# 2019

## Part – II

## PHYSIOLOGY

### (Honours)

### Paper – V

### (Practical)

*Full Marks – 100*

*Time : 6 Hours*

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

*Candidates are required to give their answers in their own words as far as practicable.*

1. Identify the histological sections of permanent slides focussed under the microscopes, marked as A, B, C, D and E. Give two appropriate identifying character for each section.

   Unique identifying character (2 ×½) = 01

   Correct Identification = 01

   **Note :** [No credit will be given for identifying character with incorrect identification]

   5×2=10

2. Stain, mount & observe Node of Ranvier under microscope. Stain with silver nitrate. Draw & label the observed field of focus. 10

| | | |
|---|---|---|
| Staining | = | 03 |
| Mounting | = | 02 |
| Focussing | = | 02 |
| Drawing | = | 02 |
| Labelling | = | 01 |

3. Properly stain the supplied paraffin section with haematoylin and eosin as per working schedule. Mount the slide clearly focus under low power (100x) of microscope, identify with two unique identification characters. Submit the slide to the examiner with authentication.

| | | |
|---|---|---|
| Deparaffination | = | 01 |
| Staining (03 + 03) | = | 06 |
| Mounting | = | 01 |
| Clearing | = | 01 |
| Identification | = | 01 |

4. Prepare a blood film of your own blood. Stain it with Leishman stain and observe under high power (400x) of microscope. Focus, identify a monotype. Measure its diameter using micrometer scale. 10

| | | |
|---|---|---|
| Blood film preparation | = | 01 |
| Staining | = | 04 |
| Focussing & Identification | = | 02 |
| Measurement with tabular result | = | 03 |

5. Submit a slide box containing five (5), HE stained histological slides duly signed by the respective teacher. 5×1

6. Identify the supplied unknown sample by performing the sequential qualitative tests. Write down the tests in a sequential manner. Perform and write specific confirmatory test. 10

| | | |
|---|---|---|
| Sequential tests | = | 06 |
| Confirmatory tests | = | 03 |
| Correct identification | = | 01 |

7. Quantitatively estimate chloride by Mohr's method. Write down the procedure in flow-chart form. Write the observations in tabular form. Calculate. Interpret your result. 10

| | | |
|---|---|---|
| Procedure | = | 03 |
| Observation | = | 02 |
| Calculation | = | 02 |
| Result | = | 02 |
| Interpretation | = | 01 |

[Errors upto 5% = 04 marks
5 – 15% = 03 marks
15 – 20% = 02 marks
Above 20% = no mark]

8. Estimate total protein by quantitative biuret reagent method from supplied sample of pulses. Write the method results and interpret the result. 15

| | | |
|---|---|---|
| Method | = | 04 |
| Result | = | 06 |
| Interpretation | = | 03 |
| Observation and calculation | = | 02 |

9. Submit Laboratory Note Books 10

| | | |
|---|---|---|
| Biochemistry | = | 04 |
| Histology | = | 06 |

10. Viva-voce 10