U.S.N | | | | | | | | | |

P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution under VTU, Belgaum)
Third Semester, Master of Computer Applications (MCA)
Semester End Examination; Dec - 2016/Jan - 2017
Programming Using JAVA

Time: 3 hrs   *Max. Marks: 100*

Note: Answer **FIVE** full questions, selecting **ONE** full question from each unit.

UNIT - I

1 a.	Describe the general structure of a simple Java program.	10
b.	List and explain the characteristics features of Java language.	10
2 a.	Discuss various data types used in Java.	10
b.	Explain the following : i) Access specifies ii) Type casting.	10

UNIT - II

3 a.	What is constructor? Explain the different types of constructors.	10
b.	What is string comparison? Explain the different methods in string comparison.	10
4 a.	What is the difference between overloaded methods and overriden methods? Demonstrate a program explaining each.	10
b.	With a suitable example explain the uses of : i) Static ii) Inner class.	10

UNIT - III

5 a.	What is inheritance? Explain the different types of inheritance.	10
b.	Explain the following with examples : i) Final class ii) Abstract class.	10
6 a.	What are interfaces? What are their benefits? Explain how it is implemented in Java with suitable example.	10
b.	What is exception? Explain the exception handling mechanism with a simple example.	10

UNIT - IV

7 a.	Develop a program to create multithreads with different priorities.	10
b.	What is inter-thread communication? Why do we need it?	10
8 a.	What is enumeration? Explain values( ) and valueOf( ) methods with example.	10
b.	Write a note on: i) Synchronizations ii) Generic constructors.	10

UNIT - V

9 a.	Explain different stages in the life cycle of an Applet. Demonstrate with a program.	10
b.	What are swings? List the features of swings.	10
10 a.	Write a Java program to handle mouse event using mouse listener.	10
b.	With a program, explain and give the difference between URL connection class and HTTP URL connection class.	10

✳ ✳ ✳