

GOVERNMENT POLYTECHNIC MUMBAI
TERM END EXAMINATION

Programme : Information Technology (SP)
Course Title : Java Programming

2:30 Hours / 60 marks

Enrolment No.

F 0 2 4 I 6 0 0 1

210 / 35 210 / 35

Instructions:

1. Attempt all the questions.
2. Illustrate your answers with neat sketches wherever necessary.
3. Use of Mathematical Tables, Steam Table and Pocket Calculator (non-programmable) is permissible.
4. Marks on Right Hand Side indicate full marks for the question.
5. Assume suitable additional data, if necessary
6. CO-COURSE OUTCOMES, L-LEVELS

Q.1 Attempt any SIX

12 Marks

- a. Define class & object.
- b. Define inheritance.
- c. State interfaces in java.
- d. Define user defined exceptions.
- e. State the use of generic methods in java programming.
- f. State byte stream & character stream classes.
- g. State any two classes & interfaces present in java.io package.
- h. Define streams.
- i. State arraylist.

[CO-1, L-R]
[CO-3, L-R]
[CO-3, L-R]
[CO-4, L-U]
[CO-5, L-U]
[CO-6, L-R]
[CO-6, L-U]
[CO-6, L-U]
[CO-7, L-R]

Q.2 Attempt any THREE

12 Marks

- a. Explain public static void main () method in java.
- b. Write a program to demonstrate static methods in java.
- c. Explain dynamic method dispatch with example.
- d. Explain Lambda expression with example.

[CO-1, L-U]
[CO-2, L-A]
[CO-3, L-U]
[CO-5, L-U]

Q.3 Attempt any THREE

12 Marks

- a. Explain constructor overloading with example.
- b. Write a program to demonstrate use of super keyword to call super class's constructor in inheritance.
- c. Explain how to create user defined package in java.
- d. State and explain inner classes in java.

[CO-2, L-U]
[CO-3, L-A]
[CO-3, L-U]
[CO-5, L-U]

Q.4 Attempt any FOUR

12 Marks

- a. Explain thread priority with example.
- b. State the use of 'throws' keyword in exception handling in java along with example.
- c. Write short note on - Bounded generics.
- d. Define functional interface. Explain it with example.
- e. Explain list interface with example.

[CO-4, L-U]
[CO-4, L-A]
[CO-5, L-A]
[CO-5, L-U]
[CO-4, L-U]

Q.5 Attempt any TWO

12 Marks

- a. Write short note on : (i) Array (ii) Strings in java.
- b. Draw the neat diagram of thread's life cycle. Explain each state in detail.
- c. Write a program to read data from one file & write that data in another file using character stream classes.

[CO-2, L-U]
[CO-4, L-U]
[CO-6, L-A]