

Code: R7420505

**R7**

B.Tech IV Year II Semester (R07) Advanced Supplementary Examinations, June 2012

**VIRTUAL REALITY**

(Computer Science and Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions

All questions carry equal marks

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- 1 Explain in detail the five classic components of a VR system.
- 2 Describe the working of any two input devices using which navigation/manipulation can be done in absolute coordinates.
- 3 (a) Mention any two devices used for sensing temperature in VR and explain how they work.  
(b) Discuss about the devices used for launching sound into space in VR.
- 4 With appropriate diagrams, explain in detail about texture mapping method.
- 5 (a) What is a testbed? Give a brief note on testbed evaluation methods of universal VR tasks.  
(b) Explain the following in case of VR human factors study.  
(i) Trials and sessions. (ii) Control study.
- 6 (a) What is orthopedic rehabilitation? What are its uses?  
(b) Write about virtual colonoscopy procedure.
- 7 Write short notes on the following:  
(a) Loading a model.  
(b) Loaderinfo3D.  
(c) Java 3D loader for games.
- 8 Describe the process of creating a particle system using points array in Java 3D.

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