING IN C

(Also common to Software Engineering)

(For those who joined in July 2012 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL the questions.

Choose the correct answer :

1. One byte = ?

- (a) 4 bits (b) 1 or 0 bit
(c) 8 bits (d) 2 bits

2. Which of the following device recognise the speech an input?

- (a) Pointing device (b) Plotters
(c) Scanners (d) None of the above

3. _____ is a standard keyword

- (a) Type (b) Size
(c) Int (d) Sign

4. What is the use of getch()?

- (a) Read the string
(b) Read the line
(c) Read a single character
(d) Read all characters

5. The minimum number of times the while loop, executed is _____

- (a) 0 (b) 1
(c) 2 (d) 3

6. The continue statement can be included within a _____ statement

- (a) While (b) Do-while
(c) For (d) (a) or (b) or (c)



7. Which is the correct way to declare a pointer?
 (a) `* int p + r` (b) `int p + r *`
 (c) `int * p + r` (d) `* int * p + r`
8. Which of the following function is used to print the string values?
 (a) `gets` (b) `puts`
 (c) `putchar` (d) `getchar`
9. In structures, the individual members are identified using _____
 (a) Asterisk operator (b) Member operator
 (c) Comma operator (d) Modulus operator
10. The bitwise and operator is
 (a) `1` (b) `^`
 (c) `&` (d) `&&`

PART B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the generations of computers.

Or

- (b) Explain the classifications of programming languages.

12. (a) State the rules for constants and variables. Give examples.

Or

- (b) Describe the logical and assignment operators in C. What is the purpose of each? Give examples.

13. (a) Differentiate while and do-while statements.

Or

- (b) What is recursion? Explain with an example.

14. (a) Explain passing arrays to a function with an example program.

Or

- (b) What are pointers? State the rules and explain with examples.

15. (a) What is a structure? How does a structure differ from an array?

Or

- (b) Write a C program to create a student information file.



PART C — (5 × 8 = 40 marks)

Answer ALL the questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Describe the features of output devices.

Or

- (b) Describe the features of good programming languages.

17. (a) Explain scanf function with its features. Give examples.

Or

- (b) List the various operators in C and explain with examples.

18. (a) Explain the decision making statements with examples.

Or

- (b) Explain storage classes with example programs.

19. (a) Explain different types of arrays with suitable examples.

Or

- (b) Write a program for the following, use switch statement.

- (i) Searching of string
- (ii) Sorting of strings.

20. (a) Define a structure that can describe the electricity board. Write a program to print the electricity bill.

For home usage unit charge – Rs. 3 per unit

For business usage unit charge – Rs. 6 per unit.

Or

- (b) Write a C programs to prepare the student mark sheets. Write separate programs for file creation and processing.

