

M .A H.sc --403 Application of ergonomics(core compulsory)

Objectives:

- To provide a general introduction to ergonomics .
- To provide knowledge about ergonomics approach to design requirement at all levels.
- To provide knowledge about consideration to design work place and furniture.

Unit 1:

1. Ergonomics, its definition origin and historical perspective.
2. Scope of ergonomics , need and importance .
3. Components of ergonomics.

Unit 2:

1. Workers consideration in work space design --- anthropometric, work habit and work posture.
2. Work surface design consideration.
3. Ergonomics criteria for designing products.

Unit 3:

1. Environmental factors --- temperature , humidity , light , noise, sound and thermal Environment.
2. Atmospheric pollution.
3. Factors responsible for exchange of heat between body and surrounding environment.

Unit 4:

1. To recommend application of ergonomics furniture.
2. Techniques of ergonomics research & furniture.
3. Design of furniture for physically challenged and elderly person.

References:

- Johnson B .J (1970) equipment for modern living –Macmillan co.newyork.
- Grandjean . E. 1973 ergonomics of home London -taylor and france.
- McCormick , e. j 1976 human factors in engineering and design –new delhi mcgrraw hill publishing ltd.
- Ergonomics –surmya joshi dept of home management -1998.
- Essential of ergonomics by prof-veena gandotra , Krishna oberoie and promila Sharma.
- Obene david (1980) :ergonomics and work ,john wiley and sons ,new York London.