



# Faculty of Engineering

## End Semester Examination May 2025

### OE00082 Advanced Object Oriented Programming

<b>Programme</b>	<b>:</b>	<b>MCA / BCA-MCA</b>	<b>Branch/Specialisation</b>	<b>:</b>	<b>All</b>
		(Integrated)			
<b>Duration</b>	<b>:</b>	<b>3 hours</b>	<b>Maximum Marks</b>	<b>:</b>	<b>60</b>

**Note:** All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary. Notations and symbols have their usual meaning.

<b>Section 1 (Answer all question(s))</b>		<b>Marks</b>	<b>CO</b>	<b>BL</b>
<b>Q1.</b>	What is the incorrect way to declare and initialize an array?	<b>1</b>	<b>1</b>	<b>2</b>
	<input type="radio"/> int[ ] a = {1,2,3} <input type="radio"/> int a[] = {1,2,3} <input type="radio"/> int a[3] = {1,2,3} <input checked="" type="radio"/> None of these			
<b>Q2.</b>	What will be the output of the code below? <pre>int I=1; while(1) { if(I&lt;=5) break; System.out.print(i); i++; }</pre> <input type="radio"/> 1234 <input type="radio"/> 12345 <input checked="" type="radio"/> Error <input type="radio"/> None of these	<b>1</b>	<b>2</b>	<b>2</b>
<b>Q3.</b>	What is correct about default access specifier?	<b>1</b>	<b>1</b>	<b>2</b>
	<input type="radio"/> It is accessible only in the class in which it is declared. <input type="radio"/> It is accessible only in the same file in which it is declared. <input checked="" type="radio"/> It is accessible only in the same package in which it is declared. <input type="radio"/> It is accessible all over.			
<b>Q4.</b>	What is incorrect about constructors?	<b>1</b>	<b>1</b>	<b>2</b>
	<input type="radio"/> It is used for startup activities <input type="radio"/> It is used to initialize instance variables <input type="radio"/> It has no return type <input checked="" type="radio"/> It must have parameters			
<b>Q5.</b>	Final keyword is used for _____. <input type="radio"/> Declaring constants <input type="radio"/> Declaring a method that can not be overridden. <input type="radio"/> Declaring a class that can not be inherited <input checked="" type="radio"/> All of the these	<b>1</b>	<b>1</b>	<b>1</b>
<b>Q6.</b>	Which inheritance is not allowed in Java? <input type="radio"/> Hierarchical <input type="radio"/> Single <input type="radio"/> Multilevel <input checked="" type="radio"/> Multiple	<b>1</b>	<b>1</b>	<b>1</b>
<b>Q7.</b>	Which layout contains NORTH, SOUTH, EAST, WEST, and CENTER constants? <input type="radio"/> FlowLayout <input type="radio"/> GridLayout <input checked="" type="radio"/> BorderLayout <input type="radio"/> BoxLayout	<b>1</b>	<b>1</b>	<b>1</b>
<b>Q8.</b>	Method use to change the text of button at runtime? <input checked="" type="radio"/> setText() <input type="radio"/> getText() <input type="radio"/> text() <input type="radio"/> None of these	<b>1</b>	<b>2</b>	<b>1</b>

**Q9.** How will you write comments in JSP?

1 2 1

☐ <% %>

☒ <%-- --%>

☐ <%@ %>

☐ <%@= %>

**Q10.** Which of the following is not an implicit object?

1 1 1

☐ Out

☒ In

☐ Request

☐ Response

### Section 2 (Answer all question(s))

Marks CO BL

**Q11.** Write a program to search for an element from an array.

4 2 3

Rubric	Marks
Input the array. Search an element	4

**Q12. (a)** What are the different control statements that exist in Java? Explain by examples.

6 3 1

Rubric	Marks
Control Statements Examples of Control Statements.	6

(OR)

**(b)** Explain in brief any 6 methods used for string operations.

Rubric	Marks
Brief of 6 methods.	6

### Section 3 (Answer all question(s))

Marks CO BL

**Q13.** Write any four features of object oriented programming.

4 1 1

Rubric	Marks
Each feature 1 mark.	4

**Q14. (a)** Write a program to overload the area method to calculate the area of the circle, square, and rectangle.

6 2 1

Rubric	Marks
The main class will call overloaded methods. Overload methods	6

(OR)

**(b)** Draw a chart explaining the accessibility of access specifiers at different places.

Rubric	Marks
Complete Chart	6

### Section 4 (Answer all question(s))

Marks CO BL

**Q15.** What is the use of the interface?

3 1 2

Rubric	Marks
explanations.	3

**Q16. (a)** Write a program for multilevel inheritance.

7 2 3

Rubric	Marks
Write a program for multilevel inheritance.	7

(OR)

**(b)** Write a program for method overriding.

Rubric	Marks
Main class Other classes	7

**Section 5 (Answer any 2 question(s))**

Marks CO BL

**Q17.** Write a program using BorderLayout. Draw output screen also.

5 2 1

Rubric	Marks
Program using BorderLayout Output Screen.	5

**Q18.** Explain the delegation event model. Draw the diagram.

5 3 2

Rubric	Marks
Delegation Event Model. Diagram.	5

**Q19.** Write a Java program to copy one TextField into another. Draw the output screen.

5 2 3

Rubric	Marks
Java program to copy one TextField into another. Draw the output screen.	5

**Section 6 (Answer any 2 question(s))**

Marks CO BL

**Q20.** What are JSP scripting elements? Explain each in brief.

5 5 2

Rubric	Marks
Any 5 JSP scripting elements.	5

**Q21.** How will you call one JSP from another JSP using Form action and RequestDispatcher?

5 5 1

Rubric	Marks
Form action RequestDispatcher	5

**Q22.** Write a JSP program to find out which checkbox is selected among multiple checkboxes.

5 5 1

Rubric	Marks
Complete JSP program.	5

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