## P4899

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## [5155]-25

## M.E. (Computer Engineering) ADVANCED INTERNET PROGRAMMING (2008 Pattern) (Elective -III)

*Time : 3 Hours] Instructions to the candidates:*  [Max. Marks : 100

- 1) Attempt any five questions out of 6 questions.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.

| Q1) | a) | Draw & Explain N-tire architecture, also explain challenges in desig  | gn of       |
|-----|----|---|-------------|
|     |    | N-tire architecture?  | [8]         |
|     | b) | Draw & explain the importance of resolver in DNS server?  | [7]         |
|     | c) | What is DOM? Explain it with suitable example?  | [5]         |
| Q2) | a) | Which design pattern is used to decouple presentation tier and busi tier? Assume suitable data and draw class diagram for the same. | ness<br>[5] |
|     | b) | Explain in details role of container, types of containers used in J architecture.   | 2EE<br>[7]  |
|     | `  |   |             |
|     | c) | Write short note on:  | [8]         |

- i) Struts frame work
- ii) J2EE specification

Q3) a) Give the definition of Java applets and explain with suitable example?[6]

- b) Write short note on:
  - i) JS functions
  - ii) JS operators
  - iii) JS variables
  - iv) JS events

[8]

| c) | How to create JS object? How to access object properties an | d object |
|----|---|----------|
|    | method?   | [6]      |

| Q4)  | a)<br>b)<br>c) | Draw & Explain four major phases of JSP life cycle? [6]<br>What are the disadvantages of CGI? How they can be overcome by<br>servlet? [6]<br>What are the methods that HTTP protocol supports to retrieve data |
|--|----------------|--|
|  | ,              | from server? Explain in detail. [8]  |
| <b>Q5)</b> a) Explain how servlet calls service () method to proce |                | Explain how servlet calls service () method to process a client's request? [6]   |
|  | b)             | Write short note on Java Beans.[6]   |
|  | c)             | Write a sample program for database connectivity using JDBC? [8]   |
| Q6)  | a)             | Explain the following concepts in terms of Evolution of Portal [8]   |
|  |                | i) Information searching   |
|  |                | ii) Information dissemination  |
|  |                | iii) Collaboration   |
|  |                | iv) Business service integration   |
|  | b)             | Define internationalization and localization? Explain its goal in detail?[6]   |

c) What are the steps to send email using Java Mail API? Explain it? [6]

