

(3 Hours)

[Total Marks: 80]

- N.B.: (1) Question No. 1 is **Compulsory**.
(2) Attempt any **three** questions out of the remaining **five**.
(3) Each question carries 20 marks.
(4) Assume suitable data if required.

1. (a) What is MVP? What are the key points while designing the MVP? (5)
(b) State the classification types of an electronic Product? (5)
(c) Define and explain Idea Segmentation. (5)
(d) What is debugging? Explain the steps of debugging (5)
2. (a) What are the product development challenges? Explain in details. (10)
(b) What are the significances of EMC and EMI in product testing? (10)
3. (a) What is the integration, verification and validation in electronic product design? (10)
(b) Explain the contents of service manual, instruction manual & user manual. (10)
4. (a) What is the role in A to D converter in product design? Explain parameters while designing A to D converter. (10)
(b) Write in brief about risk management in software testing. (10)
5. (a) Write in brief on presentation and preservation of document. (10)
(b) Write down the difference between (10)
i) White box testing and Black box testing.
ii) Functional Design and Architectural Design for a smartphone.
6. (a) Write short note on: Indian and international standard product compliance. (10)
(b) What is the importance of bill of material? Explain bill of material with suitable example. (10)

55666