



# ABES Engineering College, Ghaziabad

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

## Department of CSE-Data Science

Assignment No.2		
Subject: Object Oriented System Design (KCS-054)		
Submission Date		30/11/2023
Faculty Name: Mr. Vishal Kumar Kanaujia		Sem & Section: 5 <sup>th</sup> & A
Note: Attempt any Four Question		
		5*4=20
Q. N.	Question Statement	Bloom Level
1	What is the role of Swim lanes & Guard condition in Activity diagram? Draw the Activity diagram of ATM Machine system.	K3
2	A simple digital watch has a display and two buttons to set it, the A button and the B button. The watch has two modes of operation, display time and set time. In the display time mode, hours and minutes are displayed, separated by a flashing colon. The set time mode has two sub-modes, set hours and set minutes. The A button is used to select modes. Each time it is pressed, the mode advances in the sequence: display, set hours, set minutes, display etc. Within the sub-modes, the B button is used to advance the hours or minutes once each time it is pressed. Buttons must be relaxed before they can generate another event. Prepare a state diagram of the watch.	K3
3	Consider the application is assumed to be a web based application which is deployed in a clustered environment using server 1, server 2 and server 3. The user is connecting to the application using internet. The control is flowing from the caching server to the clustered environment. So draw the deployment diagram of order management system.	K3
4	Create a UML Activity Diagram for processing an order. Once an order has been finalized, four parties are involved in processing it: Online Sales, Accounting, Shipping, and Printing. Online Sales sends the order to Printing, where the associated PDF file is inspected. If the file is not suitable, a new file is requested from the customer. Once the file is suitable, Accounting is informed to charge the credit card. While this is done, Printing carries out the actual printing, and sends the result to Shipping. When Shipping has both received the printed products and confirmation from accounting that payment was successful, the products are shipped to the customer.	K3
5	Draw use case diagram and state transition diagram for the given scenario.  Suppose we want to develop software for an alarm clock. The clock shows the time of day. Using buttons, the user can set the hours and minutes fields individually, and choose between 12 and 24-hour display. It is possible to set one or two alarms. When an alarm fires, it will sound some noise. The user can turn it off, or choose to 'snooze'. If the user does not respond at all, the alarm will turn off itself after 2 minutes. 'Snoozing' means to turn off the sound, but the alarm will fire again after some minutes of delay. This 'snoozing time' is pre-adjustable.	K3