



'समानो मन्त्रः समितिः समानी'

**UNIVERSITY OF NORTH BENGAL**

B.Sc. Honours 6th Semester Examination, 2022

**DSE-P3-PHYSIOLOGY**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.*

**GROUP-A**

1. Attempt any *five*: 1×5 = 5
- (a) Define graded exercise.
  - (b) What is dynamic work?
  - (c) What do you mean by oxygen deficit?
  - (d) Why “warm-up” is important before exercise?
  - (e) What is the difference between physical therapy and exercise science?
  - (f) What factor might influence ventilation threshold during incremental exercise?
  - (g) What is fitness?
  - (h) Explain why exercise is an example of both kinetic and potential energy.
  - (i) Give one example of aerobic exercise.
  - (j) What ATP production mechanism is used during maximal activities?

**GROUP-B**

**Attempt any *three***

5×3 = 15

2. Describe the importance of aerobic respiration in cell. 5
3. Mention different circulatory adjustments during exercise. 5
4. What are the benefits of physical activity? 5
5. Discuss different types of O<sub>2</sub> debt. 5
6. How does endurance training affect EPOC? 5

**GROUP-C**

**Attempt any two**

10×2 = 20

7. Critically discuss different energy sources during graded exercise.
8. Write short notes on – 2½ × 4 = 10
- (a) Aerobic Power
  - (b) Work load
  - (c) Silicosis
  - (d) Nutritional supplement.
9. Write short notes on – 5+5 = 10
- (a) Ergogenic Aid
  - (b) Types of training for Anaerobic Power.
10. Discuss the role of ergonomics to avoid accidents and hazards. Write a note on static anthropometry. Mention the effect of rest on productivity. 4+3+3 = 10

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