Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – I • EXAMINATION – WINTER 2012

Subject code: 715305N   **Date: 12-01-2013**
Subject Name: Symbain OS Communications Programming
Time: 02.30 pm – 05.00 pm   **Total Marks: 70**
Instructions:
   1. **Attempt question 1 which is compulsory and answer any four from the rest questions.**
   2. **Make suitable assumptions wherever necessary.**
   3. **Figures to the right hand indicate the marks.**

Q. No. 1
   a. Use a splash screen to welcome a user to a login and then use the hash table to verify if the user has entered the correct username and password.   [7 Marks]
   b. What is the difference between kernel mode and user mode? Give two differences about the privileged mode.   [7 Marks]
Q. No. 2
   a. Use stack in J2ME to reverse a string entered by user, limit the length of string to 40 chars.
                                                                              [7 Marks]
   b. Draw a simple chart to illustrate the various layers of the device drivers and explain the different sections of the diagram.   [7 Marks]
Q. No. 3
   a. Draw an architecture diagram of Symbian OS & define the main layout of the diagram.
                                                                              [7 Marks]
   b. Define and explain the role of KVM in J2ME.   [7 Marks]
Q. No. 4
   a. Use Enumeration to loop through a collection use string arrays to insert the keys and values of ten members of a team and choose to print their addresses on a different form.   [7 Marks]
   b. Use your phone screen to obtain a number below 20 from user and print its multiplication table on screen in textbox on another screen.   [7 Marks]
Q. No. 5
   a. Create a personal music list and then allow users to select from the list and play the song in a new form.   [7 Marks]
   b. What is the purpose of the method startApp() in J2ME? Discuss it.   [7 Marks]
Q. No. 6
   a. Create a simple quiz program for mobile of five screens then let the users see their scores at the end of the quiz program.   [7 Marks]
   b. How is the security of the midlet that is being installed in phone maintained?   [7 Marks]
Q. No. 7
   a. Draw a diagram and explain the various states of the transitions for the Midlet.   [7 Marks]
   b. What is the Symbian kernel? Write its role in the Symbian operating systems.   [7 Marks]
Q. No. 8
   a. What are the various classes of MIDP? Draw a class diagram to illustrate the various classes.
                                                                              [7 Marks]
   b. Create a simple registration form for users of the library to reserve their books once they complete the registration they should get an alert about the status of their enquiry. [7 Marks]

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