ಸಂಕೇತ ಸಂಖ್ಯೆ : **74**

Code No. : 74

CCE RR

ವಿಷಯ : ಎಲಿಮೆಂಟ್ಸ್ ಆಫ್ ಕಂಪ್ಯೂಟರ್ ಸೈನ್ಸ್

Subject : ELEMENTS OF COMPUTER SCIENCE

(ಹೊಸ ಪಠ್ಯಕ್ರಮ / New Syllabus)

(ಪುನರಾವರ್ತಿತ ಶಾಲಾ ಅಭ್ಯರ್ಥಿ/ Regular Repeater)

General Instructions :

i) The Question-cum-Answer Booklet consists of 9 objective and subjective types of questions.

ii) Space has been provided against each objective type question. You have to choose the correct choice and write the complete answer in the space provided.

iii) For subjective type questions enough space for each question has been provided. You have to answer the questions in the space.

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

v) Candidate should not write the answer with pencil. Answers written in pencil will not be evaluated (Except Graphs, Diagrams & Maps).

vi) In case of Multiple Choice, Fill in the blanks and Matching questions, scratching / rewriting / marking is not permitted, thereby rendering to disqualification for evaluation.

vii) For reading the questions 15 minutes of extra time has been provided.

viii) Do not write anything in the space provided in the right side margin.

Note : Answer *all* the questions.

1. Fill in the blanks with the correct symbol/word(s) by selecting from the choices given in the brackets : 10 × 1 = 10

i) All operations of a computer can be controlled by ..... .

(*CU, CPU, ALU*)

ii) The longest key on the keyboard is ..... .

(*space bar, del, tab*)

iii) MS-DOS is an example of ..... .

(*machine language, operating system, system software*)

iv) Symbolic representation of a program is ..... .

(*algorithm, flowchart, code*)

v) An identifier whose value does not change throughout the program is called ..... .

(*constant, underscore, comment*)

vi) The escape character used for tab setting is ..... .

(*\n, \f, \t*)

vii) Any expression whose output is either true or false is known as ..... .

(*relational expression, logical expression, arithmetic expression*)

viii) An unconditional branching system is ..... .

(*if ... else, goto, for*)

ix) The library function used to find the power of a number is ..... .

(*sqrt, tan, pow*)

x) The variable declared inside any function is termed as ..... .

(*global variable, local variable, integer variable*)

2. a) What is a computer ? 2

b) List the uses of computers. 4

c) Define CPU and name the parts. 4

3. a) Define software. 2

b) Explain input and output devices. 4

c) Draw a neat layout diagram of keyboard and label the parts. 4

4. a) Define algorithm. 2

b) Write algorithm and flowchart to find the average of three numbers. 4

c) How are the computer languages classified ? 4

5. a) What do you understand by 'C' language ? 2

b) Define *C* character set and mention the types. 4

c) Convert the following mathematical expressions into equivalent *C* expressions : 4

i) $P = \frac{AC}{B} - \frac{CD}{A}$ ii) $S = A + \frac{B}{C} - D$

iii) $S = P - \frac{CA}{B}$ iv) $P = \frac{B^2}{A - B} + CD$

6. a) Define data type. Which are the different data types ? 5

b) Write a program to check the given number is positive ($+ve$). 5

7. a) Find the value of the following expressions when $A = 3$, $B = 5$ and $C = 2$. 4

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

iii) $S = A + B - C$ iv) $S = B / A$

b) Write a program to find the student result whether it is first class, second class, pass or fail when the maximum marks are 825. 6

8. a) What is a statement ? List any two types of statements. 4

b) Write a *C* program to find reverse order of given numbers. 6

9. a) Write short notes on the following : 4

i) Library function

ii) E-mail.

b) Write a program to calculate the area of triangle of given base and height. 6