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Question Paper Code: U3F05

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2024

Third Semester

Computer science and Design

21UCD305- Design Thinking

(Regulations 2021)

Duration: Three hours

Maximum: 100 Marks

Answer All Questions

PART A - (10x 2 = 20 Marks)

1. Why the phases in a design thinking process are not linear? Explain. CO2- App
2. Identify any tool to represent the following case. 'How to improve food experience of our customers who are balancing work and chores from Covid19 pandemic?' CO2- App
3. 'My kid finds online classes extremely boring. I wish I could do something to help'. Use four Ws and frame a problem statement. CO2- App
4. 'People don't buy our product since it takes too long for shipping'. Use the five whys to break the problem down and get to the root cause. CO2- App
5. Write down the four principles of design suggested by Norman. CO1- U
6. What are macro HCIs? CO1- U
7. What is meant by MVC? CO1- U
8. What are the uses of a social impact statement? CO1- U
9. State the three radical changes suggested by Mr. Spool to the usability evaluation process. CO2- App
10. Briefly explain how an expert review is performed. CO2- App

PART – B (5 x 16= 80Marks)

11. (a) Explain the various stages in design thinking process with examples. CO1-U (16)
Or
(b) Explain the tools used for 'what works' and 'what wows' questions. CO1-U (16)
12. (a) Explain Empathize phase in detail. CO1-U (16)
Or
(b) Write notes on Ideation phase in detail. CO1-U (16)

13. (a) Describe how testing is important in design thinking process. CO1-U (16)
Or
(b) Explain the differences among guidelines, principles, and theories. CO1-U (16)
14. (a) Explain the organizational support needed for usability design. CO1-U (16)
Or
(b) Explain the Guidelines used for conducting ethnographic studies for interaction design. CO1-U (16)
15. (a) Explain the differences between various kinds of direct manipulation with respect to translational distances. CO1- U (16)
Or
(b) Describe the concepts of augmented and virtual reality. CO1- U (16)