

Roll No. ....

Total No. of Questions : 08]

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## Paper ID [IE505]

(Please fill this Paper ID in OMR Sheet)

M.Tech. (Sem. - 1<sup>st</sup>)

### METHODS ENGINEERING & ERGONOMICS (IE - 505)

Time : 03 Hours

Maximum Marks : 100

#### Instruction to Candidates:

- 1) Attempt any Five questions.
- 2) All questions carry equal marks.

MAY 2008

- Q1)* Define productivity. What productivity measure should be adopted as a basis of optimizing the working of an organisation? Discuss.
- Q2)* Discuss the principle of motion economy used in method study.
- Q3)* What do you understand by allowances in the context of time study? What are various allowances and how are they determined? Discuss.
- Q4)* Define anthropometry and show its importance. Explain the principles important for the application of anthropometric data to the design problem.
- Q5)* Why is identification of control is so important? Discuss different type of control devices and the function which they perform.
- Q6)* How do high heat and high cold affect the human performance? Discuss the heat exchange process of human body with the environment.
- Q7)* How does human body respond to vibration? Discuss the methods of protection against vibration.
- Q8)* Explain the following:
- (a) Work sampling
  - (b) Metabolism.

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