


## Subject : ELEMENTS OF COMPUTER SCIENCE

( อలల అభ్యథిక \& 山ుసరాఙతికక లులా అభ్యథిక/ Regular Fresh \& Regular Repeater )
దినాంళ: 23.03. 2019 ]
[ Date: 23. 03. 2019
 ङరむూఎధి అంశగళు : 90]

## General Instructions to the Candidate :

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

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 : $10 \times 1=10$
i) The part of the computer which performs arithmetic and logic operation is $\qquad$ .
( ALU, CPU, Printer )
ii) The longest key on the key board is $\qquad$ .
( del, space bar, tab )
iii) Pay roll is an example of $\qquad$ software.
( system, package, application )
iv) Processing box in a flow chart is indicated by $\qquad$
( rhombus, rectangle, capsule )
v) An identifier whose value does not change throughout the program is called a $\qquad$ .
( constant, comment, statement )
vi) The integer conversion character is $\qquad$ . .

$$
(I, f, d)
$$

vii) The logic AND operator is $\qquad$
( $\& \&, \&, \%$ )
viii) One control structure with in the other control structure is termed as $\qquad$ . .
( switch, nesting, break )
ix) The statements allow the user to store values in the computer memory is $\qquad$
( input statement, output statement, block of statement )
x) The values of variables used in a call statement is termed as $\qquad$
( argument, variable, parameters )
2. a) Define software. 2
b) Explain the applications of $C$ language. 3
c) Explain the characteristics of algorithm. 5
3. a) Define arithmetic logic unit. 2
b) Write short notes on system software. 3
c) Explain the characteristics of flow chart. 5
4. a) Mention any four basic steps in developing the solution to any problem. 2
b) How are computer languages are classified? 3
c) Draw any five symbols used in flow charts. 5
5. a) What are compilers ? 2
b) Write a $C$ program to find the area of a triangle given the three sides. 8
6. a) List out the different types of statements in $C$. 2
b) Write a $C$ program to find the smallest of 3 Nos. using conditional operator. 8
7. a) What is the conversion specifier for decimal integer and string ? 2
b) Write a $C$ program to find reverse order of given numbers. 8
8. a) Identify the errors in the following statements : 2
i) $x+y=$ sum
ii) $5=x+y+z$
b) Write a $C$ program to compute the largest of three numbers. 8
9. a) What are logical operators ? 2
b) Write a $C$ program to convert decimal to binary. 8

