

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

**Semester: 3**  
**Subject Code: 11103203**  
**Subject Name: Animal Physiology**

**Date: 01/01/2018**  
**Time: 02:00pm to 04:30pm**  
**Total Marks: 60**

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**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) Describe the various components of blood. (08)**

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

- (a) Differentiate between different types of muscles. (04)
- (b) Explain: Mechanism of conduction of nervous impulse. (04)
- (c) Draw a flow chart: Digestion of proteins (04)

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

- (a) Differentiate between intrinsic and extrinsic pathway. (04)
- (b) Short note:  $\text{Na}^+/\text{K}^+$  ATPase pump. (04)

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

- (a) Discuss micelle formation. (03)
- (b) Name the different pericardial layers of the heart. (03)
- (c) Draw a well labeled diagram of the nucleus. (03)

**Q.3. A) Explain the various parts of the brain in detail. (08)**

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

- (a) Discuss urine formation. (04)
- (b) Differentiate between positive feedback and negative feedback (04)
- (c) Short note: Neurons (04)

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

- (a) Short note: Spinal cord. (04)
- (b) Draw the digestive system. (04)

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

- (a) List out the various hormones associated to the Thyroid gland. (03)
- (b) Define hygroscope with an example. (03)
- (c) Differentiate between afferent and efferent nerves. (03)