

FIFTH SEMESTER B.TECH. (ENGINEERING) DECEMBER 2007

Chemical Engineering

CH 2K 506 E/PTEE 2K 504 E/PTME 2K 505 E—OBJECT ORIENTED PROGRAMMING (Common to all Branches)

Time: Three Hours

Maximum: 100 Marks

Answer all questions.

Part A

- 1. (a) Briefly explain the features of Java API.
 - (b) Differentiate between Java application program and Applet program.
 - (c) How awt and swing differ in Java?
 - (d) Write a graphics program to draw a human face.
 - (e) What is a component model? What are its responsibilities?
 - (f) What are datagrams? How datagrams are implemented in Java?
 - (g) Explain how RMI feature in Java helps in building distributed applications.
 - (h) What is a JAR file? What are its advantages?

 $(8 \times 5 = 40 \text{ marks})$

Part B

2. (a) Explain the important features of object oriented programming and how they are incorporated in Java language.

(15 marks)

Or

(b) (i) Explain the life-cycle of an applet with example.

(8 marks)

(ii) Write down the features of JVM.

(7 marks)

3. (a) (i) With example, explain any two swing components classes in Java.

(7 marks)

(ii) Write notes on i/o streams in Java.

(8 marks)

Or

(b) Discuss how text, audio and video can be used in an application.

(15 marks)

4. (a) Discuss in detail about the features of BDK.

Or

(b) Write a server program that will wait for input from a client and return the input to the same machine.

(15 marks)

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5. (a) (i) Explain the life-cycle of a servlet.

(7 marks)

(8 marks)

(ii) Write a servlet program to handle HTTP request and send valid responses.

Or

(b) What is CORBA? How it can be incorporated with Java? Discuss it with example.

(15 marks)

 $[4 \times 15 = 60 \text{ marks}]$

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