

Name:.....

Roll No.



ST.JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY, PALAI
(An ISO 9001:2015 Certified College)

Affiliated to APJ Abdul Kalam Technological University

Department of Mechanical Engineering

First Internal Test–Apr 2021

Semester VIII

MP 482 Product Development and Design (NDE)

Time: 2 Hours

Answer all Questions.

Max.Marks: 50

PART-A

Q No.	Question	Marks	K Level	CO&K Level
1	Discuss the different types of Customer needs related to the products they use.	5	K2	CO1-K2
2	Explain modular architecture and different types of modular architecture.	5	K2	CO1-K2
3	What are the primary roles of development team members in Conceptual Design process?	5	K2	CO1-K3
4	Explain DFM, stating its relevance in product design.	5	K2	CO2-K3

PART-B

Q No.	Question	Marks	K Level	CO&K level
1	Sketch a 'Needs-Metrics' matrix for the design of a typical electro-mechanical product of household use, with an example.	10	K2	CO1-K2
2	Describe the 'Kano diagram' of customer satisfaction.	10	K2	CO2-K2
3	Explain 'Product Life Cycle' of a manufactured product.	10	K3	CO2-K3