H 1361

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2006.

Sixth Semester

Information Technology

IF 362 — COMPONENT BASED TECHNOLOGY

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is a broker pattern?

2. Define deferred synchronous call.

3. What is meant by 'cooperative garbage collection'?

4. What is persistence?

5. What are the necessary fields required for interface specification?

6. Define any two Java ORB terminologies.

7. Differentiate between collection and class.

8. What is 'pointer swizzling'?

9. Draw the DCOM architecture.

10. Give some classes that support a 'class factory'.

PART B — (5 × 16 = 80 marks)

11. (i) Explain the inherent issues with the distributed objects.   (8)

    (ii) What is remote reference? Explain the concurrency in server objects.   (8)

12. (a) (i) Draw the architecture of CORBA based system.   (8)

        (ii) What are object adopters? Explain its usage.   (8)

Or

(b) (i) Explain the role of J2EE in distributed objects. (8)

(ii) Define marshalling and unmarshalling. (4)

(iii) Justify the need for IDL interfaces. (4)

13. (a) Explain in detail about OMG IDL to Java Mapping with suitable examples. (16)

Or

(b) (i) What are the services provided by CORBA? (10)

(ii) Explain about Dynamic Skeleton Interface. (6)

14. (a) (i) Explain the transaction facilities provided in distributed object DBMS. (10)

(ii) What kind of queries are associated with distributed objects. (6)

Or

(b) Write a note on

(i) Object caching. (6)

(ii) Object clustering. (5)

(iii) Object migration. (5)

15. (a) (i) Explain about COM facilities and services. (8)

(ii) Briefly discuss about factory components. (8)

Or

(b) (i) Explain in detail about Active X controls with an example. (8)

(ii) How will you build components with ATL? Give an example. (8)

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