

Roll No.

2022572(022)

Diploma (Fifth Semester)

EXAMINATION, Nov.-Dec., 2021

(Scheme : New) NITTR

(Branch : CSE)

JAVA PROGRAMMING

Time : Three Hours]

[Maximum Marks : 70

[Minimum Pass Marks : 25

Note : All question are compulsory. Use programming example, whenever it is asked in question.

1. Attempt any *three* questions : $3 \times 5 = 15$

(a) Explain the various features of Java.

(b) Explain various accesses specifies in Java.

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- (c) Java is pure OOP's ? Explain your answer with explanation.
- (d) Write a program to display the output which is given below :
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2. Attempt any *three* questions :  $3 \times 5 = 15$

- (a) How we can create an object of a class ? Explain the use of new keyword.
- (b) Why garbage collection is required in java ?
- (c) What is Inheritance ? What are its types ?
- (d) Explain method over riding with example.
- (e) Develop a program to calculate factorial of a number.

3. Attempt any *three* questions :  $3 \times 5 = 15$

- (a) What is an exception ? How are they handled ?
- (b) How packages are created and imported in java ? Explain with example.

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- (c) What are the difference between interface and Abstract class ?
- (d) What is java's API Packages ?
- (e) Develop a program to explain user define exception.

4. Attempt any *one* question : 5

(a) Write short on following functions :

- (i) indexOf()
- (ii) equals()
- (iii) length()

(b) Develop given layout with help of swing class :



5. Attempt any *one* question : 5

- (a) Explain the thread life cycle in detail, along with diagram.
- (b) Explain thread synchronization with help of example.

6. Attempt any *three* questions : 3×5=15

- (a) Explain Action Event with example.
- (b) Explain MouseListener with example.
- (c) What are different methods of database connection ? Write a short note on it.
- (d) Explain following functions by using it properly in a program :
  - (i) ForName()
  - (ii) getConnection()
  - (iii) CreateStatement()
  - (iv) executeQuery()
  - (v) closing()