

**PARUL UNIVERSITY**  
**FACULTY OF APPLIED SCIENCE**  
**M.Sc., Summer 2018-19 Examination**

**Semester: 2****Date:12-04-2019****Subject Code:11209158****Time:10:30am to 01;00pm****Subject Name: Applied physiology****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) Essay type (4x2) (Each of 04 marks) Both Compulsory (08)**

- (a) Structure of skin and its role in body temperature
- (b) Life long-Nutrition based approaches for a healthy life for women

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

- (a) Brief note (2x2) (Each of 02 marks) **(04)**
  1. Malnutrition Cycle
  2. Explain blood composition
- (b) Explain 5 properties of muscles. **(04)**
- (c) Explain secondary ossification **(04)**

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

- (a) Brief note (2x2). (Each of 02 marks) **(04)**
  1. Draw and label diagram of heart.
  2. Name reproductive hormones.
- (b) Name the parts of brain. **(04)**

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

- (a) Multiple choice questions. (Each of 01 marks) **(03)**
  - 1) Insulin is a
    - a) Vitamin
    - b) Lipid
    - c) Hormone
    - d) Enzyme
  - 2) ADH or vasopressin is

- a) Enzymes that hydrolyses peptides
- b) Hormone secreted by pituitary that promotes reabsorption of water from glomerular filtrate
- c) Hormone that promotes glycogenolysis
- d) Energy rich compound connected with muscle contraction

3) Which one of the following endocrine glands stores its secretion in the extracellular space before discharging it into the blood?

- a) Testis
- b) Thyroid
- c) Pancreas
- d) adrenal

(b) Name parts of endocrine system (03)

(c) Short note: Draw figure of primary ossification. (03)

**Q.3. A) Brief note (4x2) (Each of 04 marks) Both Compulsary (08)**

(a) Explain bone formation

(b) Impact of infection on nutrient absorption utilization and function.

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

(a) Brief note (2x2) (Each of 02 marks) (04)

1. Hormonal Endocrine glands – General functions

- a. Pituitary
- b. Thyroid
- c. Parathyroid d. Pancreas
- e. Adrenal
- f. Sex glands (male and female)

2. Role of T cell and B cell

(b) Explain function of hypothalamus. (04)

(c) Explain reproductive hormones (04)

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

(a) Brief note (2x2) (Each of 02 marks) (04)

1. What is parturition.

2. Explain coagulation

(b) Explain Menstruation (04)

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

(a) Multiple choice questions. (Each of 01 marks) (03)

1. Which hormone stimulates the secretion of milk from female?

- a) Oxytocin

- b) Progesterone
- c) LH
- d) Prolactin.

2. Which of the following is an accumulation and release centre of neurohormones?

- a) Anterior pituitary lobe
- b) Posterior pituitary lobe
- c) Intermediate lobe of the pituitary
- d) Hypothalamus

3. What are dark bands that define the two ends of each sarcomeres called

- a) Myosin
- b) Actin
- c) Z-lines
- d) Sarcomeres

(b) Short note: Autoimmunedisorders & AIDS, HIV **(03)**

(c) Short note: Thyroid gland **(03)**