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NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)

B. Tech

SEM: VI - THEORY EXAMINATION (2022-2023)

Subject: Product Lifecycle Management

Time: 3 Hours

Max. Marks: 100

General Instructions:

IMP: Verify that you have received the question paper with the correct course, code, branch etc.

1. This Question paper comprises of **three Sections -A, B, & C.** It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.

2. Maximum marks for each question are indicated on right -hand side of each question.

3. Illustrate your answers with neat sketches wherever necessary.

4. Assume suitable data if necessary.

5. Preferably, write the answers in sequential order.

6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

SECTION A

20

1. Attempt all parts:-

- 1-a. What is the producer's strategic objective at the startup and production stage of the product life cycle? (CO1) 1
- (a) cash flow and profit.
(b) profit.
(c) sales growth.
(d) all of the above.
- 1-b. The life cycle of a product includes (CO1) 1
- (a) extraction of natural resources
(b) processing of raw materials
(c) manufacturing of products
(d) all of the mentioned
- 1-c. In the literature of product life cycle management, the term market risk refers to (CO2) 1
- (a) lost sales related to deferring investments.

- (b) lost sales related to making unprofitable investments.
- (c) losses related to declining market share for companies that are not technological leaders.
- (d) losses related to research and development costs.
- 1-d. In a prototype model, working ___ of a system built until an acceptable prototype is achieved. (CO2) 1
- (a) System
- (b) Prototype
- (c) Engineering
- (d) None of the mentioned above
- 1-e. Procurement methods have considerable impact on (CO3) 1
- (a) product pricing
- (b) inventory level
- (c) warehouse space
- (d) transportation modes
- 1-f. If the user is not happy with the current prototype, it needs to ___ the prototype.(CO3) 1
- (a) Redefine
- (b) Define
- (c) Design
- (d) None of the mentioned above
- 1-g. In the formula of Economic Order Quantity, the alphabet 'O' stands for.....(CO4) 1
- (a) Ordering level
- (b) Ordering Cost
- (c) Ordering Cost & Carrying cost
- (d) None of the above
- 1-h. Cause and effect diagram is also known as _____.(CO4) 1
- (a) Fishbone diagram
- (b) Fish diagram
- (c) Cause diagram
- (d) Effect diagram
- 1-i. ERP refers to _____.(CO5) 1

- (a) Efficient Resource Planning
- (b) Enterprise Resource Planning
- (c) Engineering Resource Planning
- (d) Effective Resource Planning

1-j.	Organisations are mainly concerned with managing (CO5)	1
	(a) Pure Risks	
	(b) Speculative risks	
	(c) Personal risks	
	(d) none of above	

2. Attempt all parts:-

2.a.	What is family table? (CO1)	2
2.b.	What is PLM components? (CO2)	2
2.c.	What is the first step in the strategy making process? (CO3)	2
2.d.	What is the aim of occupational health? (CO4)	2
2.e.	What is a hazard? (CO5)	2

SECTION B

30

3. Answer any five of the following:-

3-a.	What is the importance of Life cycle Model? (CO1)	6
3-b.	What are the difference between PLM and other enterprise system ? (CO1)	6
3-c.	What are the benefits of PLM in manufacturing? (CO2)	6
3-d.	What is Debugging in windchill? (CO2)	6
3.e.	write a short note on connector and router robot (CO3)	6
3.f.	Explain the types of Quality Management System. (CO4)	6
3.g.	What is Risk Appetite and Risk Tolerance? (CO5)	6

SECTION C

50

4. Answer any one of the following:-

4-a.	Explain Design Development Stages. (CO1)	10
4-b.	Explain Design Development , validation and Production. (CO1)	10

5. Answer any one of the following:-

5-a.	What is validation? What are the two types of validation? (CO2)	10
5-b.	What is Problem report, change request and change notice in windchill? (CO2)	10

6. Answer any one of the following:-

- 6-a. What is the impact on the organization of developing a strategy for PLM? (CO3) 10
- 6-b. Describe change management for PLM. (CO3) 10

7. Answer any one of the following:-

- 7-a. Discuss about the need, types, construction, and applications of control charts. (CO4) 10
- 7-b. what is main function of customization? How can we customize a table in windchill? (CO4) 10

8. Answer any one of the following:-

- 8-a. What do you mean by budget uncertainty? How risk is managed in projects? (CO5) 10
- 8-b. Explain the technique of 'Risk Measurement, 'Risk Evaluation' and 'Risk Prediction' for natural disasters (CO5) 10

2022-23 Jan_June