UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
Online End Semester Examination, May 2020

Course: SEPM   Semester: IV
Program: B. Tech. CSE All Branches   Time 03 hrs.
Course Code: CSEG 2008   Max. Marks: 100

SECTION A

1. **Each Question will carry 5 Marks**
2. **Instruction: Complete the statement / Select the correct answer(s)**

S. No.	• **Question**	CO
Q 1	What is the appropriate pairing of items in the two columns listing various activities encountered in a software life cycle? P. Requirements Capture 1.Module Development and Integration Q. Design 2.Domain Analysis R. Implementation 3.Structural and Behavioral Modeling S. Maintenance 4.Performance Tuning (A) P-3, Q-2, R-4, S-1 (B) P-2, Q-3, R-1, S-4 (C) P-3, Q-2, R-1, S-4 (D) P-2, Q-3, R-4, S-1	CO1
Q2	Explain what is meant by *PRODUCT* with reference to one of the eight principles as per the ACM/IEEE Code of Ethics? a) The product should be easy to use b) Software engineers shall ensure that their products and related modifications meet the highest professional standards possible c) Software engineers shall ensure that their products and related modifications satisfy the client d) It means that the product designed /created should be easily available	CO1
Q3	What is the appropriate pairing of items in the two columns listing various activities encountered in a software life cycle? P. Requirements Capture 1.Module Development and Integration Q. Design 2.Domain Analysis R. Implementation 3.Structural and Behavioral Modeling S. Maintenance 4.Performance Tuning (A) P-3, Q-2, R-4, S-1 (B) P-2, Q-3, R-1, S-4 (C) P-3, Q-2, R-1, S-4	CO2

	(D) P-2, Q-3, R-4, S-1	
Q4	Purpose of process is to deliver software a) in time b) with acceptable quality c) that is cost efficient d) both in time & with acceptable quality	**CO1**
Q5	Select the developer-specific requirement? a) Portability b) Maintainability c) Availability d) Both Portability and Maintainability	**CO1**
Q6	Which one of the following is not a step of requirement engineering? a) elicitation b) design c) analysis d) documentation	**CO1**

<div align="center">SECTION B</div>

1. **Each question will carry 10 marks**
2. **Instruction: Write short / brief notes**

Q 7	What are the practices followed for requirement engineering	**CO2**

Q 8	How is RAD model different from Spiral	**CO2**

Q9	**List out operators and operands. Also compute the values of Program Length, Vocabulary, Program Volume, Difficulty, Estimated Program level and Effort.**
	main()
	{ int a, b, c, avg;
	scanf("%d %d %d", &a, &b, &c);
	avg = (a+b+c) / 3;
	    printf("avg = %d", avg);}
		CO3

Q 10	Project A with cash flows of -100000, 10000, 10000, 10000, 20000, 100000 and Project B with cash flows of -120000, 30000, 30000, 30000, 30000, 75000 for year 0, 1, 2, 3, 4 and 5 respectively are to be chosen. Which of these projects will be chosen on the basis of : a) Payback Period b)ROI c) NPV assuming 10% discount rate	**CO3**
Q 11	A project of 32000 LOC is estimated. Compute effort, development time, productivity and Average Staff Size using the basic COCOMO [3+3+2+2]	**CO4**

<div align="center">Section C</div>

1. **Each Question carries 20 Marks.**
2. **Instruction: Write long answer.**

Q12	a)Define Project Management life cycle.(10 marks)	CO4
	b). Differentiate risk avoidance from risk elimination.(10 marks)	
	OR	
	Differentiate BVA from EQP using a numerical solution.	