

**PARUL UNIVERSITY**  
**FACULTY OF APPLIED SCIENCE**  
**B.Sc. Winter 2017-18 Examination**

**Semester: 4**  
**Subject Code: 11103203**  
**Subject Name: Animal Physiology**

**Date: 10/05/2018**  
**Time: 02:00PM TO 04:30PM**  
**Total Marks: 60**

**Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

**Q.1. A) Explain the working of heart as a pump. (08)**

**Q.1. B) Answer the following questions (Any two)**

- (a) Draw a well labeled animal cell and give the functions of any 2 organelles. (04)
- (b) Give the schematic representation with diagram: Mechanism of conduction of nervous impulse. (04)
- (c) Draw a flow chart: Digestion of carbohydrates (04)

**Q.2. A) Answer the following questions.**

- (a) Fill in the blanks. (04)
  1. The cell is the \_\_\_\_\_ and \_\_\_\_\_ unit of life
  2. \_\_\_\_\_ is needed to activate \_\_\_\_\_ in the stomach for protein digestion.
- (b) Short note: Types of passive transport. (04)

**Q.2. B) Answer the following questions (Any two)**

- (a) Multiple choice questions. (03)
  1. Blood group AB +ve can donate blood to
    - (A) AB (B) AB-ve
    - (C) AB+ (D) O
  2. Thrombin is inhibited by
    - (A) Prothrombin (B) Plasmin
    - (C) Fibrin (D) Antithrombin
  3. Cardiac muscle is \_\_\_\_\_
    - (A) Striated (B) Branched
    - (C) Interconnected (D) All of the above
- (b) Draw the urinary system and state any 2 functions. (03)
- (c) List out the various hormones associated to the pituitary gland. (03)

**Q.3. A) Discuss urine formation. (08)**

**Q.3. B) Answer the following questions (Any two)**

- (a) Differentiate between CNS and PNS. (04)
- (b) Differentiate between the different types of granulocytes. (04)
- (c) Short note: Saliva (04)

**Q.4. A) Answer the following questions.**

- (a) Short note: Lobes of cerebrum. (04)
- (b) Short note: Thyroid gland. (04)

**Q.4. B) Answer the following questions (Any two)**

- (a) Multiple choice questions. (03)
  1. \_\_\_\_\_ is not a type of epithelial tissue
    - (A) Squamous (B) Columnar
    - (C) Circular (D) Simple
  2. \_\_\_\_\_ is a conventional neuropeptide neurotransmitter
    - (A) Glu (B) Endorphin
    - (C) ATP (D) Gly
  3. T lymphocytes are associated to which gland?
    - (A) Thymus (B) Pancreas
    - (C) Parathyroid (D) Pineal
- (b) Draw the hemoglobin structure. (03)
- (c) Discuss micelle formation. (03)