

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

Maximum Marks : 75

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

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

1. The third Generation of computers used integrated circuits.
2. The speeds of Second Generation computers were measured in milli-seconds.
3. Operating systems were developed in the third generation of computers.
4. Notepad is not a utility software
5. The format character %c is used to represent integers.
6. = and = = is the same in C language.
7. Break statement takes the control out of the program.
8. Nested if() means one if() within another if().
9. The for(x=0; x<=5; x++) will repeat 5 times
10. ++y is called a pre-increment of the value of y

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

1. _____ Memory cards use less power have no moving parts.
a) Flash b) IC
c) hard disk d) DVD
2. Second generation computers are based on _____.
a) Artificial Intelligence b) transistors
c) vacuum tubes d) Integrated circuits
3. A formatted input function is _____.
a) scanf() b) printf()
c) put() d) getchar()
4. The Diamond shape in the flowchart signifies
a) Processing b) Decision making
c) Input / Output d) Start / End
5. Which of these operating systems does not provide a graphical user interface
a) Windows XP b) Linux
c) Android d) Microsoft DOS
6. Which of these is not a programming language?
a) C b) C++
c) Linux d) JAVA
7. The logical operator OR is written in C as _____.
a) && b) ++
c) || d) -
8. Which of the following is a system software?
a) Microsoft Word b) Microsoft Windows XP
c) Tally d) Corel Draw
9. Using a single if() we can check at the most _____ alternatives
a) 1 b) 3
c) 2 d) 4
10. The hexadecimal number system has a base of _____.
a) 2 b) 8
c) 10 d) 16

Q.2 Answer the following questions :

- a. Explain the different kind of secondary memory available (8)
- b. Convert the following binary numbers to decimal (7)
- i) 110001 ii) 1001110.01

OR

- Q.2** c. Differentiate between Analog and Digital Computers (8)
- d. Explain characteristics of a computer (7)

Q.3 Answer the following questions :

- a. What is E-Commerce? Why is it so popular now? Give the few E-Commerce sites name. (8)
- b. Write an algorithm to find the average of two numbers. (7)

OR

- Q.3** c. Draw the flowchart that read two numbers and prints the larger number (8)
- d. Discuss the applications of computer in relation with social media, website, Advertising (7)

Q.4 Answer the following questions :

- a. Explain the different storage classes in C. (8)
- b. Write a program to input the cost Salvage value and estimate life in years of an asset & display the annual depreciation when

$$\text{Depreciation} = (\text{Cost} - \text{Salvage}) / \text{Life}$$

OR

- Q.4** c. What is the output of the following C program? (8)

```
#include<stdio.h>
void main()
{char i='A';
printf("%c\n",i);
printf("%4c\n",i);
printf("%-4c\n",i);
printf("%04c\n",i); }
```

- d. What is the output of the following C program? (7)

```
#include<stdio.h>
void main( )
{ int t=400, m=200;
float x=125.8, y=35.76;
printf("%8d %8d\n", t, m);
printf("%+10.3f %10.3f\n", x, y);}
```

Q.5 Answer the following questions :

- a. Write a program in C to calculate and display the sum of 1+2+3+.....100 **(8)**
 b. Sales tax is calculated on the basis of sales as follows: **(7)**

Sales	Sales tax
First 5,000	2%
Next 20,000	5%
Excess	8%

Write a C program to input the bill no.(b) and Sales Amount(s) and Display the Bill No. Sales Amount, Sales tax (t), Total Amount (ta).

OR**Q.5 c. Write short notes on Any Three of the following giving suitable examples: (15)**

- 1) The continue statement
- 2) for () loop
- 3) while () loop
- 4) nested if
- 5) switch()

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