

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)  
BSc DEGREE EXAMINATION MAY 2018  
(Fourth Semester)

Branch – MATHEMATICS WITH COMPUTER APPLICATIONS

**C PROGRAMMING**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks (10 x 2 = 20)

- 1 Define a variable.
- 2 List out any four storage classes.
- 3 What is a mixed – mode arithmetic?
- 4 State the purpose of getchar( ) function.
- 5 Give the general form of the ELSE-IF ladder.
- 6 Define : GoTo statement and give its syntax.
- 7 What is a library function?
- 8 Define an array.
- 9 What is the major difference between structure and union?
- 10 Define a pointer.

**SECTION - B (25 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

- 11 a Explain the basic structure of a C program.  
OR  
b Write a note on C constants.
- 12 a Briefly explain about formatted I/O functions.  
OR  
b Write a note on type conversions in expressions.
- 13 a Explain the switch case statement, with example.  
OR  
b Write a C program to check whether the given year is leap year or not.
- 14 a Explain the form of a C function.  
OR  
b Write a C program for matrix multiplication.
- 15 a How do you access a variable through its pointer? Explain.  
OR  
b Write a note on structures with in structures.

**SECTION - C (30 Marks)**

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Discuss about the various data types in C language with examples.
- 17 Explain the various categories of C operators.
- 18 Explain the different loop control statements with example.
- 19 Briefly discuss about one-dimensional array.
- 20 Describe the various input / output operations on files.

Z-Z-Z

END