

# CBCS Scheme

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15CS553

## Fifth Semester B.E. Degree Examination, Dec.2017/Jan.2018 Advanced Java and J2EE

Time: 3 hrs.

Max. Marks: 80

**Note: Answer any FIVE full questions, choosing one full question from each module.**

### Module-1

- 1 a. What are Enumerations? Explain values ( ) and value of ( ) methods with an example program. (04 Marks)
- b. What is Autoboxing? Write a Java program that demonstrates autoboxing or unboxing. (04 Marks)
- c. What are Annotations? Explain the following Built - in annotations with program as an example @Override @inherited @Retention. (08 Marks)

**OR**

- 2 a. Explain the following methods of java.lang.Enum with an example program.
  - i) ordinal ( )
  - ii) compareTo
  - iii) equals ( )(08 Marks)
- b. Explain how to obtain Annotations at Run Time by use of Reflection. (08 Marks)

### Module-2

- 3 a. What is a collection Framework? And explain the methods defined by collection interface. (08 Marks)
- b. Explain the methods defined by List Iterator interface. (08 Marks)

**OR**

- 4 a. Explain the constructors of TreeSet class and write a java program to create TreeSet collection and access it via an Iterator. (08 Marks)
- b. Explain any four legacy classes of Java's collection Framework. (08 Marks)

### Module-3

- 5 a. What is string in Java? Write a Java program that demonstrates any four constructors of string class. (08 Marks)
- b. Differentiate between equals ( ) and == with respect to string comparison. (04 Marks)
- c. Explain the following character Extraction methods.
  - i) Char A + ( )
  - ii) tochar Array ( )(04 Marks)

**OR**

- 6 a. Explain how to modify a string by using following methods.
  - i) substring ( )
  - ii) concat ( )
  - iii) replace
  - iv) trim ( )(08 Marks)

- b. Explain the following methods of stringBuffer class.
- i) append ()
  - ii) insert ()
  - iii) reverse ()
  - iv) replace.

(08 Marks)

**Module-4**

- 7 a. Explain the Life cycle of Servlets. (04 Marks)  
b. List and explain core classes and interfaces in javax.servlet package. (08 Marks)  
c. Write short note on HTTP request and response. (04 Marks)

**OR**

- 8 a. What is a Cookie? List out methods defined by Cookie? Write a java program to add a Cookie. (08 Marks)  
b. Define JSP. Explain different types of JSP tags by taking suitable example. (08 Marks)

**Module-5**

- 9 a. Explain the four types of JDBC drivers. (06 Marks)  
b. Describe the various steps of JDBC with code snippets. (10 Marks)

**OR**

- 10 a. Write a Java program to execute a database transaction. (08 Marks)  
b. Explain : (08 Marks)  
i) Callable statement object  
ii) Prepared statement object

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