

QP Code : 16278

(3 Hours)

[Total Marks : 80]

N.B. : (1) Question No. 1 is **compulsory**.(2) Solve any **three** questions from remaining questions 2 to questions 6.(3) Please specify you answers with **neat** sketch and examples wherever **necessary**.(4) Assume **suitable** information to support your answers and specify the **same**.1. Answer any **four** questions from the following :—

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- (a) What are the three categories of the users ? How they can be provided with facilities to ensure feasibility in operation.
- (b) What are the factors that are considered to choose colours ?
- (c) What do you mean by keyboard accelerator and keyboard equivalent ?
- (d) How images and graphics are important in Design.
- (e) Provide brief information on Qualitative and Quantitative Research.

2. (a) Explain following with respect to Handle response Time

12

- (i) Progress Indicator
- (ii) Elapsed Time Message
- (iii) Hourglass Pointer.

(b) What are three levels of processing and seven stages of Action ? How they are interrelated to each other ?

8

3. (a) Petroleum Company want to establish unmanned petrol Pumps at major locations, Where Vehicle owners can fill the petrol on their own and the payment will be either by cashless in the form of Debit Card or Credit Card or at some points there may be Bank Note payment (Cash) by automatic machines. Following are some functional requirements :

12

There will be automatic gate that will not allow owners to take their vehicles if they didn't make the payment. Provide detailed system analysis and possible interaction design that will help to execute the same for petroleum companies. Your design should also contain suitable diagrams.

(b) List general principles of user interface design, Explain any 4 in detail.

8

4. (a) What are different presentation styles of windows ? State advantages and disadvantages of each style of window.

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(b) Provide different device based and screen based control for following.

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(i) Filling up Online Application for Admission to Engineering Course.

(ii) Online payment of Utility Bills such as Telephone, Electricity and Water charges etc.

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5. (a) What do you mean by Persona ? mention steps to design persona. 10
(b) Explain six behavioral patterns in detail. 10
6. Write short note on any **four** :- 20
(a) Goal Directed Design
(b) Gestalt principles
(c) Menus
(d) Feedback and Guidance
(e) Learning.
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