SWE 4/2 (2023-2); SPM; TT#1; Marks: 15 , Time: 30 mins

1. Define software project management. (2)
2. What is Work Breakdown Structure (WBS)? Show the hierarchical diagram of a simple PBS. (4)
3. What are the phases in systems development life cycle (SDLC)? (3)
4. Write the goals of project management. (2)
5. What are called "free floats" and "interfering floats"? How are they calculated? (4)

**Shahjalal University of Science and Technology**
**Institute of Information and Communication Technology**
SWE 4th Year 2nd Semester Final Examination 2021
Course: SWE 425 (Software Project Management)
Credits: 2.0 Full Marks: 50 Time: 2 Hours
*[Answer every question]*

## Group A

**Q.1 Answer any 5 questions. [5 x 1=5]**

a) List two problem with software projects.
b) What is called Return on Investment?
c) What are the Managerial activities?
d) Give any two examples for personnel attributes.
e) Write the disadvantages of function point analysis
f) Write any two advantages of function print analysis
g) What are the key elements to review when assessing project resource requirements?

**Q.2 Answer any 5 questions. [5 x 2=10]**

a) How do unclear requirements pose a risk to a software project? Explain with an example.
b) Write any five competencies of project management skills.
c) Write the difference between the project process and the product process.
d) What is the significance of identifying the critical path in project management?
e) Explain total slack.
f) What is mean by known risk?
g) What is the significance of "working in groups"?

**Q.3 Answer any 2 questions. [2 x 5=10]**

a) Take a scenario in which a project manager is managing a software development project with known external dependencies. How should the manager effectively anticipate and mitigate the risks arising from these dependencies?
b) Explain how the delayed projects can be brought back on track.
c) Discuss the step-wise project planning with an example.
d) Explain the key objectives of activity planning in project management, and provide examples of how they can impact project success.

## Group B

**Q.4 Answer any 5 questions. [5 x 1=5]**

a) How do personnel attributes impact resource allocation within a project?
b) State two disadvantages of function point analysis.
c) Mention one purpose of Software Quality Assurance (SQA).
d) Write some ways to collect information for system requirements.
e) What is structured data?
f) What is milestone?
g) Define process.

**Q.5 Answer any 5 questions. [5 x2 = 10]**

a) What is Work Breakdown Structure (WBS)?
b) Differentiate Leaders and managers.
c) Define project portfolio.
d) What constitutes a Hazard?
e) What factors are considered when selecting a development methodology and life cycle approach for a project?
f) How customer risks are derived?
g) What are the main elements included in a Software Project Management Plan (SPMP)?

**Q.6 Answer any 2 questions. [2 x5=10]**

a) What is project Evaluation? Why do we need it? Describe how a project can be evaluated.
b) Describe type of project costs with a cost-duration graph.
c) If a project manager must review overall resource estimates, discuss how they would approach this task and analyze the potential impact on the project budget and timeline.
d) Compare 'Theory X' and 'Theory Y' regarding organizational behavior.

Shahjalal University of Science and Technology
Institute of Information and Communication Technology
4th Year 2nd Semester Final Examination (Session: 2016-17)
Course Code: SWE 425 Credits: 2 Course Title: Software Project Management
Time: 1.5 hrs Total Marks: 50

## Group A

*[Answer all the questions]*

**1. Answer any Four** 4x1.5=6

a) What is process and project metrics?
b) State two of the common software metrics.
c) Which people are involved in Software estimation?
d) What is Decomposition technique?
e) What are the software measurement categories?
f) What are the 4p's principle in project management?

**2. Answer any Three** 3x3=9

a) Why object oriented metrics better than other metrics?
b) Briefly explain the attributes of Agile team.
c) Explain the components of reusable software resource.
d) Briefly explain the ins and out of a project.
e) Discuss the four managerial skills.

**3. Answer any One** 10x1=10

a) What is Size Oriented Metrics? Explain the pros and cons of it.

b) Briefly describe the estimation and risk with example.

## Group B

*[Answer all the questions]*

**4. Answer any Four** 4x1.5=6

a) How metrics helps in software project?
b) What are the quality factors in software project?
c) What are the three skills for project administrators?
d) Elaborate the W5HH principle.
e) Write down the PMBOK's five basic process groups.
f) Write down the project administration skills.

**5. Answer any Three** 3x3=9

a) Show the comparison between Measure and Metric.
b) How can a process be improved? Explain with example.

c) What are the factors in process that influence in quality? How it improves software quality ?
d) Write down the Mantei's seven factor in team planning.
e) Write down the four dimension of software feasibility.

**6. Answer any ONE** 10x1=10

a) Describe the importance of software scope and feasibility analysis in project planning.

b) What are the steps to avoid problems in a project? Explain briefly.

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**CT#2; SPM - 2023; Time: 25 Minutes; Marks: 10**

Explain the types of contracts and their stages in contract placement in detail.

Or

How do you prioritize the data collection using Earned Value analysis? Discuss with suitable illustrations.

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