

U218-146(ESE)

I.T.

Marking Scheme

Q.1) a) Given the values  $A=12$ ,  $B=3$ ,  $C=6$ ,  $D=2$  - 6 marks (each correct answer carry one mark)

1)  $F=A+B/C-D^2$  ans 8.5

2)  $F=(A+B)/C-D^2$  ans 2.5

3)  $F=A+B/(C-D^2)$  ans 7.5

4)  $F=(A+B) \text{ MOD } C$  ans 3

5)  $F=(A+B) \setminus D^2$  ans 3

6)  $F=C \text{ MOD } D * A$  ans 0

OR

b) Problems presented in many form. At least six forms to be discuss

[6 marks]

Q.2) a) What are the seven steps for solution development?

[6 marks]

OR

b) Explain logic structure used for problem solving.

[6 marks]

Q.3) a) Write a program C++ using inline function to find the multiplication values and the cubic values.

[6 marks]

OR

b) Create a class account having data members and member functions as

Data members: 1) Name of depositor 2) account number 3) Type of account

4) Balance amount in the account

Member functions: 1) To assign initial values 2) To deposit an amount

3) To withdraw an amount after checking the balance 4) To display name and balance  
write a logic for functions

[6 marks]

Q.4) a) Implicit type casting 2 marks and explicit type casting 2 marks.

[4 marks]

OR

b) Concept 2 marks. Example – 2marks

[4 marks]

Q. 5 a) code with proper logic.

[6 marks]

b) Explanation of pure virtual function with syntax.

[4 marks]

c) Yes, Explanation.

[4 marks]

OR

Q. 6 a) code with proper logic.

[6 marks]

b) Rules of virtual function

[4 marks]

c) Need of virtual function

[4 marks]

Q.7 a) Explanation with Syntax -3marks , Example -3 marks

[6 marks]

b) (a) To move the pointer by 15 positions backward from current position :-  
`fout.seekg(-15, ios::cur)`

[4 marks]

(b) To go to the beginning after an operation is over :- `fout.seekg(0, ios::beg)`

(c) To go backward by 20 bytes from the end :- `fout.seekg(-15, ios::end)`

(d) To go to byte number 50 in the file :- `fout.seekg(49, ios::beg)`

c) Difference – 3marks Preference over another – 1 mark

[4 marks]

OR

Q. 8 a) Explanation of each function -4 marks. Example – 2marks.

[6 marks]

b) Differentiate cin and getline function using syntax and string processing ability. [4 marks]

c) labeled diagram –

[4 marks]