NARSIMHA REDDY ENGINEERING COLLEGE
UGC AUTONOMOUS INSTITUTION
Maisammaguda (V), Kompally - 500100, Secunderabad, Telangana State, India

UGC - Autonomous Institute
Accredited by NBA & NAAC with 'A' Grade
Approved by AICTE
Permanently affiliated to JNTUH

4. Previous Question Papers:

Department of the CSE – NR20
SOFTWARE PROJECT MANAGEMENT
(Professional Elective- V)
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, December - 2019

Software Project Management

(Common to CSE, IT)

Time: 3 Hours Max.   **Marks: 75**

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5

Units. Answer any one full question from each unit. Each question carries 10 marks and may have a,

b as sub questions.

PART – A   **(25 Marks)**

1.a) Define initial process. [2]

b) Write brief notes on PSP. [3]

c) What is meant by software economics? [2]

d) Define the term artifact set. [3]

e) Explain cost estimation process. [2]

f) Write brief notes on major milestones in software process. [3]

g) Write about evolution of organizations. [2]

h) Write brief notes on metrics automation. [3]

i) What is meant by early risk resolution? [2]

j) Explain about evolutionary requirements. [3]

PART – B   **(50 Marks)**

2. Describe the principles of software process change and TSP. [10]

OR

3. Discuss about software process assessment. And also discuss about CMM. [10]

4. Explain about improving software process and improving term effectiveness. [10]

OR

5.a) Explain the principles of conventional software engineering.

b) Describe the phase of software project elaboration. [5+5]

6. Describe the conventional WBS issues and planning guidelines. [10]

OR

7. Explain about the iteration planning process and pragmatic planning. [10]

8. What are the software project quality indicators? Explain them. [10]

OR

9. What is a seven core metrics? Discuss about pragmatic software metrics. [10]

10. What are the software management best practices? Explain them. [10]

OR

11. Discuss about next generation software economics. [10]

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, March - 2019

Software Project Management

Time: 3 Hours   **Max. Marks: 75**

(Common to CSE, IT)

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit.

Each question carries 10 marks and may have a, b, c as sub questions.

Part- A   **(25 Marks)**

1.a) What is late risk resolution? [2]

b) What are various cost estimation models? [3]

c) What is roundtrip engineering? [2]

d) What are the top five principles of a modern process? [3]

e) Define transition phase. [2]

f) Write the typical release description outline. [3]

g) Define product release milestone. [2]

h) Who are stakeholders? List them. [3]

i) Define rework and adaptability. [2]

j) What are the major components of software cost? Why? [3]

Part-B   **(50 Marks)**

2.a) What are five necessary improvements in waterfall model?

b) Describe return on investments in different domains. [5+5]

OR

3.a) Give industrial software metrics top 10 list.

b) Briefly explain pragmatic software cost estimation. [5+5]

4.a) How to improve software processes?

b) What are the principles of modern software management? [5+5]

OR

5.a) Discuss about reuse with a neat diagram.

b) Describe transitioning to an iterative process. [5+5]

6. Explain about model-based architecture in a management perspective. [10]

OR

7.a) Explain about construction phase.

b) Distinguish between implementation set and deployment set. [7+3]

8.a) What are default agendas for the life-cycle architecture milestone?

b) Discuss about the cost and schedule estimating process. [5+5]

OR

9.a) What are the activities of software architecture team?

b) Explain in detail about software change orders. [5+5]

10.a) What are the seven core metrics? Explain.

b) Give an example to distinguish small scale project and large scale project. [7+3]

OR

11.a) What are the basic characteristics of a good metric? Explain.

b) Give a common subsystem overview of CCPDS-R. [4+6]

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, November/December - 2019

SOFTWARE PROJECT MANAGEMENT

(Computer Science and Engineering)

Time: 3 Hours   **Max. Marks: 75**

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit.

Each question carries 10 marks and may have a, b, c as sub questions.

Part- A   **(25 Marks)**

1.a)Define late design breakage. [2]

b)What are the parameters of cost models? [3]

c)What is configurable process? [2]

d)What are five staffing principles? [3]

e) Define elaboration phase. [2]

f) What is WBS? [3]

g)What are the responsibilities of SEEA? [2]

h)Explain about configuration baseline. [3]

i)What are the sources of architectural risks? [2]

j)Define MTBF and maturity. [3]

Part-B   **(50 Marks)**

2.a)Explain waterfall model.

b)Describe the three generations of software economics. [5+5]

OR

3. Explain the following:

a) Adversarial stakeholder relationships

b) Requirements driven functional decomposition [5+5]

4.a) Explain about object-oriented methods and visual modeling.

b) What are the modern process approaches for solving conventional problems? [6+4]

OR

5.a) How to achieve required software quality? Explain.

b) Write and explain any ten principles of conventional software engineering. [5+5]

6.a) Briefly discuss about engineering stages.

b) Explain in detail about test artifacts. [5+5]

OR

7.a) Write the primary objectives of Construction and Transition phases.

