



VIT

Vellore Institute of Technology

School of Computer Science and Engineering

Fall Semester 2024-25

CAT I

SLOT: C1

Programme Name & Branch: BTech (BBS)

Course Name & Code: Software Engineering Methodologies & CBS1005

Class Number (s): VL2024250103934, VL2024250103937

Faculty Name (s): Prof. Manjula R, Prof. Swarnalatha P

Exam Duration: 90 Min.

Maximum Marks: 50

General instruction(s):

Answer ALL the questions

Q. No.	Question	Max Marks
1.	a). Compare and contrast between Software Engineering and System Engineering with examples. [6] b). Identify any four requirements Risks for the scenario given in Q. No. 2. [4]	10
2.	Assume that you are a team leader of multimedia facilities to be handled for VIT Rivera 2024. The facilities include, process associated with the cultural and gaming contest. You are requested to plan and schedule the task associated with the multimedia related activities. As a team leader, you are planning to create a digital diary for providing the entire task, detail, and schedules. a. Define the scope for the application. [2 M] b. Identify the most suitable process model among the given process model such as waterfall, RAD, incremental and prototyping for the given scenario. [2 M] c. State any three reasons for choosing the suitable process model. [3 M] d. Also provide one reason for not choosing the other models. [3 M]	10
3.	Consider the development of digital diary for organising the decoration and multimedia activities happening during Rivera 2024. To develop it, various	10

requirements with different perspectives to be collected and analysed. In order to perform the analysis for digital diary elucidate the following.

a. List any four different users' of the system. [2 M]

b. Write any two Functional requirements satisfying each of the users' mentioned in the given scenario. Explain briefly. [4 M]

c. Also identify 4 major Non-Functional requirements of the system. [3 M]

4. **Fill in the blanks :** [4 M]

a. _____ is part of the system engineering process concerned with developing the software infrastructure, control applications and databases in the system.

b. The _____ allows for the straightforward definition of milestone progress.

c. _____ provides a framework for effective delivery of technology, forms the basis for management and also provides the context for work products, milestones, quality measures, and change management.

d. The full form of Gantt is _____

True or False: [3 M]

e. A stakeholder is anyone who will purchase the completed software system under development.

f. Requirements should specify 'what' but not 'how'.

g. A Software is not correct until it not meets all the user requirements.

Match the following: [3 M]

A	B
1. Layered Technology	a. Cost Risks
2. Unreasonable budgets	b. Configuration Management
3. Version/Release	c. Software Engineering

5.

Apply PERT Scheduling algorithm for the given task set and find the Critical path [6+4]

10

Subtask ID	Time to Complete Task	Dependencies
A	9	
B	11	
C	9	A,B
D	10	A
E	6	B
F	4	C,D
G	3	D
H	5	F,G
I	4	E,F