

Roll No



**PRESIDENCY UNIVERSITY  
BENGALURU**

**SET A**

**SCHOOL OF INFORMATION SCIENCE  
END TERM EXAMINATION - JAN 2024**

**Semester :** Semester V - 2021

**Course Code :** CSA3010

**Course Name :** Human Computer Interaction for Game Development

**Program :** BCA

**Date :** 05-JAN-2024

**Time :** 1:00 PM - 4:00 PM

**Max Marks :** 100

**Weightage :** 50%

**Instructions:**

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

**PART A**

**ANSWER ALL THE QUESTIONS**

**5 X 2M = 10M**

1. Why do many organisations conduct heuristic evaluation?  
(CO3) [Knowledge]
2. What are the possible reasons for stereotype threat?  
(CO3) [Knowledge]
3. Explain Hawthorne effect.  
(CO3) [Knowledge]
4. Give two types of acceptance testing?  
(CO3) [Knowledge]
5. Give four examples which comprise multimodal interfaces.  
(CO4) [Knowledge]

**PART B**

**ANSWER ALL THE QUESTIONS**

**5 X 10M = 50M**

6. How would you make a persona for a food ordering app? Explain the process from start to finish and mention the advantages of creating a persona.  
(CO1) [Comprehension]
7. What do you understand by Gestalt principles? Name at least five and explain them with help of figures.  
(CO2) [Comprehension]

8. Explain both stereotype threat and order effects. How will you prevent them from effecting the results of an app evaluation?

(CO3) [Comprehension]

9. Brain computer interfaces are used to control prosthetics. How do you think technology will progress in the future? Is it possible to use audio systems and hear this over the radio directly to our brain? Name some wearable devices that would be used by most people in future. How do you think your app design should change to accommodate wearable devices?

(CO4) [Comprehension]

10. How do games and simulations differ? What alternatives do games use to simulate the reality of a system such as a bag? Is it possible to simulate situations such as motion under water without using real physics equations? How would you try to do it?

(CO4) [Comprehension]

### **PART C**

**ANSWER ALL THE QUESTIONS**

**2 X 20M = 40M**

11. You are the head of a team evaluating an app for its human interaction capabilities. How would you plan and execute the evaluation? What different types of evaluation would you perform? What are the different types of biases that you would like to account for during the evaluation of the app?

(CO3) [Application]

12. When you are designing an app that targets a billion users, which devices would you try to make it compatible with? What features would you add to the app to enable multimodal compatibility? What are artificial mechanoreceptors and would you make your app compatible with them? Which visual design principles would you include? Would you use semiotics for this application? If yes, explain how?

(CO4) [Application]