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S.Y.B.C.A SEM IV, Supplementary Examination, May/June 2019
Software Engineering(BCA-401)

Duration: 2 Hours

Total Marks: 50

- Instructions:** 1) All Questions are **Compulsory**.
2) Figures to the right indicate Full Marks.
3) Start each new question on a fresh page

Q.1 a) Define the following

(5x1 =5)

- i) Project Scheduling.
- ii) Reliability respect to a software.
- iii) Pair programming.
- iv) Prototyping.
- v) Daily Scrum and who are the people involved in it.

b) Answer the following :

(5x1=5)

- i) Who draws the use case diagram in a live project environment?
- ii) Why are swimlanes used in Activity diagram?
- iii) What constitutes non-functional requirements?
- iv) What is specialization in class diagram? Draw the symbol to denote specialization in class diagram.
- v) List atleast 4 attributes of software.

Q2 Answer the following:

- a) Elaborate the importance of creating SRS documents. **(02)**
- b) Write a short note on the commonly used steps in development process. **(03)**
- c) Explain the spiral model of software development method along with diagram, strengths and weakness. **(05)**

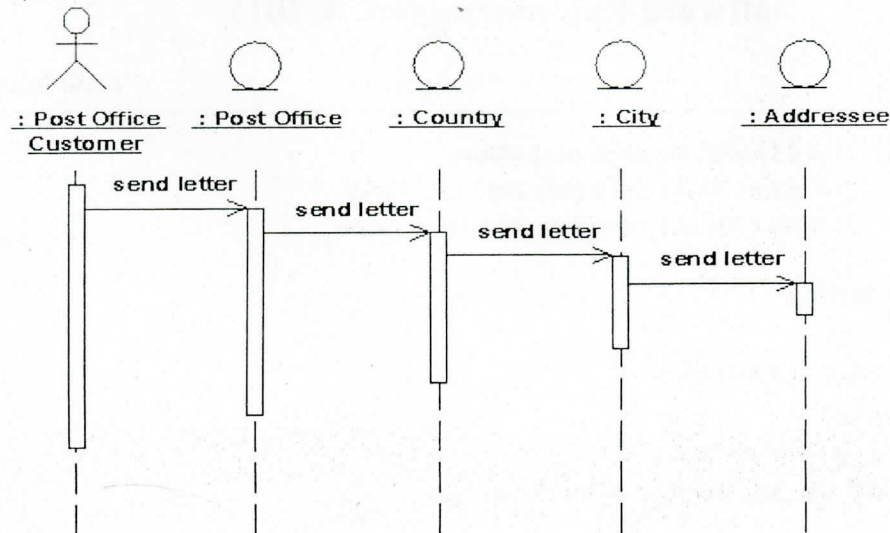
Q3 Answer the following:

- a) What is Requirement Elicitation? **(02)**
- b) Explain the types of diagrams you learnt in UML. **(03)**
- c) Draw a UML Use Case diagram for the detailed use case discussed: **(05)**

Customer browses catalog & selects items to buy. Customer goes to check out. Customer fills in shipping information (address, next-day or 3-day delivery) . System presents full pricing information . Customer fills in credit card information . System authorizes purchase. System confirms sale immediately. System sends confirming email to customer.

Q4) Answer the following :

a)

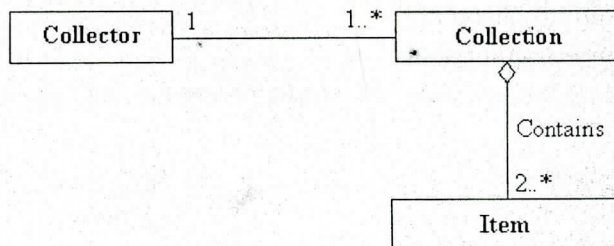


Write the scenario the above sequence diagram denotes.

(02)

b) Study the following class diagram and answer the question below:

(03)



- How many collections can a collector have?
- Can a collection be of more than one collector?
- How many items can a collection contain?

c) Give a state diagram that describes the process of passing a graduate course

(05)

as a set of concurrent activities. The process has as follows: To pass, a student has to attend all but two lectures, present to the class a paper she read, and complete a course project, due on the last day of the term. To give her presentation, the student is given a date by the instructor, prepares her presentation, and gives it on the assigned day. At any time, the student can drop the course. Make sure to define events, conditions, actions for transitions in your diagram, where appropriate.

5 Answer the following:

a) What is a Gantt chart and why is it used.

(02)

b) Software Engineering is a layered process. Elaborate the statement.

(03)

c) Write a note on Iterative model.

(05)