

Name:.....

Register No:.....

**UNIVERSITY OF CALICUT**

**Information Technology Mission**

**Model Question Paper**

**Second Semester Diploma in Information Technology Examination 2013**

**DIT2C05 – Object Oriented Programming with Java**

(With effect from 2012 Admission)

Time: 3 Hours

Total Marks: 100

**Part A**

**(Answer any 10; Each question carries 3 marks)**

1. State any four features of Java.
2. Define object.
3. What is abstraction?
4. What do you understand by Byte code?
5. What is state and behavior of an object?
6. What is the difference between a constructor and a method?
7. What is an abstract class?
8. What is modularity?
9. Differentiate between applet and application.
10. Define Interface. Give the general structure of Interface
11. What is the difference between final, finally and finalize?
12. Why java is called a true object oriented language?
13. What is a thread in Java?
14. What is JVM?
15. Explain AWT?

**Part B**

**(Answer any 10; Each question carries 5 marks)**

16. Explain polymorphism using examples.
17. Explain, why Java is called as true object oriented language?
18. Illustrate with example the use of switch case statement.
19. What is constructor? Demonstrate the use of parameterized constructor with a suitable example.
20. What are different types of operators? Explain.

21. Explain different types of message passing mechanism?
22. What is difference between array and vector?
23. What is package? How to create it? Explain with suitable example.
24. Explain applet life cycle.
25. What is difference between overloading and overriding methods?
26. What is multi threading? Explain with suitable example.
27. What is Exception? Give different types of exceptions that could occur during runtime.
28. Describe any four methods from graphics class.
29. How multiple inheritance is implemented in java? Explain.
30. Write a simple applet program which displays message “Welcome to Java”.

### **Part C**

**(Answer any 2; Each question carries 10 marks)**

31. Briefly explain Object Oriented Programming Concepts.
32. What are different types of inheritance supported by Java? Explain using examples.
33. What are decision making statements in java? Explain.
34. Explain JDBC.

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**DIT2C06 Principles of DBMS**

(With effect from 2012 Admission)

Time: 3 Hours

Total Marks: 100

**Part A**

**(Answer any 10; Each question carries 3 marks)**

15. Define database system?
16. What are the advantages of DBMS over file processing system?
17. What are different components of DBMS?
18. What is Relational data model?
19. What are tuples?
20. What are keys?
21. Define - (i) Primary key (ii) Candidate key
22. What does a null represent?
23. Explain entity and entity set?
24. What are the three levels of data abstraction?
25. What is data independence?
26. Write a note on DDL.
27. What are different data types in SQL?
28. What is fully functional dependency?
29. Describe date and time functions?

## **Part B**

**(Answer any 10; Each question carries 5 marks)**

30. What is relational model? Explain attributes and domains.
31. Compare network and hierarchical model.
32. Explain ER diagram using an example.
33. Explain DML.
34. Describe what attributes represent in an ER model? Provide examples of simple, composite, single-value, multi-value, and derived attributes.
35. Write a note on SQL?
36. What are different data types of SQL? Explain with example
37. What are Views? How can we define a View?
38. What is functional dependency? explain.
39. Explain renaming and dropping of tables.
40. What are SQL operators? explain.
41. Explain Select commands in SQL.
42. Explain about SQL functions?
43. Explain ‘‘Group by’’ in SQL with example.
44. Describe different clauses in SQL.
45. Explain Reports in SQL.

## **Part C**

**(Answer any 2; Each question carries 10 marks)**

46. Explain Entity Relationship model using an example.
47. What is Normalization? Explain first, second and third normal forms using examples.
35. Explain SQL SELECT, INSERT and DELETE queries with examples.
36. Describe Join operations in SQL using examples.

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**Second Semester Diploma in Information Technology Examination 2013**

**DIT2C07 Web Programming**

(With effect from 2012 Admission)

Time: 3 Hours

Total Marks: 100

**Part A**

**(Answer any 10; Each question carries 3 marks)**

30. Define Web servers and Web browsers.
31. What is Domain Name System?
32. How can we add an image to a HTML document?
33. Explain different types of lists in HTML.
34. What is Hyper Text Transfer Protocol?
35. What is Front Page?
36. What are styles?
37. What is CSS?
38. How can we change back ground color using style tag?
39. What is meant by padding in a box or table?
40. Which are the operators used in Javascript?
41. What are the arrays?
42. What are the objects in Javascript?
43. What is Search Engine?
48. Discuss the Dream Weaver.

### **Part B**

**(Answer any 10; Each question carries 5 marks)**

49. What is Internet? Explain different services provided by the Internet.
50. Explain Client Server Model.
51. What are attributes? Explain with example.
52. How can we link different pages in HTML? Explain.
53. What are internal and external links?
54. Explain the Table tags.
55. Explain Frames and Frameset.
56. Explain the features of HTML.
57. Explain the selectors with suitable example.
58. Explain the client side programming languages.
59. Discuss the uses of Javascript.
60. Explain the control structures in Javascript.
61. Discuss the Event handlers in Javascript.
62. What are SMTP, POP and IMAP ?
33. Explain Document Object Model in Javascript.

### **Part C**

**(Answer any 2; Each question carries 10 marks)**

34. Explain basic formatting tags with suitable example.
35. Explain different form controls in HTML with example.
36. Discuss the form validation in Javascript with suitable example.
37. Write short notes on tags , attributes , navigation link and frameset in HTML.

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