

2021

B. E. (Information Technology)

Fifth Semester

IT-505(a): Java Programming / Technologies

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) Mention various access specifiers in Java.
- b) State the purpose of wait() method.
- c) What do you understand by event sources and event listeners?
- d) What is session management? Why is it required?
- e) Which interface is used to retrieve data from the databases? Also write the syntax to create an object of this interface. (5x2)

UNIT – I

- II.
 - a) What are run time exceptions in Java? Give example.
 - b) Can we write only try block without catch and finally blocks? Justify your answer.
 - c) Explain with the help of example, the different ways to create a thread in Java. Also state the major differences between the two ways. (2,2,6)
- III.
 - a) State the usage of Java packages. Which package is imported by default in any Java class?
 - b) What will be error/output of the following program?

```
class Test
{
int test_a, test_b;
Test(int a, int b)
{ test_a = a;
Test_b=b;
}
public static void main (String args[])
{
Test test = new Test();
System.out.println(test.test_a+" "+test.test_b);
}
}
```

- c) Write a Java program to find duplicate numbers in an Integer array. (3,2,5)

P.T.O.

(2)

- IV. a) What is the key distinction between *start()* and *init()* methods of an applet?
b) Write a Java Program to copy the contents of one file to another where file names are supplied as command line arguments.
c) Explain any four components of AWT. (2,4,4)

UNIT – II

- V. a) What are the advantages of Servlets over Applets?
b) Explain the methods invoked during the life cycle of a servlet.
c) What is a scriptlet in JSP and what is its syntax?
d) What are Java Beans? Write a program to illustrate the structure of JavaBeans. (2,3,2,3)
- VI. a) How is *Prepared Statement* different from *Statement* interface?
b) What is the role of the JDBC *DriverManager* class?
c) What is the purpose of using J2EE? (4,4,2)
- VII. a) What is stateless session EJB? Write down the steps for the creation of stateless session EJB.
b) List the benefits and use cases of EJB. (2x5)

x-x-x