

## II B. Tech II Semester Model Question Paper, March - 2018

## JAVA PROGRAMMING

(Computer Science Engineering)

Time: 3 hours

Max. Marks: 70

---

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)2. Answering the question in **Part-A** is compulsory3. Answer any **FOUR** Questions from **Part-B**

\*\*\*\*\*

**PART -A**

- |   |  |      |
|---|--|------|
| 1 | a) Define class and object in java.  | [4M] |
|   | b) Write a java program to create multiple threads                               | [4M] |
|   | c) Write a java program using ternary operator to find maximum of three numbers. | [3M] |
|   | d) List the methods in thread class.   | [3M] |

**PART -B**

- |   |   |       |
|---|---|-------|
| 2 | List and explain Java buzzwords. Which factors are making Java famous language.                         | [14M] |
| 3 | a) Give the naming conventions in Java.   | [7M]  |
|   | b) Explain the conditional instructions in detail.  | [7M]  |
| 4 | What are the benefits of inheritance? Explain various forms of inheritance with suitable code segments. | [14M] |
| 5 | Explain thread life cycle and thread creation in Java with example.                                     | [14M] |
| 6 | What is an applet? Explain its life cycle.  | [14M] |
| 7 | a) Discuss various AWT containers with examples.  | [7M]  |
|   | b) What is the significance of Layout managers? Discuss briefly various layout managers                 | [7M]  |

\*\*\*\*\*

Code No: R1622052

**R16****SET - 2****II B. Tech II Semester Model Question Paper, March - 2018****JAVA PROGRAMMING**

(Computer Science Engineering)

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)2. Answering the question in **Part-A** is compulsory3. Answer any **FOUR** Questions from **Part-B**

\*\*\*\*\*

**PART -A**

- |   |  |      |
|---|--|------|
| 1 | a) How java supports multiple inheritance.                         | [4M] |
|   | b) Write a java program to create a thread.                        | [4M] |
|   | c) Write the table that shows the precedence of operators in java. | [3M] |
|   | d) List the controls supported by AWT.                             | [3M] |

**PART -B**

- |   |   |              |
|---|---|--------------|
| 2 | Discuss the principles of object oriented languages in detail.  | [14M]        |
| 3 | Illustrate constructor overloading. Give the brief note on operators in java.                         | [14M]        |
| 4 | Give a detail note on interfaces and packages in java with examples.                                  | [14M]        |
| 5 | Discuss about writing console output.<br>Write a java program to implement producer consumer problem. | [7M]<br>[7M] |
| 6 | Explain briefly about applet life cycle.  | [14M]        |
| 7 | a) Write a java program that computes factorial of a number when you enter that number in text field. | [7M]         |
|   | b) Compare the features of Applet with JApplet  | [7M]         |

\*\*\*\*\*

**II B. Tech II Semester Model Question Paper, March - 2018**

**JAVA PROGRAMMING**

(Computer Science Engineering)

Time: 3 hours

Max. Marks: 70

- 
- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answering the question in **Part-A** is compulsory  
3. Answer any **FOUR** Questions from **Part-B**  
\*\*\*\*\*

**PART -A**

- |   |    |  |      |
|---|----|--|------|
| 1 | a) | Draw the thread life cycle..                               | [4M] |
|   | b) | Write about garbage collection                             | [4M] |
|   | c) | List the thread states and given state transition diagram. | [3M] |
|   | d) | Differentiate between swing components and AWT components. | [3M] |

**PART -B**

- |   |    |   |       |
|---|----|---|-------|
| 2 |    | Compare the incremental model and the spiral model.   | [16M] |
| 3 |    | Describe various prototyping techniques and object oriented analysis and modeling principles.           | [16M] |
| 4 |    | What is transform mapping? Explain the process with an illustration. What is its strength and weakness? | [16M] |
| 5 |    | Explain black box testing methods and its advantages and disadvantages.                                 | [16M] |
| 6 |    | Explain in detail about COCOMO model.   | [16M] |
| 7 | a) | What is software maintenance? How to control maintenance cost?  | [8M]  |
|   | b) | What is meant by software quality? Give an overview of software quality factor.                         | [8M]  |

