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Question Paper Code: 90411

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2022.

Third/Fourth/Fifth Semester

Computer Science and Engineering

CS 8392 — OBJECT ORIENTED PROGRAMMING

(Common to: Computer and Communication Engineering/Electrical and Electronics Engineering/Electronics and Communication Engineering/Electronics and Instrumentation Engineering/Electronics and Telecommunication Engineering/Instrumentation and Control Engineering/Artificial Intelligence and Data Science/Computer Science and Business Systems/Information Technology)

(Regulations 2017)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. Differentiate between print () and println () methods in Java.
- 2. What are symbolic constants? Explain with examples.
- 3. Define Object cloning.
- 4. Write about Strings in Java.
- 5. Write about reading and writing files.
- 6. Define streams.
- 7. Define Thread.
- 8. What is the benefit of Generics in Collections Framework?
- 9. What are the various classes used in creating a swing menu?
- 10. What are the differences between an applet and stand-alone java application?

PART B — $(5 \times 13 = 65 \text{ marks})$

11.	(a)	(i)	What is a constructor? Write a Java program to explain the need of a constructor in problem solving. (7)
		(ii)	Explain in detail fundamental principles of OOPs with respect to java language. (6)
			\mathbf{Or}
(b)	(b)	(i)	What is scope and life time of a variable? Discuss about various data types supported by Java. (7)
	(ii)	Discuss all control statements available in JAVA with examples. (6)	
12.	(a)	(i)	With example, explain about abstract classes. (7)
		(ii)	Explain with suitable example, how super class variable can refer subclass objects. (6)
			Common to Computer and Communication Engineering Thesisteal Engineering Electronics and Comm rO cation, Engineering/Electronics
	(b)	(i)	Explain using final with inheritance (7)
		(ii)	What are the differences between package and interface? (6)
13.	(a)	(i)	What is an Exception? What are the three categories of exceptions? Also discuss the advantages of exception handling. (10)
((ii)	Distinguish between Byte Stream Classes and Character Stream Classes. (3)	
			Or Or
	(b)		lain the usage of following terms with respect to exception handling. o write a Java program to illustrate the same)
		(i)	Try
		(ii)	catch Object cloning .8
		(iii)	throw avel ai egant 2 mode striv
		(iv)	finally. askit granize has an base small services (13)
14.	(a)		arly distinguish between Multithreading and Multitasking with one gramming example each. (13)
			Or beautiful T
	(b)	(i)	Explain briefly about Bounded Types. (7)
		(ii)	Discuss about Generic Programming and their classes in detail. (6)

15. (a) (i) What is AWT class? Explain in detail. (7)(ii) Illustrate the usage of dialog Box with an example. (6)OrWrite a Java program with swing components button, text field, check (b) box and list box. PART C — $(1 \times 15 = 15 \text{ marks})$ 16. (a) Write a Case study on Whole-Application development for a typical Application. (15)Or (b) Write a Case Study in Object-Oriented Knowledge-Base Design. (15)