

Code.No: R05420505

R05

SET-4

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD  
IV B.TECH II SEM–REGULAR/SUPPLEMENTARY EXAMINATIONS MAY - 2010  
VIRTUAL REALITY**

**(COMPUTER SCIENCE & ENGINEERING)**

**Time: 3hours**

**Max.Marks:80**

**Answer any FIVE questions  
All questions carry equal marks**

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1. Discuss the various implications of commercial VR technology. [16]
2. What are magnetic trackers? Compare and contrast AC and DC magnetic trackers. [16]
3. Explain in detail about any three forces feed back interfaces. [16]
4. Write short notes on behavior modeling. [16]
- 5.a) What differences exist between human factors study and usability engineering?  
b) Explain the methodologies to be followed for usability evaluations. [10+6]
- 6.a) Explain in brief about single soldier simulators.  
b) Write about psychological and cognitive rehabilitation. [8+8]
- 7.a) What is a scene graph? Discuss about scene graph in detail.  
b) Explain about curve rotations using lathe3D. [8+8]
- 8.a) Compare and contrast between updating a 2D sprite and a 3D sprite.  
b) Write and explain Java3D code for processing an animation operation. [4+12]

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