## **Karunya University**

## (Karunya Institute of Technology and Sciences)

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

## **Model Question Paper**

COMPUTER WORKSTATION ERGONOMICS Time: 3 hours **Subject Title: Subject Code:** 09ME255 **Maximum Marks: 100** 

## Answer AII anactions

$\frac{\text{Answer ALL questions}}{\text{PART} - \text{A} \ (10 \text{ x } 1 = 10 \text{ MARKS})}$	
	Over half of the bones in the human body are located in the  Eachmuscle is responsible for moving a particular part of the body. evaluations will be conducted by the Environmental Health and Safety Center.  The backrest should offer firm support, especially in thelower back region. is actually a very important part of a comfortable workstation.  A person with a state of mind develops a positive outlook in life. mainly describes the input aspects of tasks.  Give general guidelines for design workstations for aging vision.  What is job content?  Give the performance of a good team work.
$\underline{PART - B \ (5 \times 3 = 15 \text{ MARKS})}$	
12. 13. 14.	What are the various sources of Ergonomic information?  Describe the biomechanical description of human body.  Write short notes on mental work load.  Give the general guidelines for design of office workstation.  Give the Ergonomic design consideration for pregnant women.
$\underline{PART - C \ (5 \times 15 = 75 \text{ MARKS})}$	
16.	Write about few professional organizations in the world and mention their activities in detail. (OR)
17.	Describe how various disciplines of Ergonomics evolved.
18.	Explain the working zones of convenience and how they are important in designing computer workstation.  (OR)
19.	Describe a spinal column of a human being with a neat sketch in detail.
20.	Describe the relationship between stress, strain and related procedure of mental workload in detail.  (OR)
21.	Describe the basic rules for correct sitting position with keyboard in detail.
22.	Explain the role of over - illumination in working area. Describe the adverse effects of improper illumination and various measures to prevent the same.

23. Explain the position of pelvis and lumbar spine on a flat and on a declined seat surface.

24. What is a motion study? Explain the role of the same in ergonomic design considerations. (OR)

25. Discuss the design consideration for designing a computer work station for disabled persons.

(OR)