

- N.B. (1) Question No. 1 is compulsory.  
 (2) Attempt any **four** from the remaining six questions.  
 (3) Illustrate answers with neat sketches wherever required.  
 (4) Answers to questions should be **grouped** and written **together**.

- Q.1 (a) List and explain General Principles for designing User Interfaces. 10  
 (b) Design an User Interface (adopting concepts of HCI for designing good interfaces) for a mobile application that guides students through daily college routine, of practical and lectures. The application should help monitor the grades scored in various internal and external examinations and attendance and should display messages to indicate academic health of the student on the basis of performance and attendance. Also provide reports that indicate the efforts to be put by the student to achieve a particular score or grade. Draw the interface(s) and also mention the HCI concepts used by you for designing user friendly and efficient interface. 10
- Q.2 (a) Explain the following Human Characteristics from the point of view of designing interfaces – Visual Acuity, Mental Models and Skill. 8  
 (b) Explain how User's Tasks and Needs also play an important role in Interface Design from the point of Human Consideration. 7
- Q.3 (a) Explain the following Direct methods for determining requirements during Interface designing –i) Individual face-to-face Interview ii) Card Sorting for Web Sites. 8  
 (b) What is Mental Model in interface designing? List and explain any six guidelines for designing Conceptual Models. 7
- Q.4 (a) Designing Visually Pleasing Interfaces is important. Explain on the basis of : i) Sequentiality ii) Predictability iii) Regularity iv) Unity 8  
 (b) What is the purpose of Menus in Interface Design? Explain the following Menu Structures :  
 i) Sequential Linear Menu ii) Event Trapping Menu iii) Connected Menus 7
- Q.5 (a) Explain the following the types of windows :  
 i) Primary ii) Dialog Box iii) Message Box iv) Palette 8  
 (b) List and explain the various Windows presentation styles. 7
- Q.6 (a) List and explain Presentation Controls used during Interface Design. 8  
 (b) Mention the Guidelines for selecting proper Device-Based Controls. 7  
 Write note on the following Device-Based Controls –  
 i) Graphic Tablet ii) Voice
- Q.7 (a) Write note on Contextual Help as a means of providing Guidance and Assistance when designing an Interface. 8  
 List and explain the possible problems with Colors when designing Interfaces. 7