

Name:	 UPES <small>UNIVERSITY WITH A PURPOSE</small>
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course:	Object Oriented Programming	Semester:	III
Program:	B.Tech.(CSE)-BAO,BFSI, CCVT, ECOM-RA, Mainframe Technology, IT-Infrastructure, Graphics & Gaming,Mobile Application Development)	Time	: 03 hrs.
Course Code:	CSEG 2016	Max. Marks:	100

Instructions: Answer all the questions

SECTION A

S. No.		Marks	CO
Q1	What is an anonymous class? Explain the different types of anonymous class with an example	4	CO1
Q2	Draw the architecture of JVM and explain all the functional blocks of JVM	4	CO2
Q3	What is java collection? What are the difference between Throw and Throws exception	4	CO5
Q4	Give suitable examples to read from and write bytes to a file?	4	CO3
Q5	What is JDBC Connection? Explain steps to get Database connection in a simple java program.	4	CO5

SECTION B

Q 6	Create a Date class in Java having day, month and year data members. Create constructors for initializing data members, functions for validating date, getting values of data members and displaying the date.	10	CO4
Q7	Explain the Various Networking Classes and interfaces using Java.Net Package?	10	CO2
Q8	Describe interfaces & how to implement it with a Java Program?	10	CO5
Q9	Explain the concept of streams and about stream classes and classification? OR What is a wrapper class? Explain any five java wrapper class with an example	10	CO1, CO3

SECTION-C

Q10	a). Describe Servlets with a Java Program? (10 Marks) b). What is nested class in Java? Explain the different types of nested class with an example.(10 Marks)	20	CO5
Q11	c). Write a Java program for sorting of strings and searching a string from an array? (10 Marks) d). Explain the following string functions with an example; concat(), replace(),	20	CO2, CO4

split(), join().

OR

An election is conducted by 5 candidates. the candidates are numbered 1 to 5 and the voting is done by marking the candidate number on the ballot paper. Write a java program to read the ballot and count the votes by each candidates. In case a number read is outside the range 1 to 5, the ballot should be considered as a spoiled ballot.
(10 Marks)