

S.No. 3246

16 SMBECA 1:2/

16 SMBECS 1:1/

16 SMBEIT 1:1

(For candidates admitted from 2016–2021 batch)

**B.Sc. / B.C.A. DEGREE EXAMINATION,
NOVEMBER 2023.**

**Part III — Computer Applications / Computer Science /
Information Technology — Major Based Elective**

SOFTWARE ENGINEERING

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20)

Answer ALL questions.

1. List down few advantages of linear sequential model.
2. Define Application software.
3. What is analysis modeling?
4. List out the characteristics of a good design.
5. Define Encapsulation.
6. Define Usability.
7. List down the advantages of coding convention.

8. Define Software metrics.
9. Define Web engineering.
10. Define OOSD.

SECTION B — ($5 \times 5 = 25$)

Answer ALL questions, choosing either (a) or (b) in each.

11. (a) What are the phases of software development? Explain in detail.

Or

- (b) Describe the focus group technique of eliciting requirements in detail.

12. (a) What is state transition diagram? Explain with example.

Or

- (b) What is coupling? Discuss the different types of coupling.

13. (a) Explain the sequence diagram with an example.

Or

- (b) Discuss four user interface elements.

14. (a) Discuss resource metrics.

Or

- (b) Discuss the work Breakdown structure and its uses.

15. (a) Discuss the principles of web design.

Or

- (b) Write notes on following:

(i) Web 2.0

(ii) Cloud Computing

SECTION C — ($3 \times 10 = 30$)

Answer any THREE questions.

16. Discuss spiral model in detail.
17. Discuss data modeling with ER diagram as example.
18. Explain in detail about design frameworks.
19. With a suitable example, explain SCR life cycle in detail.
20. Draw the layers of web application and explain.