

Roll No. :

Total No. of Questions : 10]

[Total No. of Printed Pages : 2

BPF-2221

M.Sc. (Final) Examination, 2022

COMPUTER SCIENCE

Paper - MCS-203

(For Due and Imp. Students only)

(Java)

Time : 3 Hours]

[Maximum Marks : 100

Note :- Attempt *five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

Unit-I

1. (a) What is a Token ? List the various types of tokens supported by Java.
- (b) Explain in detail about constructor and its types. 10,10

Or

2. Discuss about method overriding with example. Explain the inheritance concept in Java with its types. 20

Unit-II

3. (a) Write about exception handling mechanism. Give the advantages of exception handling.
- (b) What is an Interface ? Explain the usage of an interface with an example. 10,10

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Or

4. Define an Applet. Describe the different stages in the life cycle of an applet. Distinguish between init() and start() methods. 20

Unit-III

5. (a) Explain how graphics are generated using AWT.
(b) Explain any *five* swing components. 10,10

Or

6. What are the benefits of swing over AWT ? Write a program to create GUI for website user registration form in swings. 20

Unit-IV

7. (a) What are the steps for querying the database with JDBC ?
(b) Explain JDBC architecture with its components. 10,10

Or

8. What is the purpose of generic servlet ? Differentiate HttpServlet class from generic Servlet class. Explain Servlet life cycle with example. 20

Unit-V

9. (a) How beans are used to build an application ? Explain with example.
(b) Define Bean class. Explain in detail about session bean. 10,10

Or

10. Define AOP concept in Java. Explain the advantages of AOP with its uses. 20