

Code.No: R05420505

R05

SET-2

**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. Explain in detail about the five classic components of a Virtual Reality system. [16]
2. Discuss in detail about the functionality of ultrasonic trackers. [16]
3. What is a large-volume display device? Discuss in detail about different large-volume display devices. [16]
4. Briefly explain different stages of haptics rendering pipeline. [16]
- 5.a) What are the main stages in usability engineering? Explain in brief.  
b) Write about after effects of adaptation. [8+8]
- 6.a) What is orthopedic rehabilitation? What are its uses?  
b) Write about virtual colonoscopy procedure. [8+8]
7. Explain about adding a texture to a shape using Loader3D. [16]
8. Explain in brief about different aspects involved in creating a simple 3D sprite application. [16]

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