\*\*\*\*\*

**II B. Tech II Semester Model Question Paper, March - 2018****JAVA PROGRAMMING**

(Computer Science Engineering)

Time: 3 hours

Max. Marks: 70

- 
- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answering the question in **Part-A** is compulsory  
3. Answer any **FOUR** Questions from **Part-B**  
\*\*\*\*\*

**PART -A**

- 1 a) List the various ways of static keyword usage. [4M]
- b) Illustrate the usage of this keyword [4M]
- c) Write about thread suspension and resume. [3M]
- d) What are the differences between applet and application programs? [3M]

**PART -B**

- 2 a) Define software. List and explain about the elements of a software process. [8M]
- b) With suitable illustration explain SPIRAL model . [8M]
- 3 Describe various prototyping techniques and discuss on object oriented analysis and modeling. [16M]
- 4 Explain the importance of user interface design in sale of software. [16M]
- 5 What are the various testing strategies to software testing? Discuss them briefly. [16M]
- 6 Explain the need for software measures and describe various metrics. [16M]
- 7 a) Discuss the concept of software maintenance process. [8M]
- b) What is meant by SQA? Discuss in detail SQA activities. [8M]

\*\*\*\*\*

## II B. Tech II Semester Regular Examinations, April - 2018

## JAVA PROGRAMMING

(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)2. Answer **ALL** the question in **Part-A**3. Answer any **FOUR** Questions from **Part-B**

~~~~~

**PART -A**

1. a) How to use break and continue statements in java?
- b) Illustrate the importance of this keyword in java.
- c) Differentiate compile time errors and runtime errors in java.
- d) What is assertion? Give example.
- e) List the advantages and disadvantages of applet.
- f) Differentiate GridLayout and GrodBagLayout.

**PART -B**

2. a) Write about the role of JVM, JAVA API in developing the platform independent java program with suitable example.
- b) What are the two control structures used in java for making decisions? Explain with an example program.
3. a) Can we use constructors with parameters? What kind of parameters can be given? Explain with area of various geometric shapes example.
- b) With an example program explain the concept of classes and nested classes in java.
4. a) Write a program that shows an Employee class which contains various methods for accessing employee's personal information and methods for paying an employee.
- b) Give the syntax of exception handling and also handle exception occurred during the execution of divide by zero
5. a) Write a program to read and write disk file character by character using Reader and Writer classes.
- b) Explain thread synchronization with respect to multithreading. Why is it important?
6. a) Explain the process of event handling through delegation model.
- b) Create an event listener for Action Event.
7. Explain different types Layout managers present in AWT with sample programs.

II B. Tech II Semester Regular Examinations, April - 2018

JAVA PROGRAMMING

(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answer **ALL** the question in **Part-A**  
3. Answer any **FOUR** Questions from **Part-B**

~~~~~  
**PART -A**

1. a) Write about the relationship between OOPs, OODesign and OOAnalysis.  
b) Relate objects, classes and methods.  
c) What is the importance of CLASSPATH.  
d) Write about FileInputStream and FileOutputStream.  
e) How applet is different from application? Explain.  
f) What are the types of check boxes present in awt.

