

BACHELOR OF PHYSIOTHERAPY
EIGHTH SEMESTER
ERGONOMICS
BPT - 804

(USE SEPARATE ANSWER SCRIPTS FOR OBJECTIVE & DESCRIPTIVE)

Duration: 1.30 hrs.

Full Marks: 35

Time: 10 min.

(PART-A: Objective)

Marks: 10

Choose the correct answer from the following:

1×10=10

1. Ergonomics is related to human
 - a. Comfort
 - b. Safety
 - c. Both 'a' and 'b'
 - d. None of these
2. The following subject(s) is/are related to Ergonomics:
 - a. Anthropology
 - b. Physiology
 - c. Psychology
 - d. All of the above
3. Ergonomics principle suggests that:
 - a. Monitoring displays should be placed outside peripheral limitations.
 - b. Glow in the dark dials made of reflective substances are good for viewing in the nights.
 - c. Visual systems should be preferred over auditory systems in noisy locations.
 - d. All of the above
4. The most frequently used components are arranged in:
 - a. Left Side
 - b. Right Side
 - c. Central Location
 - d. Any of the above
5. The height of top of the work bench should be _____ the height of the elbow of the workmen
 - a. At
 - b. Above
 - c. Below
 - d. Any of the above
6. Repetitive motion injuries are caused by _____ exposure to a combination of factors
 - a. Short Term
 - b. Intermittent
 - c. Prolonged
 - d. Immediate
7. In an Industrial setting, a pro-active ergonomic approach leads to:
 - a. A reduction in work related injuries
 - b. Increased Productivity
 - c. Reduced Physical/Mental stress
 - d. All of the above
8. How can you reduce injury due to vibration?
 - a. Reduce the power of tool
 - b. Incorporate articulating arms
 - c. Install cork, plastic or rubber on the handles.
 - d. All of the above

9. Tools can be a problems when they
- a. Are heavy
 - b. Require static work
 - c. Do not allow for neutral postures
 - d. All of the above
10. The basic definition of ergonomics is:
- a. Using relaxed postures
 - b. Fitting the employee to the workstation
 - c. Fitting the workstation to the employee
 - d. Either B or C

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(PART-B : Descriptive)

Time : 1 hour 20 min.

Marks : 25

[Answer question no.1 & any two (2) from the rest]

1. Explain the principles and disciplines of Ergonomics. 5
2. a) Factors affecting Posture. 5+5=10
b) Ergonomical aspects of Light at Workstation.
3. a) Biomechanical aspects of Ergonomics. 5+5=10
b) Ergonomical aspects of Noise
4. a) Explain various sitting Postures. 5+5=10
b) Prevention of Hearing Disorders.
5. a) Effect on Spine in Forward and Backward Sitting with suitable diagrams. 5+5=10
b) Social Significance of Ergonomics.

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