

NEW

2015

Part II 3-Tier

PHYSIOLOGY

(Honours)

PAPER—V

(PRACTICAL)

Full Marks : 100

Time : 5 Hours

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

Answer all questions.

1. Identify *five* unknown histological permanent slides marked A — E focus under microscope and write main two identifying characters. 2×5
[Correct identification of each slides — 1, Two main identifying characters of each slides — $\frac{1}{2} + \frac{1}{2} = 1$]
2. Stain the supplied adipose tissue with sudan stain and focus under microscope. Draw with level your preparation on your answerscript. 10
[Preparation and staining — 3+3 = 6, Proper focusing under microscope — 2, Diagram with proper leveling — 2]
3. Stain a thin blood film of your own and measure the diameter of a focused monocyte by you under microscope. 10
[Preparation of blood film —2, Staining — 2, Focusing of Monocyte — 2, Proper measurement — 4]

(Turn Over)

4. Stain properly with Hematoxylin and Eosin the supplied paraffin section of a mammalian tissue. Mount properly and made permanent. Write two main identifying characters and identify properly your supplied slide. Write the flow-chart of your preparation. 15

[Deparaffinisation — 2, H/E Stain — 2 + 2,
Mount & Clearing 1 + 1 = 2, Correct identification — 2,
Two correct identifying characters 1 + 1 = 2,
Flow chart of H/E tissue staining — 3]

5. Identify the supplied biochemical sample with proper systematic qualitative analysis and confirm it with suitable confirmatory test. 15

[Systematic analysis — 8,
Detailed description of confirmatory test — 5,
Correct identification of supplied sample — 2]

6. Determine the normality of supplied HCl solution by titrating it against standard $\frac{N}{10}$ NaOH solution. 10

[Principle — 2, Procedure — 2, Result with tabulation — 2,
Calculation — 1, Accuracy as per error upto 5% — 3, Error
above 5% to 10% — 2, Error above 10% to 15% — 1,
Above 15% — 0]

7. Submission of authenticated report on the basis of a visit to higher learning centre. 10

[Printed Report — 6, Viva — 4]

8. Submission of duly signed Laboratory Note Books. 10

[Histology — 5, Biochemistry — 5]

9. Viva-voce. 10