**PART -B**

2. a) Write a java program that inputs an integer, 'n' from the command line and displays the string "1+2+3+...+n=sum" and also compute the sum.  
b) How to implement precedence rules and associativity in java language? Give an example.
3. a) Design a class that represents a bank account and construct the methods to
  - i) Assign initial values
  - ii) Deposit an amount
  - iii) Withdraw amount after checking balance
  - iv) Display the name and balance.  
b) Do you need to use static keyword for the above bank account program? Explain.
4. a) Write a program which specify that there are two classes Rectangle and Circle which implements the interface and find the area of rectangle and circle  
b) Demonstrate nested try statements and finally statements.
5. a) How to provide random access to a file through deserialization? Explain.  
b) Write a java program to create multiple threads. And explain the advantages of multithreading.
6. a) Write a java code to create applet and customize it based on input parameters  
b) Write different methods present in Window Listener interface.
7. a) Write a program to design calculator using awt.  
b) Explain various event adopter classes in awt and also give their syntaxes in java.

II B. Tech II Semester Regular Examinations, April - 2018

JAVA PROGRAMMING

(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answer **ALL** the question in **Part-A**  
3. Answer any **FOUR** Questions from **Part-B**

~~~~~  
**PART -A**

1. a) What is data abstraction? Differentiate data and procedural abstractions.  
b) Write about multidimensional arrays in java.  
c) Write the similarities and differences between abstract class and interface.  
d) Describe the lifecycle of a thread.  
e) Differentiate local and remote applet.  
f) Write different types of controls supported by awt.

**PART -B**

2. a) What are the different primitive data types in java? Give their sizes in bits. How they are different from reference data types?  
b) Write a java program to illustrate the increment & decrement operators, shift operators and ternary operator.
3. a) What is the importance of constructor? Write a java program to perform constructor overloading.  
b) Describe the usage of static members and nesting members with suitable example programs in java.
4. a) Write inheritance hierarchy for the super class Quadrilateral, Parallelogram, Square and Rectangle. Calculate area of square, rectangle and parallelogram.  
b) Give the list of mostly used java API packages and also explain adding more classes to a package.
5. a) What do you mean by multithreading? Develop a simple application program to illustrate the use of multithreading.  
b) "Intercommunication between thread is relatively economical than processes" justify this statement.
6. a) Write an applet program that will take an input from the user to calculate the sum of two integers.  
b) Differentiate adopter classes and inner classes with examples.
7. Differentiate the following
  - i) TextField and TextArea.
  - ii) Menu and MenuItem.
  - iii) Checkbox and CheckboxGroup.

II B. Tech II Semester Regular Examinations, April - 2018

JAVA PROGRAMMING

(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answer **ALL** the question in **Part-A**  
3. Answer any **FOUR** Questions from **Part-B**

~~~~~  
**PART -A**

1. a) What are the components of JAVA platform? Explain.  
b) Specify the importance of garbage collection.  
c) What is interface? How does it support multiple inheritance in java  
d) Differentiate the operations suspending and stopping a thread.  
e) Write about the attributes of applet tags.  
f) What are the subclasses of Container class?

**PART -B**

2. a) How to perform type casting in java? Differentiate it from primitive type conversion with an example program.  
b) Write a java program to illustrate the usage of conditional statements and looping statements.
3. a) Discuss declaration, allocation and accessing array elements in java with matrix multiplication example.  
b) Write about command line arguments. Accept the input from keyboard to display Fibonacci series.
4. a) What is method overriding? Illustrate the concepts of method overriding and constructor overriding.  
b) With sample program explain the creation of packages. Accessing a package and hiding classes with packages.
5. a) What is thread scheduling? How to perform this by setting priorities to threads. explain with an example program.  
b) What are the states associated with threads? Write a java program for thread creation.
6. a) Explain various states in the life cycle of an applet. And also give the syntax of each state.  
b) What are the sources of events? How to handle the events in java through event Listeners.
7. a) How do you change the current layout manager for a container?  
b) Write a program in awt to design the registration form.



