

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI(NEW) EXAMINATION – WINTER 2022****Subject Code:3161609****Date:17-12-2022****Subject Name:Enterprise Application Development****Time:02:30 PM TO 05:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

MARKS

- Q.1**
- (a) List out java technologies supported by J2EE along with their applications. **03**
- (b) What is Session Bean? Describe types of session bean with suitable example. **04**
- (c) Draw the JSF request processing life cycle and briefly give the function of each phase. **07**
- Q.2**
- (a) List the JSF validation Tags and explain any one. **03**
- (b) Differentiate Java beans and Enterprise Java beans **04**
- (c) Write a program to create a shopping cart in an online bookstore and uses a stateful session bean to manage the operations of the shopping cart. The bean's client can add a book to the cart, remove a book, or retrieve the cart's contents **07**
- OR**
- (c) Create a program which demonstrates how to define an asynchronous business method on a session bean and call it from a web client. The MailerBean stateless session bean defines an asynchronous method, sendMessage, which uses the JavaMail API to send an email to a specified email address. Create JavaServer Faces web application front end that uses Facelets tags in XHTML files to display a form for users to enter the email address for the recipient of an email. The status of the email is updated when the email is finally sent. **07**
- Q.3**
- (a) What is Qualifier? How EJB implements dependency injection? **03**
- (b) List various JPA Object Relational Mapping describe one with example. **04**
- (c) Explain JSF standard components in detail. **07**
- OR**
- Q.3**
- (a) What is the difference between JSON-P and JSON-B? **03**
- (b) Write a short note on PrimeFaces. **04**
- (c) Write a JSF program to authenticate user with UID and password. **07**
- Q.4**
- (a) Write an application for transferring text data using WebSocket. **03**
- (b) Briefly Explain JAVA Messaging Service (JMS) with suitable example. **04**
- (c) Explain EJB timer service with suitable example. **07**
- OR**
- Q.4**
- (a) List various annotations of JAX-RS. **03**
- (b) Write a complete code that generates JSON strings from Java objects with JSON-B. **04**
- (c) Draw and explain Enterprise JavaBean life cycles. **07**

- Q.5** (a) List various advantages of RESTful Web Services. **03**
(b) Explain various stages of Servlet Life Cycle. **04**
(c) Create a program that populate Java Objects from JSON with JSON-B **07**
- OR**
- Q.5** (a) What is filter in Servlet? What is its use? Briefly explain. **03**
(b) Differentiate JAX-WS document style and RPC style with example **04**
(c) Differentiate forward() of RequestDispatcher and sendRedirect() of HttpServletResponse. **07**

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