

2020

**PHYSIOLOGY****[HONOURS]****Paper : XI****[PRACTICAL]**

Full Marks : 80

Time : 4 Hours

*The figures in the right-hand margin indicate marks.*

1. a) What is stain? Distinguish between a stain and a dye.
- b) Describe the histological staining procedure to study a histological tissue section of liver by Haematoxyline-Eosin staining method.
- c) Draw a diagram of the section of liver and write two major identifying features. 25
2. a) What is Dale's fluid? Write the composition of Dale's fluid for a volume of 500ml.
- b) What will be the probable results when a small quantity of Acetylcholine is added to an organ bath containing a segment of rat's duodenum in your Dale's experiment? Give a sketch of your results.
- c) Explain the obtained results physiologically.

 $(2+4)+(2+3)+4=15$ *[Turn over]*

3. a) What is meant blood pressure? How could you obtain a mean BP?
- b) Name a method for measurement of BP of a human individual and write about the procedure of this method with a diagram.

2+8=10

4. Find out whether the mean blood sugar level is significantly lowered after drug treatment in the diabetic patients from the given data by Student's t test.

10

Before Treatment (mg/dl)	After Treatment (mg/dl)	t value at df 7
189	124	0.05 = 2.365
198	128	0.01 = 3.499
190	110	0.001 = 5.405
188	118	
192	110	
195	122	
187	126	
196	116	

5. Viva-Voce (Viva-voce will be held on Google meet/ Google duo/ WhatsApp call) 10
6. Laboratory Note Book (Submit the scan copy of laboratory note book). 10