P1028

[5870]-1222

T.E. (Computer Engg.)
HONORS - VIRTUAL REALITY AND AUGMENTED REALITY
Augmented Reality
(2019 Pattern) (Semester - II) (310703)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates:
1) *Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*
2) *Neat diagrams must be drawn whenever necessary.*

Q1) a) Explain the different characteristics of tracking technology. **[9]**

    b) What are multiple cameras infrared tracking in AR? **[8]**

OR

Q2) a) What are major software components used in AR? **[9]**

    b) Explain outdoor tracking in details. **[8]**

Q3) a) Explain marker based tracking in detail. **[6]**

    b) What are different types of markers? **[6]**

    c) What is scene generator? **[6]**

OR

Q4) a) What is localization based Augmentation? **[6]**

    b) Explain feature based tracking method. **[6]**

    c) Explain virtual retinal system in detail. **[6]**

Q5) a) What is Mixed Reality? **[5]**

    b) What are different Projection displays? **[4]**

    c) Explain AR monitoring system in detail. **[8]**

OR

P.T.O.

Q6) a) What is SLAM? **[7]**

b) Explain all AR devices with suitable example. **[10]**

Q7) a) What is Semi-direct monocular Visual Odometer (SVO)? **[6]**

b) Explain the different applications of mixed reality. **[6]**

c) What are input and output in Mixed Reality? **[6]**

OR

Q8) a) Explain the difference between computer vision and mixed reality. **[8]**

b) Explain the different variants of SLAM in detail. **[10]**

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