

Total No. of Questions : 5]

SEAT No. :

**PC1173**

[Total No. of Pages : 2

**[6317]-403**

**T.Y. B.B.A. (Computer Application)**

**CA - 603 : ADVANCED JAVA**

**(CBCS 2019 Pattern) (Semester - VI)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

**Q1)** Attempt any eight of the following.

**[8×2=16]**

- a) List any 2 JDBC drivers.
- b) What is protocol?
- c) What is JSP?
- d) What is sleep ( ) method?
- e) What is session?
- f) What is TCP/IP?
- g) What is hybernate?
- h) What is port number?
- i) List any 2 implicit objects in JSP.
- j) What is thread synchronization.

**Q2)** Attempt any four of the following.

**[4×4=16]**

- a) Explain driver manager class & its methods.
- b) Write down the difference between do get ( ) & do post ( ) methods.
- c) Explain thread life cycle with diagram.
- d) What are the benefits of spring.
- e) Write a java program to display all the records from EMP table. Assume EMP (Eno, Ename, Salary) table is already created.

**P.T.O.**

**Q3)** Attempt any four of the following.

**[4×4=16]**

- a) List and explain types of result set in JDBC.
- b) Explain runnable interface with example.
- c) Explain socket & server socket classes used in networking.
- d) Write a multithreading program in java to display all the integers between 1 to 100 randomly after 2 seconds.
- e) Write a java program to delete the details of given teacher. Assume teacher table with attributes tno, tname, subject is already created.

**Q4)** Attempt any 4 of the following.

**[4×4=16]**

- a) Write a servlet application to display “Hello Java” message on the browser.
- b) List and explain any 4 directives in JSP.
- c) Explain prepared statement interface in detail with example.
- d) List different ways of session tracking. Explain any one in detail.
- e) Write a JSP script to display all the even numbers between 1 to n in Blue color.

**Q5)** Write a short note on any two of the following.

**[2×3=6]**

- a) Service ( ) method.
- b) Thread class.
- c) Hibernate.

