

**III B.Tech II Semester Supplementary Examinations, April/May 2005**  
**ERGONOMICS**  
**(Bio-Medical Engineering)**

**Time: 3 hours**

**Max Marks: 80**

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

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1. What is a Transducer. Classify , types of Transducers and describe how they are useful to humans in day to day life.
2. A fire station receives a call of fire accident from sixty kilometers away to extinguish fire at fifth floor in a complex. Answer the following.
  - (a) How does the fire fighting equipment reach?
  - (b) What type of dress should a fireman wear to prevent burns.
  - (c) How the fireman reach the place of fire.
3. What are the factors you will take in to consideration while building a bridge across a river to move light armoured cars during a war.
4.
  - (a) What is audiometry ?
  - (b) How do we judge the levels of hearing in defective hearing?
5. Describe in detail the factors required for a space craft.
6.
  - (a) If you are asked to select young people for armed forces or para military forces what anthropometric measurements you would like to record .
  - (b) How helpful are they in selecting people for different work places ?
7. Present the case study of wheel chair.
8. Design the cock pit with a neat diagram.

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