

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
BCA/ IMCA Summer 2016 – 17 Examination

Semester: 4**Subject Code: 05101253 / 05301253****Subject Name: Basic Software Engineering****Date: 05/06/2017****Time: 10.00 am to 01.00 pm****Total Marks: 60****Instructions:**

1. Attempt all questions from each section.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Write section-A, section-B on separate answer sheets.

SECTION-A

Q.1 Answer the following MCQ (Attempt any 10 from 12) (10)

1. **Quality Management in software engineering is also known as**
a) SQA b) SQM c) SQI d) SQA and SQM
2. **Beta testing is done at**
a) User's end b) Developer's end c) Both end d) none of these
3. **Acceptance testing is also known as**
a) Grey box testing b) White box testing
c) Alpha Testing d) Beta testing
4. **In which testing internal logic – code is being tested?**
a) Blackbox testing b) Whitebox testing
c) grey box testing d) none of these
5. **Which of the following is not a coding approach?**
a) Top down b) Bottom up
c). Structured d) un structure
6. **Full form of SRS**
a) System requirement specification
b) Support requirement specification
c) Specific requirements specification
d) None of these
7. **DFD shows**
a) flow of data b) process of system
c) Storage portion d) all of these
8. **Class diagram includes**
a) attributes only b) class name only
c) operation only d) all of these
9. **Which model stipulates that the requirements be completed specified before the rest of the development can processed.**
a) Waterfall b) Spiral model
c) Iterative Development d) Incremental Development
10. **Requirement engineering process includes which of these steps?**
a) Feasibility study
b) Requirement Gathering
c) Software Requirement specification & Validation
d. All mentioned above
- 11 **Actor symbol is used in which diagram?**
a) Class diagram b) Activity diagram
b) Use case diagram d) State diagram
- 12 **In which diagram we can show object's process with sequence numbers.**
a) Collaboration diagram b) Use case diagram
c) Class diagram d) Activity diagram

Q.2 – A Answer the following Questions (Attempt any 5 from 7) (05)

1. What is system?
2. What is DSS? Define in one line
3. What is SDLC? Define in one line
4. What is requirement elicitation?
5. What is cohesion?
6. What is coupling?
7. What is UML? Define in one line

Q.2 – B Answer the following questions (Attempt any 2 from 4) (05)

1. Explain terms: System Analysis and System analyst
2. Write SDLC Steps with figure
3. Write steps of waterfall models with figure
4. Explain big bang model in short

OR

Q.2 – B Answer the following questions (Attempt any 2 from 4) (05)

1. Define UML with basic elements
2. Explain the term programming or coding practices
3. Explain unit testing in short?
4. Explain regression testing in short?

Q.3 Answer the following questions (Attempt any 2 from 3) (10)

1. Write a short note on DFD with examples and Terminology.
2. Write a short note on interaction diagram with example
3. Write a short note on SRS with example.

OR

Q.3 Answer the following questions (Attempt any 2 from 3) (10)

1. Write a short note on UML (Basic elements, List of diagrams, use)
2. Write short note on V model (advantages , disadvantages , figure, use)
3. Write a short note on spiral Model (advantages , disadvantages , figure, use)

SECTION-B

Q.1 Answer the following short questions (Attempt any 5 from 7) (10)

1. What is testing? Why should we do it?
2. What is difference between QA and QC
3. What is software development process review? List its types
4. writes any three differences between top down and bottom up coding approaches
5. What is structured programming?
6. What is white box testing?
7. What is black box testing?

Q.2 – A Attempt the following Questions (Attempt any 5 from 7) (05)

1. Draw any three symbols which are used in Use case diagram
2. Draw any three symbols which are used in Component diagram
3. What is Designing of system ?
4. What is planning system?
5. Why maintenance of system is needed?
6. For which system spiral model is required?
7. What is prototype model?

Q.2 – B Answer the following questions (Attempt any 2 from 4) (05)

1. Explain component diagram and its use in short
2. Explain deployment diagram and its use in short
3. Explain is data dictionary
4. What is feasibility study? Explain with any 2 feasibility study example.

OR

Q.2 – B Answer the following questions (Attempt any 2 from 4) (05)

1. Explain System testing in short
2. Explain Integration testing in short
3. Explain Acceptance testing in short
4. Explain Unit testing in short.

Q.3 Answer the following questions (Attempt any 2 from 3) (10)

1. Draw an use case diagram for Hospital Management system OR Student Information System.
2. Draw an activity diagram for Online shopping OR Student Information System.
3. Draw a Class diagram of Student information system.

OR

Q.3 Answer the following questions (Attempt any 2 from 3) (10)

1. Draw a DFD diagram for Hospital Management system OR Student Information System up to 2nd level
2. Draw sequence diagram for Online shopping OR Student Information System.
3. Draw a Collaboration diagram for student information system