b) What are engineering artifacts? Explain. [5+5]

8.a) Discuss about evolutionary work breakdown structures.

b) What are the activities of software assessment team? Explain. [5+5]

OR

9.a) Explain in detail about planning guidelines.

b) Discuss about automation building blocks. [6+4]

10.a) What are process discriminants? Briefly explain.

b) Explain culture shifts for modern process transitions. [5+5]

OR

11.a) What are management indicators? Explain.

b) Explain top ten software management principles. [5+5]

  --ooOoo—

Imp Questions:
Question Bank 2 Marks and 10 Marks:

2 Marks:

1. What are the five basic parameters of software economics?
2. How to improve team effectiveness?
3. Enumerate the top five principles of modern process.
4. Define artifact sets.
5. Elucidate the importance of inception phase.
6. Draw the structure of work breakdown.
7. What is software change order?
8. List the seven core metrics which are used in all software projects.
9. What is pragmatic software metrics?
10. Mention the role of project manager.
11. What is requirement analysis?
12. Write the relationship between the parameters in software cost model.
13. What is meant by team effectiveness?
14. What is meant by risk mitigation?

15. What is the necessity of artifact sets?
16. What are checkpoints of the process?
17. Define earned value analysis.
18. Define project environment.
19. What is meant by configuration baseline?
20. Define stakeholder environment.
21. What is COCOMO model?
22. What is 80/20 principle?
23. What is meant by team effectiveness?
24. What is meant by risk assessment?
25. Write a short note on artifact sets.
26. What are minor milestones of a process?
27. Define backup plan.
28. Define peer inspections.
29. What is meant by configuration baseline?
30. What are included in architecture baselines?
31. What are the two basic steps to build a program? Explain.
32. Write Boehm's quotation "walkthroughs catches 60% of the errors".
33. List the principle of top talent in team effectiveness.
34. Analyze the Davis principle "Use different languages for different phases".
35. What are the two essential activities of transition phase? List.
36. List the artifacts of the deployment set.
37. List the artifacts of requirement workflow.
38. Define minor milestone.
39. Define breakage and modularity.
40. Write process maturity level.

10 Marks :.

1. Explain the waterfall model. What are the necessary improvements for this model?

2. What are the five components of software cost models?

3. Explain water fall model with late design breakage and late risk resolution

4. Give an overview of the artifact sets. Also, explain the artifacts in management set.

5. How an operational artifact of a management set differs from planning artifacts? Explain

6. Define the terms 'model' and 'view'. What are the three different aspects of software architecture form management's perspective?

7. Explain the significance of software architecture in modern software development process.

8. What does each of the views (design, process, component, deployment) address in the software architecture? Explain with an example.

9. What are the seven workflows in the life cycle?

10. What levels of activity takes place in these workflows during each of the four phases (inception, elaboration, construction and transition).

11. Define iteration. Discuss the sequence of activities in an iteration workflow.

12. Bring out the differences between iterations and increments along with suitable diagrams.

13. How are the checkpoints or synchronization points decided? Explain with an example.

14. Discuss in detail about the minor milestones in the life cycle of iteration.

15. Define periodic status assessment. What is the need of status assessment in software life cycle? Also discuss the default content of periodic status assessments.

16. Explain the main features of the default line-of-business organization.

17. What are the four component teams in a default line-of-business organization and their responsibility?

18. Discuss the four component teams in a default project organization and their responsibility.

19. How does the emphasis in the four teams evolve over the course of the entire project?

20. Discuss the reason for looking at organizations from project as well as line-of-business perspective.

21. What are the steps in identifying project roles? Name any five project roles and the skills needed for them.

22. Name metrics for reliability. SW cost, effort, SW complexity with examples.

23. Explain the seven-core metrics.

24. Discuss the evolution of software project team over the software life cycle.

25. Explain the three levels of process along with their automation support

26. What are the effects of architectural risk on process discriminators?

27. Distinguish between small-scale projects and large-scale projects.

28. Define the SEI-CMM maturity levels of organizations. How do processes differ because of process flexibility and process maturity?

29. Explain the Best Practices associated with software Management.

30. Discuss the Next-Generation software Economics.

31. Give a brief note on Modern Process Transitions.

32. Elaborate the Modern Project Profiles.

33. What are modern project profiles? Explain.

34. Explain the trends in improving software economics.

35. Explain the Modern Project Profiles Next generation Software economics.
36. Explain the Software maturity Framework.
37. List and explain the Principles of Software Process Change.
38. Elaborate the Software Process Assessment.
39. Discuss the Capability Maturity Model (CMM).
40. Explain the terms CMMI, PCMM, PSP, TSP
41. Elaborate the pragmatic software cost evolution in detail
42. Draw and explain waterfall model in practice
43. Give an overview of the artifact sets. Also, explain the artifacts in management set
44. What are the top ten risks in conventional process of software development? Explain.
45. Discuss the results of conventional software project design reviews
46. Explain pragmatic software cost evolution in detail
47. Explain waterfall model in practice

48. Discuss the conventional software management performance