

Time 3hrs

M.M. 70

i) All questions are compulsory.

ii) Programming language followed C++.

Q1. Define Object oriented programming. Name some Object oriented languages? 1

Q2. Write name of the header files to which following functions belong: 1

a. strcat() b. exit(0) c. isupper() d. exp()

Q3. Differentiate between global variable and local variables, explain with suitable code in C++ language? 2

Q4. Will the code given below execute successfully. If no, give reasons 3

```
#include<stdio.h>
void main()
{
int s1, s2 , num;
s1=s2=0;
for(x=0;x<11;x++)
{
cin<<num;
if(num>0)
s1+=num;
else
s2=num;
}
cout<<s1<<s2;
}
```

Q5. What is error? What are the different types of error? Explain with example? 3

a. Find error in the following program 2

```
#include<iostream.h>
void main()
{
cout<<"enter the name";
gets(name);
cout <<"the name is ";
puts(name);
getch();
}
```

b. How Syntax error is different from syntactic errors?

Q6. What is type casting? Differentiate between implicit and explicit type casting?

Q7. What is inheritance? Also explain different type of inheritance in brief? 1

a) Explain the concept of friend function. Give suitable code for it. 2

- b) Differentiate between public, private and protected modes? 2
- Q8. What are constructors? How they are different from destructor and other functions in a class. What is the order of execution of constructor and destructor in a class? 3
- Q9. What is stack and how they are implemented? 2
- a. Convert the infix to postfix notation 3
- $a+b*((c-d)*(e+f)/g$
- Q10. Define a class company in C++ with following subclass
- a. employee
b. client
- employee has following data members
- name 20char
address 20varchar
terlephone no. 15 int
department 20char
designation 20char
- b client
name 10char
company name 20char
employee dealing with company
- i) Construct a function which show the employee who deal with a particular client 2
- ii) construct a function which show all the employee who has designation set as managers 2
- Q11. Differentiate between read() and write()? 2
- a) Explain how to append to a text file? 1
- Q12. What is DDL. How to display a set of records from a table in SQL? 2
- Q13. What is view with the reference to SQL give example? 2
- Q14. State absorption law? 2
- Q15. a) Solve $F(w,x,y,z,w)=\text{summation of } (1,3,6,7,9,10,11,12,15,12)$ using k map 3
- Q16. Given two arrays A and B A is in increasing order and B is in decreasing order write a program to merge A and B and form other array C in increasing order? 4
- Q17. Explain Sequential files? 3