CBCS SCHEME

16/17MCA454 **USN** Fourth Semester MCA Degree Examination, Dec.2019/Jan.2020 **Principles of User Interface Design** Time: 3 hrs. Max. Marks: 80 Note: Answer any FIVE full questions, choosing ONE full question from each module. Module-1 What are usability goals and measures? Briefly explain each one of them. 1 (07 Marks) What are the goals for requirements analysis? (04 Marks) b. Briefly explain the concept of usability motivations. (05 Marks) What are the interaction styles available for a UI designer? Mention their advantages and disadvantages. (08 Marks) Elucidate the eight golden rules of Interface Design. (08 Marks) Module-2 With a neat sketch, explain the four pillars of design, in detail. (08 Marks) 3 a. Discuss the development methodologies in managing design processes. (08 Marks) Describe the steps involved in ethnographic observation, (04 Marks) a. Elaborate the spectrum of usability testing. (07 Marks) b. Explain the concept of evaluation during active use. (05 Marks) Module-3 Write a note on all the examples of direct manipulation. (07 Marks) What are the problems with direct manipulation? Explain each one of them. (06 Marks) What are the principles of direct manipulation? (03 Marks) List out the single menu options available for a UI design. Explain them in brief. (03 Marks) Discuss the combinations of multiple menus available for a UI designer. (04 Marks) c. List out any eight form fill - in design guidelines Explain any five of them. (09 Marks) Module-4 Describe various abbreviation strategies. (06 Marks) b. What are the pointing tasks? Explain them briefly. (07 Marks) List out the different pointing devices. (03 Marks) With neat diagrams, explain the models of response time impacts. (06 Marks) List out the reasons for importance of colors. (03 Marks) List out and explain any seven color guidelines. (07 Marks) Module-5 Compare and contrast online versus paper documentation. 9 (08 Marks) Differentiate between reading from paper versus from displays.

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

OR

(08 Marks)

Write a note on any four of the multimedia document searches. 10 (04 Marks) a. Discuss any six advanced filtering and search interface options. (06 Marks) Describe any six challenges for information visualization. (06 Marks)