APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER B.TECH DEGREE EXAMINATION, DEC 2018

Course Code: CS206	
Course Name: OBJECT ORIENTED DESIGN AND PROGRAMMING (CS)	

Scheme of Valuation/Answer Key

(Scheme of evaluation (marks in brackets) and answers of problems/key)

PART A

			Answer all questions, each carries 3 marks.	Marks
1			Use Case diagram showing the actors and functionality	(3)
2			Significance of byte code	(3)
3			Definition of constructor : 1 mark Uses : 2 marks	(3)
4			Description of each qualifier of *main* method : 1 mark each	(3)

PART B

		Answer any two full questions, each carries 9 marks.	
5	a)	Java code of a class named "Shape" with three private instance variables and three methods – 2 public and one protected	(5)
	b)	Description of any four features of Java(4 *1 = 4 marks)	(4)
6	a)	Java program to check whether a given number is prime or not	(4)
	b)	Each shift operator (Shift right >>,Shift left <<, and Shift right with zero fill >>>)in java with an example	(5)
7	a)	The visibility of all access specifiers namely private, protected, default, and public with respect to; same class, same package sub-class, same package non sub-class, different package sub-class, different package non sub-class.	(6)
	b)	No. it is not possible. Default constructor must be defined	(3)

PART C

	Answer all questions, each carries 3 marks.	
8	No, Only public classes and interfaces within a package will be available. Sub-packages will not be imported.	(3)
9	Use of "*finally*" statement in exception handling	(3)
10	Names of Sub-classes of Writer class : 1.5mark Names of Sub-classes of Reader class: 1.5mark	(3)
11	Diagram showing lifecycle of a thread with states (New/Born, Running,Runnable, Waiting/Blocked, Dead) and methods (start, stop, yield, wait, notify, sleep etc) marked	(3)

PART D

		Answer any two full questions, each carries 9 marks.	
12	a)	Difference between abstract class and interface	(4)

	b)	Explanation of each exception with scenario of its generation	(5)
13	a)	A java program to create two threads(2*2 = 4) , one for writing odd numbers and another for writing even numbers up to 100 into two different files(2 marks)	(6)
	b)	Uses of "*synchronized*" keyword with an example	(3)
14	a)	Method overriding description : 3 marks Example : 3 marks	(6)
	b)	Definition of exception : 1 mark Need for handling exception : 2 marks	(3)

PART E

Answer any four full questions, each carries 10 marks.

15	a)	Detailed explanation of Delegation Event model with description of concepts like event, event source, listener etc : 5 marks	(5)
	b)	Each event source, event type and listener : 1 mark Total 5 marks	(5)
16	a)	Character extraction methods (any 5 methods) of String class like charAt, getChars etc with syntax: 5 marks Brief description without syntax : 3 marks	(5)
	b)	At least three differences between an applet and a java application : 5 marks	(5)
17		Java program with proper syntax using string class methods	(10)
18		Complete Program with GUI, Event Handling - 10 Marks	(10)
19	a)	Any four advantages of using Swings	(4)
	b)	Any 3 graphics related methods along with their syntax : (3 *2)marks	(6)
20		5 marks for steps to connect database 2 marks for select query 3 marks for fetching the results.	(10)
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