Total No. of printed pages = 7

BMD 161202

Roll No. of candidate

2017

B. Des 2nd Semester End-Term Examination

INTRODUCTION TO COMPUTER

PROGRAMMING

Full Marks –100   Pass Marks – 35   Time – Three hours

The figures in the margin indicate full marks
for the questions.

PART – A

Answer the following questions.

1. (A) Choose the correct answers from the
   following :   10×1=10

   (a) C programs are converted into machine
   language with the help of

   (i) An editor

   (ii) A compiler

   (iii) An operating system

   (iv) None of these

(b) Which one of the following is not a reserved keyword for C ?

    (i) auto   (ii) case

    (iii) main   (iv) default

(c) A C variable cannot start with

    (i) A number

    (ii) A special symbol other than underscore

    (iii) Both of the above

    (iv) An alphabet

(d) Which one of the following is not a valid identifier ?

    (i) _examveda   (ii) 1examveda

    (iii) exam_veda   (iv) examveda1

(e) What is the correct value to return to the operating system upon the successful completion of a program ?

    (i) 1   (ii) −1   (iii) 0

    (iv) Program do no return a value

(f) Which is the only function all C programs must contain ?

(i) start ( )

(ii) getch ( )

(iii) main ( )

(iv) printf ( )

(g) Which of the following operator takes only integer operands ?

(i) +   (ii) *

(iii) /   (iv) %

(h) Which of the following comments about the ++ operator are correct ?

(i) It is a unary operator

(ii) The operand can come before or after the operator

(iii) It cannot be applied to an expression

(iv) All of the above

(i) Determine output :

```
main ( )
  {
  int i = abc (10);
  printf ("%d", --i);
  }
  int abc (int i)
  {
  return (i++);
  }
```

(i) 10   (ii) 9

(iii) 11   (iv) None of these

(j) Use of functions

   (i) Helps to avoid repeating a set of
       statements many times

   (ii) Makes the debugging task easier

   (iii) Enhances the logical clarity of the
        program

   (iv) All of the above

(B) Answer any *five* of the following in short :

5×2=10

(i) Define variable and constant.

(ii) Explain primary data types used in C.

(iii) Describe arithmetic operator.

(iv) State three advantages of function.

(v) What is call by value ?

(vi) Which of different types of loop statement used in C ?

(vii) What is unary operator ?

(viii) What is an expression ?

(C) Differentiate between the following : 5+5=10

(i) while-do and do-while statement

(ii) Union and Structure.

PART – B

Answer any *five* questions.   5×8=40

2. (a) Explain difference between a flowchart and an algorithm with an example.

(b) Explain the various decision making statements in C with an example for each.

(c) Write a short note on Preprocessor.

(d) Write the purpose of the following functions :

   (i) getch ( )

   (ii) putchar ( )

   (iii) fgetc ( )

   (iv) gets ( )

   (v) puts ( )

   (vi) fscanf ( )

(e) Write a program that prints the even number from 1 to 100.

(f) Define pointer. Write a program to explain the usage of Pointer.

(g) Explain in detail High level language, Machine language and Assembly language.

PART – C

Answer any *three* questions.   3×10=30

3. (a) Explain about C tokens in details.

   (b) Explain about the functional units of a computer with proper diagram.

(c) Explain about AND, OR, NOT, NAND and NOR gate with diagram and truth table for each.

(d) Write a program to print Fibonacci series up to 100.

(e) Write a program to find whether a given number is a prime or not.