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| ***Total No of Questions: [10]*** | | | |
| **[Total No. of Pages :02 ]** | | | |
|  |  | ***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 | [06] |

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|  |  | popularity among game developers? |  |
|  |  | **OR** |  |
| Q6) | a) | What are some key features of GameMaker: Studio, and how do they help  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] |