Semester: 6th
Subject Name:- SPM & Code:- IT-3032
Branch (s): - CSE, IT, CSCE, CSSE

SPRING MID SEMESTER EXAMINATION-2024

School of Computer Engineering
Kalinga Institute of Industrial Technology, Deemed to be University
Software Project Management
IT-3032

Time: 1 1/2 Hours **Full Mark: 20**

Answer Any four questions, including question No.1 which is compulsory.
The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable and all parts of a question should be answered in one place only.

1. Answer all the questions. [1 Mark X 5]

   a) If the size of the project is 160 function point, what would be development time as per Caper Jonas rule?
   b) Explain the scenarios where you will use Prototype model , provide 2 reason for this.
   c) What are the responsibilities of a Program Manager? Is a Program manager superior to Project manager? Give reason for the answer you choose.
   d) Write down the four ways in which Data groups can be moved in COSMIC function points.
   e) What is Stand up meet in an agile frame work . Mention the three roles in an agile team.

2. Identify and explain the important best practices that have been incorporated in the agile methodology. Name the agile model that focuses on minimizing wastage in the development process. Briefly explain the artifacts and methodology that it follows to achieve this [5 Marks]

3. Calculate the NPV (Net Present Value) for each of the projects A, B and C shown in table below using each of the discount rate 9% and 13%. For each of the discount rate, decide which the best project is. Also calculate the payback period for each project. [5 Marks]

Year	Project-A	Project-B	Project-C
0	-100000	-100000	-100000
1	50000	25000	7000
2	25000	32000	15000
3	15000	43000	5000
4	30000	5000	27000
5	10000	12000	20000

4. What steps are involved in project planning, and why are they important for project success? Explain the details with an example. [5 Marks]

5. By using COCOMO estimation technique, solve the below problem.
Note: Use the value of constant on your own which are not provided [5 Marks]

Factor	Rating	Value
PREC	nominal	3.74
FLEX	high	2.04
RESL	very low	7.08
TEAM	very high	1.11
PMAT	low	6.25

(i) What would be the scale factor (sf) in this case?

(ii) What would the estimate effort if the size of the application was estimated as in the region of 3000 lines of code?

(iii) What would the development time in the above scenario.

*** Best of Luck ***