Hall Ticket Number:

CS/IT216(R18)

B.TECH. DEGREE EXAMINATION, DECEMBER-2020

Semester III [Second Year] (Regular & Supplementary)

OBJECT ORIENTED PROGRAMMING

Time: Three hours | Maximum Marks: 60

Answer Question No.1 compulsorily. (12 x 1 = 12)
Answer One Question from each unit. (4 x 12 = 48)

1. Answer the following:

(a)	Define interface.	CO1
(b)	Write about conditional operators in Java.	CO1
(c)	What is transient variable?	CO1
(d)	When is super keyword used?	CO2
(e)	Define dynamic method dispatch.	CO2
(f)	Explain the concept of Extending Interfaces.	CO2
(g)	What is the use of function destroy()?	CO3
(h)	How can packages be imported in Java?	CO3
(i)	Write about Window Listener Event Handling.	CO5
(j)	What is the purpose of Appletviewer?	CO4
(k)	Mention various JDK tools.	CO4
(l)	List any three Swing components.	CO5

UNIT – I

2. (a) What are features of Java? Explain. (6M) CO1

   (b) Explain the concept of Classes, Objects and Methods in JAVA. Also write a program to explain the concept of Overriding Methods with reference to classes. (6M) CO1

(OR)

3. (a) What do you understand by inheritance? Explain multiple inheritance with the help of a Java program. (6M) CO1

(b) Differentiate classes and interfaces. Also state their advantages and disadvantages. (6M) CO1

UNIT – II

4. (a) Describe the following methods related to strings: replace(), CompareTo() and CharAt(). (6M) CO2

(b) Create a Date class in Java having day, month and year as data members. Create constructors for initializing data member function for validating data members and displaying the data. (6M) CO2

(OR)

5. (a) Differentiate process and thread. Explain the life cycle of a thread with relevant examples. (6M) CO3

(b) What are the types of Exception? Explain the usage of try, catch and throw and finally with the help of a program. (6M) CO3

UNIT – III

6. (a) Differentiate byte and character streams with the help of examples. (6M) CO4

(b) What is the purpose of applet programming in Java? Explain the life cycle of an applet in detail. (6M) CO4

(OR)

7. (a) Explain with examples the various graphics methods supported by AWT. How color of an object can be changed? Demonstrate with the help of a program. (6M) CO4

(b) Differentiate between Generic method and Generic class. (6M) CO4

UNIT – IV

8. (a) Explain Java AWT basics. Explain the syntax of TextArea layout in AWT package. (6M) CO4

(b) What is event class? Write a program for mouse event handler. (6M) CO5

(OR)

9. (a) Distinguish between swing and AWT with the help of relevant examples. (6M) CO4

(b) Write a program on layout managers. (6M) CO5

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CS/IT216(R18)

Hall Ticket Number:

CS/IT216(R18)

B.TECH. DEGREE EXAMINATION, MARCH-2021

Semester III [Second Year] (Regular & Supplementary)

OBJECT ORIENTED PROGRAMMING

Time: Three hours | Maximum Marks: 60

Answer Question No.1 compulsorily. (12 x 1 = 12)
Answer One Question from each unit. (4 x 12 = 48)

1. Answer the following:
   (a) List the different data types in Java. CO1
   (b) How to declare a nested class in Java? CO1
   (c) Define an interface. CO1
   (d) Give the syntax of importing a package in Java. CO2
   (e) What are the command line arguments? CO2
   (f) What are the different ways of creating a thread in Java? CO2
   (g) What are the file streams in Java? CO3
   (h) What is a generic class in Java? CO3
   (i) What is the use of <param> tag? CO3
   (j) List the different event classes in Java. CO4
   (k) What is the use of adapter class in Java? CO4
   (l) List the different swing containers. CO4

UNIT – I

2. (a) Discuss the usage of static keyword. (6M) CO1
   (b) Design a Java program using a nested class. (6M) CO1

(OR)

3. (a) Develop a Java program to implement multiple inheritance in Java. (6M) CO1
   (b) Explain the usage of super keyword in Java. (6M) CO1

UNIT – II

4. (a) Write about String and StringBuffer classes in Java. (6M) CO2
   (b) What is a thread? Explain the different states of thread during its lifetime. (6M) CO2

(OR)

5. (a) How to create an user defined exception? Illustrate with an example. (6M) CO2
   (b) Discuss the concept of resource locking using synchronized modifier. (6M) CO2

UNIT – III

6. (a) Draw the state transition diagram of an applet and discuss applet life cycle. (6M) CO3
   (b) How to pass parameters to an applet from a HTML page? Illustrate with an example. (6M) CO3

(OR)

