

II – SEMESTER EXAMINATION, 2017-18

DATE: SUBJECT: COMPUTER-SCIENCE-I

STD: XI

DURATION: 3 hrs

MARKS: 50

Note: Figures to the right of the question indicate marks.

Q.1 Select the correct alternative and rewrite the following 4 M

A]

- 1 _____ loop is a bottom tested loop.
a) for b) do...while c) switch d) while
- 2 The default return type of a function is _____.
a) int b) float c) char d) double
- 3 In visual basic _____ is the extension to represent project file.
a) .frm b) .vbp c) .vb d) .cls
- 4 The hexadecimal number system uses _____ as the base number.
a) 15 b) 2 c) 16 d) 2

B] Answer any two of the following 6 M

- 1 List different data types available in VB?
- 2 Find 2's complement of the decimal number $(20)_{10}$.
- 3 Write a short note on nested. If with a suitable example.

Q.2 Answer any two of the following 6M

A]

- 1 Difference between for and do...while.
- 2 Explain the properties of control textbox used in VB.
- 3 Explain switch statement with a suitable example.

B] Answer any one of the following 4M

- 1 Write a short note on break and continue statement with one example.
- 2 Convert the given decimal number to binary 36.1875.

Q.3 Answer any two of the following 6M

A]

- 1 What is a variable. State three rules for defining a variable?
- 2 Perform the binary addition of $(11101)_2 + (1010)_2$
- 3 Write an algorithm to find area and circumference of circle.

B] Answer any one of the following 4M

- 1 Write an algorithm and draw a flowchart to find reverse of a number.

- 2 Define the following.
a) Bit b) Nibble c) Byte d) Word

Q.4 Answer any two of the following 6M
A]

- 1 Explain the concept of 1d array & its initialization with a suitable example
- 2 Explain do....while used in VB with a suitable example.
- 3 Explain the concept of function with arguments and return values.

B] Answer any one of the following 4M

- 1 What is operator in C++.Explain two types of operators used in C++ with a suitable example.
- 2 Write a short note on flowcharts.

Q.5 Answer any two of the following 10M

- 1 Write a program in VB to find sum of user entered ten numbers using do...while loop.
- 2 Write a program in C++ to find sum of all digits of inputted number using function. The function prototype is `int sum_of_digits(int n)` .
For eg:if $n=123$ then $sum=1+2+3=6$
- 3 Write a program in C++ to calculate length of a string without using library function.

OR

Q.5 Answer any two of the following 10M

- 1 Write a program in C++ to reverse a number and check whether the inputted number is palindrome or not.
- 2 Write a program in C++ to accept a string and find out occurrences of each vowels in it.
- 3 Write a program in C++ to accept 10 numbers and print all even numbers from them.