

Time : 2  $\frac{1}{2}$  Hrs.

Maximum Marks : 75

**Please check whether you have got the right question paper.**

- Note :**
- 1) All questions are compulsory.
  - 2) All questions carry equal marks.

**Q.1 A. State whether the following statements are True or False : (Attempt any Eight) (8)**

1. The speeds of first generation computers were measured milli-seconds
2. 1024 Megabytes = 1 Terabyte
3. In the hexadecimal system there are 16 symbols.
4. Linux is not a programming language
5. Algorithm is used to state the sequence of steps that will eventually lead to the correct output.
6. In every C program scanf( ) function is mandatory.
7. \n is an escape sequence which moves the cursor to the next line
8. Nested if( ) means one if( ) within another if( )
9. case statement is used in while ( )
10. The for(x=0; x<=9; x+=2) will repeat 5 times.

**Q.1 B. Select the appropriate option from the following : (Attempt any Seven). (7)**

1. \_\_\_\_\_ memory cards use less power have no moving parts.
 

a) IC	b) DVD
c) Flash	d) Hard Disk
2. In Analog computer the data is processed in a \_\_\_\_\_ form.
 

a) Continuous	b) discrete
c) Nano	d) Pico
3. Which of these operating systems does not provide a graphical user interface?
 

a) Windows XP	b) Linux
c) Android	d) Microsoft DOS
4. A computer program that translates program instructions from human readable form into machine languages codes is
 

a) Computer Language	b) Language translator
c) Utility Program	d) Spreadsheet
5. A keyword must be written in \_\_\_\_\_
 

a) upper case	b) lower case
c) toggle case	d) mini case
6. There are \_\_\_\_\_ storage classes in C.
 

a) 4	b) 3
c) 2	d) 6
7. The format characters “%8.2f” will contain \_\_\_\_\_ decimals.
 

a) 2	b) 8
c) 10	d) 5
8. The terminal symbol in the flowchart represents :
 

a) Start of program logic	b) Processing
c) Decision	d) Display data

9. The logical operator OR is written in C as \_\_\_\_\_
- a) &&    b) ==  
c) ++    d) ||
10. To terminate the loop and take the control out of it we use \_\_\_\_\_
- a) continue                                        b) break  
c) case    d) exit

**Q.2 Answer the following questions :**

- a. Explain the different generations of computers highlighting the improvements in them. (8)
- b. What are the binary numbers? What are the rules of binary addition? (7)
- OR**
- c. Explain in brief about tablet computer and smartphones (8)
- d. Convert the following decimal numbers in to binary (7)
- i) 56.25      ii) 324.625

**Q.3 Answer the following questions :**

- a. What are the types of systems software? (8)
- b. Write an algorithm to find the largest of three numbers. (7)
- OR**
- c. Draw the flowchart to get three data values a, b and c from the user and display the average of these three values. (8)
- d. Discuss the applications of computer in relation with Risk Analysis, Management Information System, E-Commerce. (7)

**Q.4 Answer the following questions :**

- a. What is an escape sequence? What is its purpose (8)
- b. Write a program to input the basic pay and calculate and display basic pay da,hra, total pay and tax where da as 60% of basic pay, hra as 25% of basic pay, total as basic pay+da+hra and tax as 20% of the total pay. (7)

**OR**

- c. What is the output of the following 'C' program? (8)
- ```
#include<stdio.h>
void main( )
{ int a=1235, b=-1888;
float x=2233.44, y=4455.866;
printf("%d %d\n", a, b);
printf("%+8.2f %+10.1f\n", x, y); }
```

- d. What is the output of the following 'C' program? (7)
- ```
#include<stdio.h>
void main( )
{ int a=5, b=10, c, d;
a+=b++;
c=a*2+b;
d=++a-4;
printf("%d %d %d %d\n", a, b, c, d);}
```

**Q.5 Answer the following questions :**

- a. Write a program in C to Display the Multiplication table of Seven. (8)

7 X 1 = 7  
 7 X 2 = 14  
 •  
 •  
 •  
 7 X 10=70

- b. Write a program in C to accepts sales from key board then calculate and print sales tax as follows: (7)

sales	sales tax
up to Rs 5000	5% of sales
between Rs 5000 & Rs 9000	10% of sales
over Rs 9000	12.5% of sales

**OR**

- c. Write short notes on **Any Three** of the following giving suitable examples: (15)

- 1) break statement
- 2) for ( ) loop
- 3) do...while ( ) loop
- 4) if ( )
- 5) switch ( )

-----X-----X-----