CHAROTAR UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF TECHNOLOGY AND ENGINEERING (FTE)

DEVANG PATEL INSTITUTE OF ADVANCE TECHNOLOGY AND RESEARCH

CE343: SOFTWARE ENGINEERING

QUESTION BANK 1: UNIT 1

1. Which one of the following is not an Evolutionary Process Model?
    a) WINWIN Spiral Model
    b) Incremental Model
    c) Concurrent Development Model
    d) Spiral Model
    e) All are Evolutionary Software Models

2. What is the major advantage of using Incremental Model?
    a) Customer can respond to each increment
    b) Easier to test and debug
    c) It is used when there is a need to get a product to the market early
    d) Both b & c

3. The spiral model was originally proposed by
    a) IBM
    b) Barry Boehm
    c) Pressman
    d) Royce

4. How is Incremental Model different from Spiral Model?
    a) Progress can be measured for Incremental Model.
    b) Changing requirements can be accommodated in Incremental Model.
    c) Users can see the system early in Incremental Model.

5. Give scenario base explanation of Spiral model and explain its architecture with advantages and disadvantages.

6. Why software engineering is a layered Technology?
7. Define different types of software Myths.
8. In what situations will you use waterfall model? Justify your answer. Name the risk-based software development process model? What are its advantages and disadvantages?
9. What do you mean by software process models? Why we need it? Distinguish between software product and software process. Name four process models that are used to develop large software systems.
10. Why does the waterfall model sometimes fail?

11. What are the major phases of the entire life of the software? specify the percentage of efforts required on each phase. Which phase requires the maximum efforts? Which phase is/are more creative?
12. If formal methods can demonstrate software correctness, why is it they are not widely used?
13. Compare the relative advantage of using the iterative waterfall model and the spiral model of software development. Explain with the help of examples, the type of problems for which you would adopt the waterfall model of software development, and the type of problems for which you would adapt the spiral model.
14. What do you mean by software lifecycle model(s)? is it compulsory to follow it while developing a project? Explain in brief.
15. What formal techniques are available for assessing the software process?
16. Define software and software engineering. What are the characteristics of software?
17. Show how the failure curve of software differs from that of hardware. Software doesn't wear out but it deteriorates due to change. Justify. How do software myths affect a software project?
18. If you are a lead developer of a software company and you are asked to submit a project/product within a stipulated time-frame with no cost barriers, which model will you select?
    a) Waterfall
    b) Incremental
    c) Spiral
    d) RAD
19. Explain which process model is most suitable for the following definition and justify it:
    a) A compiler for new language
    b) Event management system
    c) Chess
20. Draw neat sketch of spiral model and justify why it is considered as meta model.
21. Differentiate throw-away v/s evolutionary model.
22. Explain with a neat sketch "A software process framework".
23. How does a framework activity change as the nature of the project changes?
24. What is a process pattern?