

BARNES SCHOOL AND JUNIOR COLLEGE,DEVLALI
HALF YEARLY EXAMINATION 2011-2012

COMPUTER SCIENCE

Time :3 hrs

Class : 12

Max Marks:100

*Answer all questions in Part I(compulsory) and seven questions from part II ,Choosing three questions
From Section –A, two from Section – B and two from Section – C
All working including rough work should be done on the same sheet as the rest of the answer.
The intended marks for questions are given in brackets [].*

PART I

*Answer **all** questions*

- Q1.Explain the different types of errors. [5]
Q2. Differentiate between if else and switch statement. [5]
Q3. What is Tree transversal ? Explain its types [5]
Q4. Write a note on : a) Public b) Private [5]
Q5. Explain the types of Queue with a diagram. [5]
Q6. Define : a) Parent node b) Siblings [5]

PART II

*Answer seven questions in this part, choosing three questions from
Section A, two from Section B and two from Section C*

SECTION – A

Answer any three questions

- Q7. Write a program to print the Fibonacci series [10]
Q8. Explain the different types of Inheritance [10]
Q9. What is Stack and explain its different operations on stack [10]
Q10.Draw the Expression tree for the following [10]
a. $(a + b) * (c - d)$
b. $2a / 3b$
c. $2^3 + 7^2$
d. $(2a + 3^2) * (3b - c)$
e. $(a + b) * (c + d) - e$

SECTION – B

Answer any two questions

- Q11. Write a program to print the factorial of entered number [10]
Q12. Explain link list and its type in detail [10]
Q13. What is a Queue and explain the different operations on Queue [10]

SECTION –C

Answer any two questions

- Q14. Convert the following Infix expression to Postfix expression [10]
a. $((a + b) + (c + d) * (e + f))$
b. $((a + b) - (c / d))$
- Q15. Write a program to print the sum of 100 natural numbers [10]
Q16. Write an algorithm to insert / add a node to a list [10]
a. At first
b. At last