BHARATI VIDYAPEETH'S
INSTITUTE OF COMPUTER APPLICATIONS & MANAGEMENT (BVICAM)
(Affiliated to Guru Gobind Singh Indraprastha University, Approved by AICTE, New Delhi)
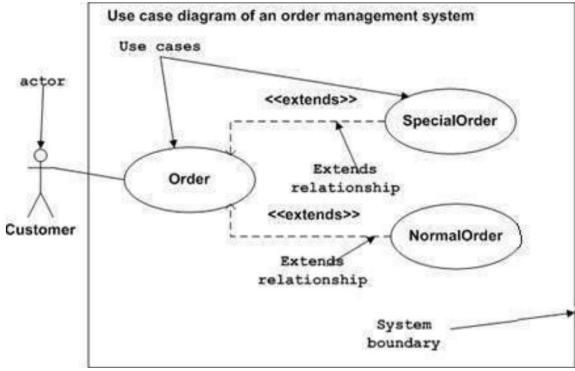A-4, Paschim Vihar, Rohtak Road, New Delhi-110063, Visit us at: http://www.bvicam.in/

Assignment – 2
(Based on Unit III)
MCA-II Semester

Course Code: MCA 104	Course Name: Object Oriented Software Engineering

Q 1.	Elaborate the need for a separate construction phase in object oriented design.
Q 2.	Through a suitable example justify the need of traceability between the analysis and the design model?
Q 3.	 For the above use case, make appropriate sequence diagram?
Q 4.	Elaborate the issues in designing the data access layer?
Q5.	Enumerate how to carry database design across the UML?
Q6.	Why are design patterns desirable in object oriented design? Enlist some common design patterns through appropriate example?
Q7.	Differentiate between sequence and collaboration diagrams?
Q8.	A telephone system works as follows. It starts from user lift receiver, waits for the dial tone and starts dialing. It checks every digit for correctness, when every digit is dialed. Then the phone is connected. The user can hang the phone anytime to cancel the operation. Make an appropriate state machine diagram for the telephone system?
Q9.	Construct an Analysis Model for the following Student University Enrollment scenario. This example demonstrates relationships between classes. It's from an imaginary application that models university courses. Colleges are affiliated to a university. A course running in a college is taught by a lecturer. A lecturer can teach more than one course. A course is attended by zero or more Students, and a Student may attend multiple courses. Student and teacher implement an interface person. Teachers perform other duties as well apart from teaching-learning. Draw class diagram. Identify relationships, attributes and member functions
Q10.	Analyze the mentioned problem and draw deployment diagram for the same. INDIACom is an international conference, organized annually by BVICAM. Researchers submit their research papers on the INDIACom portal (IP) using the online Paper Submission Module (PSM). For using the PSM all the authors must register on the IP. Registration is free of cost and after registration a unique Member ID is allotted to the registree. Each paper may have multiple authors, registered on the IP. While submitting a paper, the member Ids of all the authors must be provided. Out of these

authors, one author is designated to be the Corresponding Author (CA) by the author who submits the paper. PSM sends the submission confirmation to the CA via an auto generated mail, after allocating a Paper ID to the submitted paper. Authors are required to use the allotted ID for further correspondence. The submitted papers are blind reviewed by the members of the Program Committee, and the review comments / acceptance status is sent via email to the corresponding author and is also available online on the home page of a logged in author. The CAs of the papers which are finally accepted for presentation are notified and asked to submit a registration fee. The registration fee depends upon the registration category (Research Scholar, Faculty Member or an Industry Representative) of the author, Professional Membership status (CSI, IEEE, IETE) of the author and the date of registration. The accepted papers for which registration fee is received (from at least one of the authors) are selected for printing in the pre-conference Proceedings of INDIACom. On registration the author is entitled to get one paper published in the proceedings. If an author submits multiple papers, he/she must pay an extra-paper fee for each additional paper. During the conference, the authors are required to report on the registration desk. Here the attendance of the registered authors is marked and they are issued a Conference Kit (CK) and a copy of the Proceedings (PR). After their attendance is marked on the registration desk, the authors proceed to the venue of presentation where they present their paper in front of Subject Experts and other audience. Those authors of the presented papers, who had paid their registration fee, are issued a Certificate of Presentation. Additional, unregistered authors may pay their registration fee on desk, in case they want a similar certificate. The paid authors, whose papers were published but not presented, are awarded a Certificate of Contribution. In case an author whose paper was not published in the proceedings (due to non payment), may register on-spot and present a paper. In such a case on-spot registration fee would be applicable. Also the paper would not be published in the proceedings but a certificate of presentation would be awarded to the author(s). Interested people (non-authors) may also attend the conference as delegates after registering for the conference. The attendance of these delegates is marked when they report on the registration desk and a CK & a PR is also issued to them. But the delegates are awarded a Certificate of Attendance after attending the conference