



**SCHOOL OF INFORMATION TECHNOLOGY AND ENGINEERING**

**CONTINUOUS ASSESSMENT TEST – II - WINTER SEMESTER 2019-2020**

**Programme Name & Branch: B.Tech (IT)      Class Number(s): VL2019205004433 / 6764**

**Course Name Code: ITE1014**

**Course Name: Human Computer Interaction**

**Faculty Name(s): Dr. Kamalakannan J / Dr. Rajesh Kaluri**

**Exam Mode: Closed book**

**Exam Duration: 90 mins**

**Maximum Marks: 50**

**Answer all of the following (5 x 10 = 50 Marks)**

1. Google Pay is a digital wallet platform and online payment system developed by Google to power in-app and tap-to-pay purchases on mobile devices, enabling users to make payments with Android phones, tablets or watches.

*Srinivasan wants to use transfer money to one of his friend using Google Pay. Analyze the user interface of the Google Pay app and prototype using storyboarding technique along with the design specifications.*

2. Paytm is a well-known Indian digital wallet and payment company which provides bus, flight & train booking services.

**Illustrate the concept of personas to the below scenario**

*A person wants to book a train ticket from Chennai to New Delhi using Paytm.*

1. *A retired army person whose age is 56 and wants to use paytm for train booking.*
  2. *Mohit (age - 20) is a student studying in VIT and wants to book a train ticket.*
  3. *Priya (age - 43) is an employee working in Wipro and wants to book a train ticket.*
3. a. Discuss how GOMS can be used in predicting the skilled behavior of a human and improving the efficiency of HCI by identifying and eliminating unnecessary user actions. [5 M]





- b. Analyze the sequence of interactions using GOMS for logging into the homepage of Facebook. Assume the following variable names and estimated time required to do each action. List out all the necessary actions and calculate the amount of time necessary to complete the actions for both Novice and Expert users. [5 M]

**TYPE OF OPERATION**

**TIME ESTIMATE**

K: Keyboard input

Expert: 0.12 s

Average: 0.20 s

Novice: 1.2 s

T(*n*): Type *n* characters

$280 \times n$  ms

P: Point to something on the display

1100 ms

B: Press or release mouse button

100 ms

BB: Click a mouse button (press and release)

200 ms

H: Home hands, either to the keyboard or mouse

400 ms

M: Thinking what to do (mental operator)

1200 ms (can change)

W(*t*): Waiting for the system (to respond)

*t* ms

4. How the primary stakeholders profile can be used to define the target user for an application and discuss the constructs which can be used to cover context of use, cognitive abilities physical abilities and individual profile for any one desktop application.
5. Discuss the three different stages of usability engineering life cycle model with diagram and how it can be applied to identify the achievement of usability goals for an application.