**II B. Tech II Semester Regular/ Supplementary Examinations, April/May - 2019**

**JAVA PROGRAMMING**

(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answer **ALL** the question in **Part-A**  
3. Answer any **FOUR** Questions from **Part-B**

~~~~~

**PART -A**

1. a) Justify the validity of the statement “Byte code of Java gives high performance”. (2M)
- b) What is the need of garbage collection in Java? (2M)
- c) What happens when there is no suitable try block to handle exception? (2M)
- d) Write the purpose of FileInputStream and FileOutputStream. (2M)
- e) How PARAM TAG is helpful in applets? (3M)
- f) Write different event sources for AWT. (3M)

**PART -B**

2. a) Demonstrate precedence rules and associativity with an example Java program. (7M)
- b) List and explain Java Buzz words, in detail. (7M)
3. a) How to share the data among the functions with the help of static keyword? Explain the same with an example. (7M)
- b) Explain the usage of constructor and types of constructors in Java. (7M)
4. a) What is method overriding? Illustrate the concepts of method overriding with an example. Is constructor overriding is possible in Java? (7M)
- b) Write different types of inheritances in Java and give an example for each. (7M)
5. a) Explain multi threading. Write the purpose of isAlive() and join() functions in java. Explain the same with an example. (7M)
- b) Write a Java program that reads from the ‘text’ file using FileReader. (7M)
6. Develop an applet program to change the foreground and background colors and to display the message in the order in which the init(), start() and paint() methods are called. (14M)
7. Discuss various AWT controls in Java in detail? (14M)

**II B. Tech II Semester Regular/ Supplementary Examinations, April/May - 2019**
**JAVA PROGRAMMING**

(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
 2. Answer **ALL** the question in **Part-A**  
 3. Answer any **FOUR** Questions from **Part-B**
- ~~~~~

**PART -A**

1. a) Is Java a secure and robust language? Justify your answer. (2M)
- b) Write the purpose of this keyword in Java. (2M)
- c) Does java support multiple inheritance? Justify your answer. (2M)
- d) List various methods in Thread class. (2M)
- e) Write the advantages and disadvantages of applet. (3M)
- f) What types of check boxes are present in AWT? (3M)

**PART -B**

2. a) Discuss various principles of object oriented programming. (7M)
- b) Write a java program to illustrate the increment & decrement operators, shift operators and ternary operator. (7M)
3. a) Can we use constructors with parameters? What type of parameters can be passed for this? Explain the same with an example. (7M)
- b) Write a Java program to demonstrate garbage collection. (7M)
4. a) Write a Java program to create a package where the program has to access a package and hide classes with packages. (7M)
- b) Illustrate the use of 'super' and 'final' key words in java. Write the importance of abstract classes. (7M)
5. a) How can you perform thread scheduling by setting priorities to threads? Explain the same with an example. (7M)
- b) Write a Java program to read from file and print file data on the user screen. (7M)
6. a) Discuss various states in the life cycle of an applet in detail. (7M)
- b) What is an event? Explain the methods that are available to handle events in Java. (7M)
7. Explain about Border Layout? Write a Java program which creates Border Layout and adds two Checkboxes to it? (14M)

**II B. Tech II Semester Regular/ Supplementary Examinations, April/May - 2019**

**JAVA PROGRAMMING**

(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answer **ALL** the question in **Part-A**  
3. Answer any **FOUR** Questions from **Part-B**
- ~~~~~

**PART -A**

1. a) Why Java is architectural neutral language? (2M)
- b) Write the purpose of static keyword in Java. (2M)
- c) Write the need of CLASSPATH in Java. (2M)
- d) Write various operations to suspend and stop a thread. (2M)
- e) Write the difference between applet and application. (3M)
- f) What are the different types of controls supported by AWT? (3M)

**PART -B**

2. a) How to implement type casting in Java? How it is different from primitive type conversion? Explain it with an example. (7M)
- b) Explain the architecture of Java Virtual Machine with a neat diagram. (7M)
3. a) Write a Java program to overload a constructor. (7M)
- b) Write the importance of command line arguments. Write a Java program which accepts the input from keyboard to display Fibonacci series. (7M)
4. a) List the mostly used java API packages and explain how to add more classes to a package. (7M)
- b) Demonstrate nested try and final statements in exceptional handling. (7M)
5. a) Discuss Inter thread communication with examples. (7M)
- b) Write the procedure to read from a file using File Reader class. (7M)
6. a) Write the procedure to handle events in Java through event listeners. (7M)
- b) Discuss various methods present in Window listener interface. (7M)
7. How to create menus and menu bars using AWT? Explain with examples. (14M)

**II B. Tech II Semester Regular/ Supplementary Examinations, April/May - 2019**

**JAVA PROGRAMMING**

(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)  
2. Answer **ALL** the question in **Part-A**  
3. Answer any **FOUR** Questions from **Part-B**

