

Reg. No.

--	--	--	--	--	--	--	--	--



MDH 453

II Semester M.P.Ed. Examination, September 2022
PHYSICAL EDUCATION
Physiology of Exercise

Time : 3 Hours

Max. Marks : 70

Instructions : 1) Answer **all** questions.

2) **Each** answer shall **not** exceed **six** pages.

1. Write the structure of bone and effect of exercise on skeletal system. **15**

OR

Describe the microscopic structure of muscles. Add a note on types of muscle fibers.

2. What is cardiac output ? Explain the changes in cardiac output during exercise. **15**

OR

Explain the process of gas exchange in lungs and tissues.

3. Discuss the ATP-CP, lactate and oxidative system of energy metabolism. **15**

OR

Discuss the physiological basis of developing strength and endurance.

4. Write the physiological differences between males and females. **15**

OR

Discuss the physiological changes and adaptation in hot and humid climate.

5. Write short notes on **any two** of the following : **(5×2=10)**

- a) Types of muscle contraction
 - b) Lung volumes and capacities
 - c) Energy requirements for football
 - d) Ergogenic aids.
-