

Total No of Questions: [10]

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B.E.(Information Technology)

Game Engineering (414451)

(2019 course) (Semester - II) (Endsem Exam)

Time: 2 ½ Hrs. Max. Marks : 70

Instructions to the candidates:

- 1. **Answer Q1or Q2, Q3or Q4, Q5 or Q6, Q7 or Q8**
- 2. **Neat diagrams must be drawn wherever necessary.**
- 3. **Figures to the right side indicate full marks.**
- 4. **Use of calculator is allowed**
- 5. **Assume Suitable data if necessary**

- Q1) a) What is "Reclaiming Opposition" in the context of digital culture, and why is it important? [06]
b) What is "affective modulation," and how does it relate to the design of digital products and services? [06]
c) Explain any four mechanics which can be used in any gamified system designed for solving any social problems. [06]

- OR**
- Q2) a) Explain how social engagement loop motivating emotion leads to player reengagement. [06]
b) Explain point system in game engineering. [06]
c) How levels and leaderboards act as game mechanics for designing game? [06]
- Q3) a) What are the "Three Levels" of rules in game design and how do they relate to gameplay? [06]
b) What are "Positive and Negative Externalities" in network effects and how do they affect games played over networks? [05]
c) What is "Selfish Routing" and how does it relate to network games? [06]

- OR**
- Q4) a) How do "Wardrop and Nash Equilibrium" affect the design and play of network games? [06]
b) What is "Partially Optimal Routing" and how does it impact network games? [05]
c) What is the "Price of Anarchy" and how does it relate to network games and their outcomes? [06]
- Q5) a) What are some popular game engines/frameworks, and what are their strengths and weaknesses? [06]
b) How does Godot 3.2 compare to other game engines in terms of functionality and ease of use? [06]
c) What are some key features of Construct 2, and how have they contributed to its popularity among game developers? [06]

- OR**
- What are some key features of GameMaker: Studio, and how do they help
- Q6) a) developers create engaging games? [06]
b) What are some of the advantages and disadvantages of using Clickteam Fusion 2.5 for game development, and how does it compare to other game engines? [06]
c) What are some key features of Sploder, and how does it compare to other game engines in terms of ease of use and functionality? [06]
- Q7) a) How is game engineering used in esports, and what are some examples of successful esports games? [09]
b) What are some applications of game engineering in the field of teaching and learning, and how effective are they? [08]
OR
- Q8) a) What are some key features of PUBG New State that distinguish it from other battle royale games? [09]
b) How have game developers used game engineering to create a flexible and customizable experience in Minecraft? [08]