7. (a) Write about Java streams. (6M) CO3
   (b) Write an applet program for drawing different shapes using Graphics class. (6M) CO3

UNIT – IV

8. (a) Discuss different layout managers in Java. (6M) CO4
   (b) Develop a Java application for creating menus and handling menus. (6M) CO4

(OR)

9. (a) Write a Java program for handling ActionEvent and WindowEvent. (6M) CO4
   (b) Explain the use of Adapter classes. Write a Java program for handling a event using Adapter class. (6M) CO4

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Hall Ticket Number:

CS/IT216(R18)

B.TECH. DEGREE EXAMINATION, FEBRUARY-2020

Semester III [Second Year] (Supplementary)

OBJECT ORIENTED PROGRAMMING

Time: Three hours | Maximum Marks: 60

Answer Question No.1 compulsorily. (12 x 1 = 12)
Answer One Question from each unit. (4 x 12 = 48)

1. Answer the following:
   (a) What is JDK?
   (b) Distinguish between instance methods and class methods.
   (c) Java is architecture neutral, Justify.
   (d) Define a package.
   (e) How command line arguments are received in Java?
   (f) List the different built-in exceptions in Java.
   (g) Define a stream.
   (h) Distinguish between local applet and remote applet.
   (i) What is a generic class in Java?
   (j) How to handle events in Java?
   (k) How to create a menu in Java?
   (l) What are the advantages of Swing components?

UNIT – I

2. (a) Write about Java buzz words. (6M)
   (b) Discuss different data type conversion methods in Java. (6M)

(OR)

3. (a) Distinguish between method overloading and method overriding, Illustrate with examples. (6M)
   (b) How to design and implement an interface? (6M)

UNIT – II

4. (a) How to create packages in Java? Write about access control protection in Java packages. (6M)
   (b) Write a Java program to implement the concept of multithreading. (6M)

(OR)

5. Define an exception. Discuss in detail the exception handling mechanism supported by Java, illustrate with examples.

UNIT – III

6. (a) Discuss Java stream classes. (6M)
   (b) Write an applet program for drawing different shapes. (6M)

(OR)

7. (a) Write a Java program using a Graphics class. (6M)
   (b) Discuss different states of applet life cycle. (6M)

UNIT – IV

8. Discuss in detail the event handling mechanism supported by Java. Give examples.

(OR)

9. (a) Write a Java program for handling mouse events. (6M)
   (b) Explain the Swing components JTree and JTable. (6M)

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Hall Ticket Number:

CS/IT216(R18)

B.TECH. DEGREE EXAMINATION, OCTOBER-2019

Semester III [Second Year]

OBJECT ORIENTED PROGRAMMING

Time: Three hours | Maximum Marks: 60

Answer Question No.1 compulsorily. (12 x 1 = 12)
Answer One Question from each unit. (4 x 12 = 48)

1. Answer the following:
   (a) Java is platform independent. Justify.
   (b) What are Zagged Arrays?
   (c) What is the use of implements keyword?
   (d) Define Abstract Class
   (e) Write the importance of interfaces.
   (f) Why do threads block an I/O?
   (g) How would you access a package?
   (h) Define multithreading.
   (i) How does Java handles integer overflows and underflows?
   (j) What is byte code?
   (k) Write an applet code to draw Rectangle using Graphics class.
   (l) Describe delegation event model.

UNIT – I

2. (a) How Java is different from C++? Explain. (6M)
   (b) What are the various primitive data types available in Java? Also specify memory requirements and range of each. (6M)

(OR)

3. (a) What is Object Oriented Programming? Discuss the basic concepts of Object Oriented Programming. (6M)
   (b) Write a Java program to find the sum of first 100 prime numbers. (6M)

UNIT – II

4. (a) What are classes and interfaces? Differentiate between them. (6M)
   (b) Describe the level of access protection available for packages. (6M)

(OR)

5. (a) Describe dynamic dispatch method with an example. (6M)
   (b) What is error and exception handling in Java? How would you handle an exception using Try and Catch? (6M)

UNIT – III

6. (a) What are the inbuilt streams available in Java I/O package? Discuss data input and output streams. (6M)
   (b) Write an Applet for each of the following Graphics methods: drawline(), drawoval() and filloval(). (6M)

(OR)

7. (a) What is an applet? How is it different from application? Explain. (6M)
   (b) What are the applications of list, queue and set? Explain with the help of small examples. (6M)

UNIT – IV

8. (a) What is AWT? Explain various AWT controls available in Java. (6M)
   (b) Explain the basic components of JDBC. Explain in detail the different drivers of JDBC. (6M)

(OR)

9. (a) Develop swing application which uses JTree, JButton and JCheckbox classes. (6M)
   (b) What do you understand by event handling? Explain the event class hierarchy. (6M)

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