

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA – SEMESTER – IV • EXAMINATION – WINTER - 2017

Subject Code: 640002

Date: 30-12-2017

Subject Name: Web Technology & Application Development

Time: 2:30 pm – 5:00 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Do as directed: **07**
1. The JSTL expression `${24 % 3}` evaluates to be _____
 2. The topmost object in DOM hierarchy is _____
 3. `HttpServletRequest` is a/an _____ (class/interface)
 4. JavaScript is a _____
 5. The role of `DriverManager` in JDBC is _____
 6. `getCookies()` method returns _____
 7. `PreparedStatement` is used for executing _____ (stored procedures/pre-compiled SQL statements)
- (b)** What is a servlet? Explain the servlet life cycle with suitable diagram. **07**
- Q.2 (a)** What do you mean by HTTP status code? Explain all the status codes. **07**
- (b)** Explain any 5 methods of `HttpServletRequest`. **07**
- OR**
- (b)** Explain any 5 methods of `HttpServletResponse`. **07**
- Q.3 (a)** List all implicit objects of JSP and explain any 5 with suitable example. **07**
- (b)** What is a Cookie? Explain how it is used for session management with suitable example. **07**
- OR**
- Q.3 (a)** Discuss JSTL. Explain any 5 JSTL tags with suitable example. **07**
- (b)** What do you mean by JSP directive? Explain all the directives with one example each. **07**
- Q.4 (a)** Discuss Servlet/JSP filter with suitable example. **07**
- (b)** Explain JSP EL with suitable example. **07**
- OR**
- Q.4 (a)** Differentiate between (any 3): **07**
1. `jsp:include` & `jsp:forward`
 2. `doGet()` & `doPost()`
 3. Callable Statement & Prepared Statement
 4. Declarative Security & Programmatic Security
 5. `jsp:setProperty` & `jsp:getProperty`
- (b)** Discuss MVC. Explain the types of file required and the folder structure. Give suitable example using request dispatcher. **07**
- Q.5 (a)** Create a bean called `student_bean`. The attributes are roll, name & contact number. Implement the same for storing and retrieving the information. **07**
- (b)** Discuss tag library descriptor. Create a custom tag for performing substring operation. **07**

OR

- Q.5 (a)** Create a HTML form for inputting the following details: **07**
Employee ID, Employee Name and Salary.
Now write a servlet code to insert and display information using JDBC.
- (b)** Discuss web descriptor file. Explain any 5 tags with suitable example. **07**
