

OLD**2016****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 — $\frac{1}{2} + \frac{1}{2} = 1$]

(Turn Over)

2. Collect, spread and properly stain squamous epithelial cells using methylene blue solution. The cells are to be collected from the inner surface of your lips. Mount and focus a cluster of squamous cells under the low power (100×) of microscope, such that there are no intercellular space in between. Draw and label the observed field of focus.

10

(Staining-3, Mounting-1, Focusing-3,
Drawing-2 Labelling-1).

3. Prepare a blood film of your own blood. Properly stain it with Leishman stain and observe under high power (400×) of microscope. Focus and identify an eosinophil. Draw the observed field of focus with proper labelling.

10

(Blood film preparation-1, Staining Focusing and
identification-2, Drawing-2, Labelling-1).

4. Stain properly with Hematoxylin and Eosin the supplied paraffine section of mamaline tissue. Mount properly and made permanent. Write two main identifying characters and identify properly your supplied slide. Write the flow chart of your preparation.

[Deparaffination - 2, H/E stain - 2+2, Mount and clearing 1 + 1 = 2. Count identification - 2, Two Count *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.

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

6. Determine the normality of supplied H_2SO_4 solution by titrating it against standard $\frac{N}{10}$ NaOH solution.

[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]

10

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

[Printed Report-6, Viva-4] 10

8. Submission of duly signed Laboratory Note Books.

(Histology-5, Biochemistry-5) 10

9. Viva-Voce. 10
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OLD

2016

Part II 3-Tier

PHYSIOLOGY

(Honours)

PAPER—V

(PRACTICAL)

Full Marks : 100

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[Instruction to the Examiners]

1. Only one histological tissue section will be chosen from each of the following groups and to be recorded in the Key Khata for each day of examination.
 - A : Tongue, Esophagus, Stomach, Duodenum, Jejunum, Large Intestine.
 - B : Bone, Cartilage, Trachea, Lung, Spleen, Lymph Gland.
 - C : Liver, Kidney, Pancreas, Adrenal gland, Thyroid gland.
 - D : Testis, Ovary, Uterus, Artery, Vein.
 - E : Spinal Cord, Cerebral Cortex, Cerebellum, Skin, Skeletal muscle, Cardiac muscle.

(Turn Over)

- (i) 1 minute for each slide identification. Extra 1 minute to be given for completion of writing.
 - (ii) Marks distribution as per question.
 - (iii) In case of more than one day of examination at least three slides out of five must be changed from the previous day of examination. This is for all successive days of examination at the centre.
 - (iv) If identification is incorrect, no credit will be given for identifying character.
2. As per questions and examiner's discretion.
 3. As per questions and examiner's discretion.
 4. As per question and examiner's discretion.
 5. (i) No marks should be given in case of wrong identification.
(ii) Marking will be done as per question and examiner's discretion.
 6. As per question and examiners discretion.
 7. As per question and examiners discretion.

8. (i) As per question and examiner's discretion.
- (ii) Special wrightage to be given for regular signature of the teacher.
- (iii) No marking for unsigned note books.
9. During viva-voce following instruments are to be displayed—
- (i) Burette, (ii) Pipette, (iii) Volumetric flask, (iv) Conical flask, (v) Beaker, (vi) Haemoglobinometer, (vii) Hemocytometer and (viii) Compound microscope.

Marking :

- (a) Naming of the instruments = 01.
- (b) Use of the instrucments = 01.
- (c) Questions from the practical performed and related fields as per discretion of the examiners = 08

Post Examination Instruction

Examiners are requested to submit the following items to the Head Examiner :

- (a) Sample key book which contains the name of histological slides for Q.No. 01, stock and distribution of biochemical sample against Q.No.5.

- (b) Marks key which contains the part marks of all questions after signatures of the examiners.
 - (c) Copy of student's attendance sheet.
 - (d) Evaluated answerscripts with examiner's signatures.
 - (e) Award lists signed by the examiners.
 - (f) Any other paper or statement as desired by the examiners, if any.
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