

THE UNIVERSITY OF BURDWAN

B. Sc. 5th Sem (Honours) Examination, 2020 (CBCS)

SUBJECT: PHYSIOLOGY

Paper – DSE 2A (ERGONOMICS AND OCCUPATIONAL PHYSIOLOGY)

The figures in the right hand margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable. Examinees are instructed to submit the scanned copies/photographs of their answer scripts within 30 minutes after the completion of examination. Answer all questions as instructed

F.M = 40

Time: 2 Hrs.

Answer any **eight** questions of the following.

5X8= 40

1. Differentiate between physical work and physiological work. Outline the importance of work-rest cycle.
2. State the importance of Ergonomics in occupational health.
3. What is heat stress? How is it related with heat cramp and heat syncope?
4. What is 'hand-arm vibration syndrome'? Mention three major effects of whole body vibration.
5. What is glare? How does it affect the vision of workers in a work station?
6. State in brief, the principle of 'work station designing'.
7. What is meant by Newtonian anthropometry? State one example where the application of anthropometry is related to rise in productivity.
8. Mention salient features of designing a chair for 'visual display terminal'
9. State the symptoms of pneumoconiosis and WMSD.
10. Define accident. Mention ergonomic suggestions for avoiding road accidents.

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B. Sc. 5th Sem (Honours) Examination, 2020 (CBCS)

SUBJECT: PHYSIOLOGY

Paper – DSE 2B (SPORTS AND EXERCISE PHYSIOLOGY)

The figures in the right hand margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable. Examinees are instructed to submit the scanned copies/photographs of their answer scripts within 30 minutes after the completion of examination. Answer all questions as instructed

F.M = 40

Time: 2 Hrs.

Answer any **eight** questions of the following.

5X8= 40

1. Mention the effect of training on prolonged work.
2. State the cardiovascular and muscular changes that occur during graded exercise.
3. How can you calculate the work done by using bicycle ergometer.
4. Explain how detraining affects heart and skeletal muscles?
5. Name any one ergogenic aid and mention its adverse effects.
6. Mention different types of sports injuries and how can they be prevented?
7. Explain positive work, negative work and zero work with examples of each.
8. What do you mean by excess post exercise oxygen consumption and mention its importance.
9. Briefly discuss how the oxygen consumption of a subject is measured while performing exercise,
10. Define and mention the importance of measurement of VO_2 max.