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CCE RF
CCE RR

ಸಂಕೇತ ಸಂಖ್ಯೆ : **74**

Code No. : 74

ವಿಷಯ : ಎಲಿಮೆಂಟ್ಸ್ ಆಫ್ ಕಂಪ್ಯೂಟರ್ ಸೈನ್ಸ್

Subject : ELEMENTS OF COMPUTER SCIENCE

(ಶಾಲಾ ಅಭ್ಯರ್ಥಿ & ಪುನರಾವರ್ತಿತ ಶಾಲಾ ಅಭ್ಯರ್ಥಿ / **Regular Fresh & Regular Repeater**)

ದಿನಾಂಕ : 01. 04. 2022]   [Date : 01. 04. 2022

ಸಮಯ : ಬೆಳಗ್ಗೆ 10-30 ರಿಂದ ಮಧ್ಯಾಹ–1-45 ರವರೆಗೆ]   [Time : 10-30 A.M. to 1-45 P.M.

ಪರಮಾವಧಿ ಅಂಕಗಳು : 90]   [Max. Marks : 90

General Instructions to the Candidate :

1. This Question Paper consists of objective and subjective types of 9 questions.

2. This question paper has been sealed by reverse jacket. You have to cut on the right side to open the paper at the time of commencement of the examination. Check whether all the pages of the question paper are intact.

3. Follow the instructions given against both the objective and subjective types of questions.

4. Figures in the right hand margin indicate maximum marks.

5. The maximum time to answer the paper is given at the top of the question paper. It includes 15 minutes for reading the question paper.

TEAR HERE TO OPEN THE QUESTION PAPER

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Note : Answer *all* the questions.

1.   Four alternatives are given for each of the following questions /

incomplete statements. Select the most appropriate alternative and

write it in the answer book along with its alphabet :   10 × 1 = 10

i)   FORTRAN is a

(A)   high level language   (B)   low level language

(C)   assembly language   (D)   machine language.

ii)   Two parts of a program can be connected by

(A)   rhombus   (B)   capsule

(C)   rectangle   (D)   circle.

iii)   An identifier whose value does not change throughout the

program is called a

(A)   variable   (B)   constant

(C)   reserve word   (D)   label.

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iv) The size of char data type is

(A)   1 byte   (B)   2 bytes

(C)   4 bytes   (D)   8 bytes.

v) The escape sequence character set for end of string is

(A)   \n   (B)   \b

(C)   \0   (D)   \r

vi) The maximum length of a variable in C is

(A)   64   (B)   32

(C)   16   (D)   8.

vii) The formatted output function in a computer programming is

(A)   menu ( )   (B)   printf ( )

(C)   scanf ( )   (D)   putchar ( )

viii) Which symbol is used as a statement terminator in C ?

(A)   ;   (B)   !

(C)   #   (D)   ~

ix)   An expression that outputs a numeric value is called an

(A)   arithmetic expression   (B)   logical expression

(C)   relational expression   (D)   algebraic expression.

x)   The equality operator is represented by

(A)   =   (B)   : =

(C)   = =   (D)   . EQ .

2.   a)   Define translator.   2

     b)   Write a short note on application software.   3

     c)   Explain the characteristics of flowchart.   5

3.   a)   List the different types of expressions.   2

       b)   Explain delimiters.   3

       c)   Mention the rules to name a variable.   5

4.   a)   Write the conversion characters for various data types.   2

       b)   Explain the various arithmetic operators.   3

       c)   Draw the symbols used in system flowchart.   5

5.   a)   List the types of logical operators.   2

       b)   Write a C program to find largest of two numbers.   8

<div align="center">OR</div>

       a)   List the types of binary operators.   2

       b)   Write a C program to find circumference of a circle.   8

6.   a)   What are constants ?   2

       b)   Write a C program to find whether a given number is even or odd.   8

7.   a)   Convert the following mathematical expressions into equivalent

         C expressions :   2

           i) $a^2 - \dfrac{b}{2} + c^2$

           ii) $\dfrac{2x^2 + 3x - 1}{10}$.

   b)   Write a C program to find the highest marks of a student in four

         exams.   8

8.   a)   Identify the errors in the following statements, if any :   2

           i) $P = x + y \; ; 5$

           ii) $x + y = Sum \; ;$

   b)   Write a C program to convert degree Fahrenheit to degree
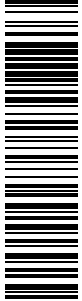
         Centigrade.   8

9. a) What will be the value of the following expressions when $A = 3$,

B = 5 and C = 2 ? 2

i) $S = (A + B)/C$

ii) $S = B * C / A$.

b) Write a C program to evaluate the following expression : 8

$$P = \frac{Y^2 - XZ}{2Y}.$$

OR

a) Differentiate between = = and = operator. 2

b) Write a C program to calculate simple interest. 8