2019

B.Sc. (Honours)

5th Semester Examination

PHYSIOLOGY

Paper - DSE 2-P

Full Marks: 20

Time: 3 Hours

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

Environmental Physiology

Answer all the questions.

1. Determine the dissolved oxygen (DO) of the supplied water samples, and interpret your result.

2. Kymographically record the effect of food additive (As) on the intestinal movement of rats in Dale's bath. [Marks: Normal movement - 1, 1st effect - 3, 2nd Normal - 1, Result & Interpretation - 1] 5+1

[Turn Over]

1	2	1
1	4	•

A 37	3.	Laboratory Note Book.	2
	A	Viva-voce	_

in the second se

Pharmacology & Toxicology

Answer all the questions.

 Kymographically record the two effects of acetylcholine (ACh) on isolated rat intestine in Dale's bath. Interpret your findings.

[1st normal - 1, Effect of acetylcholine - 4, 2nd normal - 1, Interpretation - 2] 6+2

2. Determine the acid value of the given oil sample. State the procedure in brief. Write down its principle.

[Procedure - 2, Calculation - 2, Interpretation - 1, Principle - 2] 5+2

- 3. Laboratory Note Book.
- 4. Viva-voce.

2

Sports Physiology, Work Physiology and Ergonomics

Answer all the questions.

1.	Determine the Physical Fitness Index (PFI) of individual and record the recovery heart rate in graphical manner (after doing standard exercise)	
	[Tabulation - 2, Measurement & Calculation - Graphical presentation - 2]	4, 8
2.	Measure the following:	
	(i) Height (Standing)	
	(ii) Weight	
	(iii) Sitting height	
	(iv) Eye height (sitting)	
	and calculate BMI and BSA of your subject.	
	[All measurement - 3, Calculation of BMI BSA - 4,]	& 7
3.	Laboratory Note Book.	2
4.	Viva-voce.	3

Ergonomics and Occupational Health

Answer all the questions.

1. Measure the blood pressure of a subject before and after exercise.

[Tabulation - 2, BP before exercise - 2, After exercise - 2, Interpretation - 2] 8

- Measure the working heart rate of an individual by ten beats method. Record your results in a proper tabular form.
- 3. Laboratory Note Book. 2
- 4. Viva-voce.