~~~~~

**PART -A**

1. a) Define data abstraction. Write the differences between data and procedural abstractions. (2M)
- b) Write the importance of static constructor. (2M)
- c) Write the differences between abstract class and interface. (2M)
- d) Write a java program to create a thread. (2M)
- e) Define adapter class. (3M)
- f) What are the subclasses of container class? (3M)

**PART -B**

2. a) Discuss various primitive data types in Java in detail. Explain how they are different from reference data types. (7M)
- b) Write the problems associated with procedure languages. Elaborate how object oriented languages overcomes the problems of procedural languages. (7M)
3. a) Elaborate the use of static and nesting members in Java with suitable examples. (7M)
- b) How to assign the values to the variables in the class during the time of creation of an object to that class? Explain with an example. (7M)
4. a) Define an interface. Explain the definition and implementation of interface in java. (7M)
- b) Write the need of exceptional handling. Demonstrate Java program for array index out of bound and divide by zero exception. (7M)
5. a) Write the states associated with threads. Write a Java program to create a thread. (7M)
- b) Explain the purpose of BufferedWriter and BufferedReader classes in Java with an example. (7M)
6. a) Develop a simple banner applet using repaint() method to scroll a message from left to right and across the applets window. (7M)
- b) Write the importance of event delegation model. (7M)
7. a) Write a program in AWT to design a registration form. (7M)
- b) Write a program to design a calculator using AWT. (7M)

## II B. Tech II Semester Supplementary Examinations, November - 2018

## JAVA PROGRAMMING

(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)2. Answer **ALL** the question in **Part-A**3. Answer any **FOUR** Questions from **Part-B**

~~~~~

**PART -A**

1. a) How JAVA is a platform independent language? 3M
- b) Why 'main ()' method is declared as **public static** in JAVA programming? 2M
- c) Does JAVA support Multiple Inheritance? Give Explanation. 2M
- d) What is Multithreading? 2M
- e) Why does an Applet not need a main() method? Explain. 2M
- f) List the differences between AWT and Swings 3M

**PART -B**

2. a) Write any six significant differences between Procedure Oriented Programming and Object Oriented Programming. 6M
- b) Why JAVA is Robust programming language? Explain. 4M
- c) With a neat diagram, explain the Java Virtual Machine architecture. 4M
3. a) What are objects and how they are created from Class? Explain the dynamic initialization of objects using constructors. 7M
- b) When to use a Static variable in JAVA programming? Explain the importance of Static Variable with a JAVA program. 7M
4. a) What is meant by Inheritance and why it is important in Object Oriented Programming? Explain different types of inheritance supported in JAVA with example programs. 10M
- b) What is an Assertion in JAVA? Write JAVA program to illustrate the importance of assert statement. 4M
5. a) With a neat sketch, explain the lifecycle of a Thread in JAVA programming. 7M
- b) Write a JAVA program to display the number of characters, words, and lines in a given file. 7M
6. What is an Event? What are the various sources of Events? Explain the delegation event model of handling events with a suitable JAVA program. 14M

7. a) Write short notes on

i) Different ways of creating a frame in AWT

5M

ii) AWT Layout Manager

5M

iii) JAVA AWT Checkbox

4M