Total No. of Questions—4]   [Total No. of Printed Pages—3

Seat
No.   **[5116]-306**

T.Y. B.Sc. (Computer Science) (Third Semester)

EXAMINATION, 2017

CS-336 : OBJECT ORIENTED SOFTWARE ENGINEERING

(2013 PATTERN)

Time : Two Hours   **Maximum Marks : 40**

N.B. :— (*i*) Neat diagrams must be drawn wherever necessary.

 (*ii*) Figures to the right indicate full marks.

 (*iii*) *All* questions carry equal marks.

 (*iv*) *All* questions are compulsory

1. Attempt all of the following :   [10×1=10]

 (*a*) Write any *two* benefits of the object oriented programming.

 (*b*) Define an object "Saving Account" with possible attributes and operations with visibility.

 (*c*) "UML is a pure visual programming language." State T/F. Justify.

 (*d*) Define Association.

 (*e*) What is use cases ?

 (*f*) Name any *two* phases of Iterative development process.

 (*g*) What do you meant by components ?

                                                     P.T.O.

(*h*)   Define Alpha testing.

(*i*)   "A class is object types." State T/F. Justify.

(*j*)   What is meant by protected visibility ?

2.   Attempt any *two* of the following :   [2×5=10]

(*a*)   Explain elaboration with some key ideas and best practices.

(*b*)   What is use of deployment diagram ? Explain it with suitable example.

(*c*)   Differentiate between aggregation and generalization with suitable examples.

3.   Attempt any *two* of the following :   [2×5=10]

(*a*)   Write a note on Booch method.

(*b*)   Define collaboration. Explain structural aspects of a collaboration.

(*c*)   Prepare a class diagram giving attributes and operations for stack and queue implementation using linked list.

4.   Attempt the following :

(*a*)   Library system of a University is to be computerized. The members can be students, University departments and colleges affiliated to the university. The information about available books should be available with all these members. The student has to return book within 15 days and is charged fine for the delay. Number of books that can be issued to him are restricted

to five. If the books are not available or copies are not available, the member can issue demand requests which are used for procurement of books. Dealers send list of new books, which are categorized according to subject and subjectwise list is then sent to respective department for approval. Approved books are then procured.

Consider the above case and draw the following diagrams :

(1) Use case diagram.   [3]

(2) Sequence diagram.   [4]

(*b*) What is integration testing ? Explain role of stub.   [3]

Or

Draw component and deployment diagram for e-mail system.   [3]

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