M.Sc. RNLKWC-/CS-204/22

2022
COMPUTER SCIENCE

M.Sc. Second Semester End Examination - 2022
Paper - CS-204
(CBCS)
PROGRAMMING CONCEPTS WITH C LANGUAGE

Full Marks : 50   *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

1. Answer any five questions.   5×2=10

   a) Why is C known as a mother language?

   b) What is the use of static variable in C?

c) Why Register Storage Class is used?

d) What is size-of-operator? – Explain with example.

e) What is a NULL pointer?

f) Can we compile a program without main () function?

g) What is the differences between break and continue statement?

h) What is the difference between i++ and ++i?

Group - B

2. Answer any four questions.   4×5=20

a) Explain briefly abot do-while loop with an example.

b) What is the purpose of functions in C? Write the difference between call by value and call by reference?

$2\frac{1}{2}+2\frac{1}{2}=5$

c) Why pointers are used in C? What is pointer to pointer in C?   3+2=5

d) What is dynamic memory allocation? What is the difference between calloc ( ) and malloc ( )?   2+3=5

e) Write a short note on – (i) global variable (ii) type casting. $2\frac{1}{2}+2\frac{1}{2}=5$

f) What is recursion? What is recurssive function? Explain with example.   2+3=5

Group - C

3. Answer any one question.   1×10=10

a) What is the use of getchar () and putchar ()? Explain switch case statement with example. What is function call? What is pointer to a function? Explain with example.   2+3+2+3

(4)

b)   (i) Write a program to check whether a string is palindrome or not.

      (ii) What is the difference between static variable & global variable? What are the advantages of Register variable?   5+5