ADAMAS UNIVERSITY PURSUE EXCELLENCE	**ADAMAS UNIVERSITY** **END-SEMESTER EXAMINATION : MAY 2021** (Academic Session: 2020 – 21)		
Name of the Program:	**B. Tech**	**Semester:**	**IV**
Paper Title :	**Object Oriented Programming**	**Paper Code:**	**ECS42114**
Maximum Marks :	**40**	**Time duration:**	**3 Hrs.**
Total No of questions:	**8**	**Total No of Pages:**	**2**
(Any other information for the student may be mentioned here)	**1.** At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, and Date of Exam. **2.** All parts of a question should be answered consecutively. Each Answer should start from a fresh page. **3.** Assumptions made if any, should be stated clearly at the beginning of your answer.		

Answer all the Groups

Group A

Answer all the questions of the following **5 x 1 = 5**

1. a) What is the difference between blocking and stopping a thread?

b) What is a final keyword?

c) Define Hierarchical inheritance.

d) Differentiate between final, finally and finalize ( ).

e) Mention the various sections of a web page.

GROUP –B

(**Short Answer Type Questions**)

Answer *any three* of the following **3 x 5 = 15**

2. i) Define constructor with a suitable example.
ii) Write a java program to implement the concept of nesting of methods. **[2 + 3]**

3. i) What is method overriding?
ii) Write a java program to make method overriding compulsory. **[1 + 4]**

4. i) What is multiple inheritance?
ii) Write a java program to implement the concept of multiple inheritance. **[1 + 4]**

5. i) What is an exception?
ii) Write a java program to throw your own exception. **[1 + 4]**

GROUP –C
(**Long Answer Type Questions**)
Answer *any two* of the following **2 X 10 = 20**

6. i) Create a try block that is likely to generate three types of exception and then incorporate necessary catch blocks to catch and handle them appropriately.

ii) Write a java program to create a thread by implementing runnable interface.

iii) Describe the different stages in the life cycle of an applet with a suitable block diagram.

[3 + 3 + 4]

7. i) Describe the three ways of drawing polygons.

ii) Write an applet to draw a circle inside a square.

iii) Describe the three different ways by which a running thread may relinquish its control to another thread.

[3 + 4 + 3]

8. i) Write a java program to set and retrieve the priority of a thread.

ii) Develop an applet that receives three numeric values as input from the user and then displays the largest of the three on the screen. Write a HTML page and test the applet. **[4 + 6]**
