

ANNA UNIVERSITY COIMBATORE

B.E / B.Tech DEGREE EXAMINATION – DEC 2008

THIRD SEMESTER

CS 304 – OBJECT ORIENTED PROGRAMMING

(Common to Mechanical / Automobile / Metallurgical / Textile Technology)

Time: Three hours

Maximum: 100 marks

PART A – (20 x 2 = 40 marks)

Answer ALL questions

1 Write the benefits of inheritance.

(Or)

Write special characteristics of the member functions.

2 What are qualifiers? Specify their types.

3 Let $b=5$, $c=2$, $d=10$. Find the output for the given expression $a = b + c * 5 + d / 2 - 3$

4 Specify the components of the functions.

5 List out the steps involved in the process of programming in OOPs

6 Distinguish between constructor and destructor.

(Or)

What is the use of constructor?

7 Mention the principal area of operator overloading.

8 What are the different forms of inheritance supported by C++?

9 What are tasks performed by error handling code, when the exception handler is invoked?

10 Specify the categories of manipulators. Give an example.

(Or)

What are C++ streams?

11 What are file pointers?

12 Write the use of `set_terminate()`.

13 What is the scope of a variable?

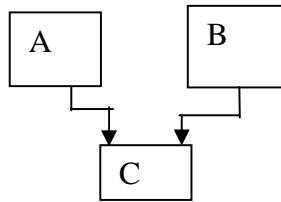
14 Mention the uses of 'instanceof' and 'dot' operators.

15 Write the java assignment statements to evaluate the following equations.

(i) $\text{Area} = \pi r^2 + 2\pi rh$

(ii) $t = 2ab/a+b * g$

16 Is the following hierarchy permitted in java?



Give reasons for your answer.

17 What are the benefits of packages in java?

18 Give at least four examples for runtime errors in java.

19 How many states are available for thread in java?

20 Write any four-string buffer methods in java.

PART B (5x12=60 marks)

(ANSWER ANY FIVE QUESTIONS)

21. Explain the basic concepts and benefits of OOPs (12)
22. What is multilevel inheritance? Explain with a suitable example program. (12)
23. (i) Explain about ios stream class member functions and flags with example. (8)
(ii) Describe the various file modes available in C++. (4)
24. Discuss about different forms of inheritance in java with example. (12)
25. Explain in detail about life cycle of a thread. With example, write about thread methods and priority. (12)
26. What is a package? Explain the creation and accessing of a package with example. (12)
27. Discuss about exception handling model with an example. (12)
28. What is the need for virtual function? Discuss with an example. (12)

*****THE END*****