

**NEW**  
**Part-III 3-Tier**

**2017**

**ZOOLOGY**

**(Honours)**

**PAPER—VII**

**(PRACTICAL)**

*Full Marks : 100*

*Time : 5 Hours*

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

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

*Answer all questions.*

**Group—A**

1. Prepare a smear of the gut content / Seminal vesicular content of the animal specimen provided. Examine your preparation under a microscope and draw a labelled diagram of the endoparasite observed by you. Identify the

*(Turn Over)*

parasite stating any three morphological characteristics and the generic name. 15

2. (a) Identify the histological slides provided (A and B), stating two diagnostic characters for each slide. 5
- (b) Determine your blood group (ABO and Rh) by the help of suitable antigen-antibody reactions. Describe the principle of your test and record your blood group.

Or

Describe the working principle of ELISA / immunofluorescence technique / blotting technique learnt by you. State the practical significance thereof.

5

3. Prepare a smear of the microbial sample provided. Fix and 'Gram stain' the smear. Examine the preparation under a microscope and draw a diagram of the bacterium observed by you, stating the generic name. 10

### Group—B

(*Biochemistry, Animal Physiology & Biophysics*)

4. (a) Identify the sample provided by performing suitable qualitative tests. Tabulate your tests (names only) observations and inferences (with reaction wherever necessary). 10

- (b) Estimate the concentration (mg / ml) of protein present in the 'unknown solution' provided, using Lowry's method. Present your readings, calculation and inference. 10
5. (a) Prepare a blood film with the blood sample provided. Fix and stain it suitably. Observe your preparation under a microscope and draw a labelled diagram of any leucocyte observed by you. 10
- (b) Demonstrate the presence of ammonia / urea / uric acid in the sample provided, using suitable qualitative test. 5
6. (a) Determine the pH of the water sample provided. Record your result and comment on it. 15
- (b) Point out at least three components of a table centrifuge machine / digital balance / colorimeter and state their functions. 5

### **Group—C**

#### **(Lab note book & Viva-Voce)**

7. Viva Voce. 10
8. Laboratory Note Book. 10