

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA

(An Autonomous Institute)

Affiliated to Dr. A.P. J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow

Course BTECH/MTech (Int)

Branch:- CSE/IT/AIML/AI/DS/IOT/CSE(R)

Semester- III

Sessional Examination:- 1st Sessional Examination

Subject Name: Object Oriented Techniques using Java

Year- (2022 - 2023)

Time: 1.15Hours

Max. Marks:30

General Instructions:

- This Question paper consists of 03 pages & 5 questions. It comprises three Sections A, B, & C. You are expected to answer them as directed.
- **Section A** – Q. No. 1 is of one 1 mark each & Q. No. 2 carries 2 mark each.
- **Section B** – Q. No. 3 carries 5 marks each.
- **Section C** – Q.No-4 & 5 carries 6 marks each. Attempt any one part a or b

SECTION - A		[08Marks]
1. All questions are compulsory-		(4×1=4)
a.	A class diagram is divided into which of these compartments?	(1) CO1
	<ul style="list-style-type: none"> i. Name Compartment ii. Attribute compartment iii. Operation compartment iv. All of the above 	
b.	<pre> class Testwhile { public static void main(String[] args){ int x = -5; while (x < 0) { x++; System.out.print(x + " "); }} } </pre> <p>What will be the output of the above code?</p> <ul style="list-style-type: none"> i. 5 4 3 2 1 ii. -5 -4 -3 -2 -1 iii. -4 -3 -2 -1 0 iv. None of the above 	(1) CO1
c.	Which of the correct syntax to create an object of class in java?	(1) CO1

	i. classname objectname= new() integer; ii. classname objectname= new() classname(); iii. classname objectname= new classname; iv. classname objectname= new classname();		
	d. Which concept of Java is achieved by combining methods and attribute into a class? i. Encapsulation ii. Inheritance iii. Polymorphism iv. Abstraction	(1)	CO1
2.	All questions are compulsory-	(2×2=4)	
	a. Differentiate between procedural and object oriented programming language.	(2)	CO1
	b. Write the code to take 10 integers values from user using loop and print their average value.	(2)	CO1
SECTION – B		[10Marks]	
3.	Answer any <u>two</u> of the following-	(2×5=10)	
	a. Explain the inheritance with their types. Justify the concept of code reusability in inherence.	(5)	CO1
	b. Explain the polymorphism with their types. What is the need of polymorphism in java?	(5)	CO1
	c. Explain the command line argument with example.	(5)	CO1
SECTION – C		[12Marks]	
4	Answer any <u>one</u> of the following-	(1×6=6)	
	a. A college has following rules for grading system: a. Below 25 - F b. 25 to 45 - E c. 45 to 50 - D d. 50 to 60 - C e. 60 to 80 - B f. Above 80 - A write the java code Ask user to enter marks and print the corresponding grade.	(6)	CO1
	b. Define if-else-if ladder with short program.	(6)	CO1

		Subject Code: AMICSE0302/ACSE0302/ACSEH0302	
5.	Answer any <u>one</u> of the following-		(1×6=6)
	a.	"Develop a Banking System in which customer can open account. The account has the functionality of deposit, withdraw and get balance. There are two kinds of account; Current Account and Saving Account. Each kind of accounts withdraw in different ways. The account is identified by account number." Draw the class diagram for above statements with their attribute, operation and their relationship.	(6) CO1
	b.	Write the short notes on <ul style="list-style-type: none"> i. Class ii. Object iii. Association iv. Aggregation v. Composition vi. Generalization 	(6) CO1

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 Course-B.Tech/MTech(Int) Branch CSE/IT/AIML/AI/DS/IOT/CSE(R)

Semester- 3rd

Sessional Examination: 2nd Sessional Examination

Subject Name: Object Oriented Techniques using Java

Year- (2022 - 2023)

Time: 1.15Hours

Max. Marks:30

General Instructions:

- This Question paper consists of 2 pages & 5...questions. It comprises three Sections -A, B, & C. You are expected to answer them as directed.
- Section A-Q.No- 1 is of one 1 mark each & Q.No- 2 carries 2 mark each.
- Section B-Q. No- 3 carries 5 marks each.
- Section C-Q.No-4 & 5 carries 6 mark each. Attempt any one part a or b

SECTION – A**[08Marks]****1. All questions are compulsory-****(4×1=4)**

- a. Super keyword in java is used to (1) CO2
 - a) Refer immediate parent class instance variables.
 - b) Invoke immediate parent class methods.
 - c) Invoke immediate parent class constructor.
 - d) All
- b. Which of these is correct way of calling a constructor having no parameters, of superclass A by subclass B? (1) CO2
 - a) super(void);
 - b) superclass.();
 - c) super.A();
 - d) super();
- c. What is the use of try & catch? (1) CO3
 - a) It allows us to manually handle the exception
 - b) It allows to fix errors
 - c) It prevents automatic terminating of the program in cases when an exception occurs
 - d) All of the mentioned
- d. What is a package in Java? (1) CO3
 - a) Package is a collection of files of type Java Class, Interfaces, or Abstract Class
 - b) A Package is simply a Directory or Folder with Java Classes
 - c) A Package usually contains Java Classes written for a specific purpose or problem
 - d) All the above

2. All questions are compulsory-

(2×2=4)

a. What are objects? How are they created?

(2) CO2

b. Give a difference between User Defined packages and In built packages.

(2) CO3

SECTION – B

[10Marks]

3. Answer any two of the following-

(2×5=10)

a. Give a comparison between object and class in detail.

(5) CO2

b. Explain the concept of Abstract Class with program.

(5) CO2

c. What is a finally block? When and how is it used? Give a suitable example.

(5) CO3

SECTION – C

[12Marks]

4. Answer any one of the following-

(1×6=6)

a. Explain the term method overloading with program.

(6) CO2

b. What are the types of exceptions? Explain them.

(6) CO3

5. Answer any one of the following-

(1×6=6)

a. How do you declare an Array in java? Write a program to print the largest element in an array.

(6) CO2

24	14	11	75	54
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b. What is a user-defined package? How to create a user-defined package? Explain with an example?

(6) CO3

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