

XI – COMPUTER SCIENCE – TERM 1 EXAM
(Except Arrays and Structures Chapters)

- 1.a) What do you understand by booting?
 Write its types. (2)
- 1.b) What is cache memory?
 Write its advantages. (2)
- 1.c) Discuss the basic composition of a simple microprocessor. (2)
- 1.d) Differentiate between freeware and shareware. (2)
- 1.e) Define operating system with its two functions. (2)
1. f) Explain tracks & sectors in a hard disk. (2)
- 1.g) Convert according to given their base address (2)
 $(4502)_{10} \rightarrow ()_{16} \rightarrow ()_2 \rightarrow ()_8$
- 1.h) Define compiler, Non-volatile memory, application software, USE port. (4)
- 2.a) What is polymorphism? (2)
- 2.b) Write the characteristics of a good program. (2)
- 2c) What do you mean by Abstraction and Encapsulation?
 How are these two terms interrelated? (4)
- 2.d) How many types of errors are there?
 Discuss each with example. (4)
- 2.e) Draw a flow chart to find the sum of first 50 even numbers. (4)
- 2.f) What is the role of comments and indentation in a program? (4)
- 2.g) Write all the steps of Problem Solving Methodology. (4)
- 3.a) What will be the size of constants: (2)
 (i)'0' (ii)"a" (iii)7.88 (iv)39872
- 3.b) What will be value of x for following expression (2)
 if a=5, b=7, c=10, d=13.
 (i) $x=c!=a*b?++b: (b=16,b+=2, b--)$

(ii) if a=10, $x=a++\%5+ ++a + ++a$

- 3.c) Write the equivalent C++ expression for the following arithmetic expressions: (2)
 i) $(a+b+c)^3+2ab+ab^2$ ii) $Ut + \frac{1}{2} at^2$
 iii) $\sqrt{(p+q)+x^2}$ iv) $P(1+r/100)^n$
- d) How many bytes make 1 terabyte? (1)
- 4.a) Write the output of the following code: (3)
- ```
#include<iostream.h>
int main()
{ unsigned int a,b,c,l;
 a=1;
 b=2;
 cout<<a<<b;
 for(i=0;i<5;i++)
 { c=a+b;
 cout<<c;
 a=b;
 b=c;
 }
}
```
- 4.b) Convert the following if-else to a single conditional statement. (1)
- ```
if(qty>=20)
  order=max+5;
else
  order=max;
```
- 4.c) Write a program to print the following series. (4)
 1 -4 7 -10 -40
- 4.d) Write a program to check that the given number is prime number or not. (4)
- 4.e) Write a program to swap the two numbers without using third variable. (3)
- 4.f) Write a program to input any number and print the output in the following manner: (3)
 le Suppose input is 4 then output must be
- | | |
|--------------------|----|
| Your number is | 4 |
| It's square is | 16 |
| And square root is | 2 |
- 4.g) Write a program to input three integers and print the largest of three. (3)