



**UNIVERSITY OF THE PUNJAB**  
Seventh Semester – 2019  
**Examination: B.S. 4 Years Program**

Roll No. in Fig. ....

Roll No. in Words. ....

**PAPER: Enterprise Application Development**  
**Course Code: IT-402 Part-I (Compulsory)**

**MAX. TIME: 15 Min.**  
**MAX. MARKS: 10**

Signature of Supdt.:

**Attempt this Paper on this Question Sheet only.**

**Please encircle the correct option. Division of marks is given in front of each question.**

**This Paper will be collected back after expiry of time limit mentioned above.**

**Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)**

- 1- Servlet are used to program which component in a web application.  
a) Tomcat                      b) Client                      c) Server                      d) All of the above
- 2- Which of the following is the format for EJB deployment descriptor files?  
a) XML                      b) html  
c) Java                      d) Dhhtml
- 3- Which of the following is the format for EJB deployment descriptor files?  
a) Application server                      b) Web server c) DB server d) Thin client
- 4- What type of protocol is HTTP:  
a) Stateful                      b) State less  
c) Transfer protocol                      d) Information protocol
- 5- What does MIME stand for:  
has been applied?  
a) Multipurpose Internet Messaging Extension b) Multipurpose Internet Mail Extension.  
c) Multipurpose Internet Media Extension d) Both a and c
- 6- Which JSP tag is used to transfer processing to another JSP page  
a) <jsp:include>                      b) <jsp:forward>  
c) <jsp:redirect>                      d) <jsp:include;forward>
- 7- Which of the following is true for JNDI?  
a) DB service                      b) Naming and directory service c) web service d) Network service.
- 8- Which method of the servlet is/are called several times in its life?  
a) doPost ()                      b) init ()                      c) destroy()                      d) super()
- 9- Which is not a valid scope for Java bean in JSP  
a) Page b) session c) application d) global
- 10- a) Which of the following allows substitution of code to occur at the translation time in a JSP page?  
b) <jsp:include>                      c) <@ page >                      d) <@ include>                      e) All a, b and c



**UNIVERSITY OF THE PUNJAB**

Seventh Semester – 2019

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**PAPER: Enterprise Application Development**  
**Course Code: IT-402 Part – II**

**MAX. TIME: 2 Hrs. 45 Min.**  
**MAX. MARKS: 50**

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

**Q.2. Give short answers of these questions.**

**(5x4=20)**

- 1) State the need for remote method invocation.
- 2) What is service oriented architecture.
- 3) Why CORBA uses an interface definition language?
- 4) State the difference between XML schema and XML DTD
- 5) Define Middle ware with the help of example.

**Q.3 Questions with brief answers.**

**(3 x 10 = 30)**

- 1) What is CORBA? Explain with diagrammatic illustration the building blocks of CORBA architecture.
- 2) Implement a simple networked client and server communication in java using TCP sockets.
- 3) List and discuss the steps involved in building an application using enterprise Java bean technology.



# UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program : Seventh Semester – Fall 2021

Roll No. ....

Paper: Enterprise Application Development

Course Code: IT-402

Time: 3 Hrs. Marks: 60

Q.1. Answer the following short questions:

(6x5=30)

1. Enlist the Declarative Transaction types?
2. Define ACID Properties?
3. Write down the life cycle of Java servlets?
4. Explain MVC architecture with examples.
5. How send redirection differs from request dispatcher?
6. What is the purpose of a transient variable?

Q.2. Answer the following questions.

(3x10=30)

1. Write a program to find and display the duplicate characters a in a string.
2. Write a JSP page which will dynamically create a table of Students names with their ID saved in the database. (Table: Students (ID, Name))
3. Write a code using threading in which thread takes a positive integer as an input and checks whether it's a prime number or not.



# UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program : Seventh Semester – Fall 2021

Paper: Enterprise Application Development

Course Code: IT-402

Roll N

Time: 3 Hrs. Marks: 60

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(6x5=30)

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6. What is the purpose of a transient variable?

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