

**PSG COLLEGE OF ARTS & SCIENCE**  
(AUTONOMOUS)

**BSc DEGREE EXAMINATION DECEMBER 2019**  
(Second Semester)

Branch - **PSYCHOLOGY**

**PHYSIOLOGICAL PSYCHOLOGY - II**

Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks (10 x 1 = 10)

- 1 Identify the cells that are responsible for colour vision.  
(i) Rods (ii) Cones  
(iii) Bipolar cells (iv) Ganglion cells
  - 2 Indicate the feature of sound wave that determine pitch perception.  
(i) Amplitude . (ii) Timbre  
(iii) Decibel (iv) Frequency
  - 3 State the receptor organ for the vestibular sensation.  
(i) Ear drum (ii) Middle ear  
(iii) Cochlea (iv) Semicircular canals
  - 4 Name the chemical secretion in animals that is used to attract the animals of the same species.  
(i) Hormone (ii) Pheromone  
(iii) Neurotransmitter (iv) Enzyme
  - 5 Mention the main function of the muscles.  
(i) Conduction (ii) Contraction  
(iii) Transportation (iv) Secretion
  - 6 Which part of the brain is responsible for motor balance and coordination.  
(i) Cerebellum (ii) Cerebrum  
(iii) Thalamus (iv) Hypothalamus
  - 7 Choose the best example for the circadian rhythm.  
(i) Migration of birds (ii) Sleep wake cycle  
(iii) Menstrual cycle (iv) Breathing
  - 8 State the brain part that regulate the hunger motive.  
(i) Thalamus (ii) Hypothalamus  
(iii) Medulla (iv) Basal ganglia
  - 9 Mention the nature of the testosterone hormone.  
(i) Estrogen (ii) Estradiol  
(iii) Androgen (iv) Progesterone
- Which endocrine gland secrete the hormone ACTH?
- (i) Adrenal cortex (ii) Adrenal medulla
  - (iii) Posterior pituitary (iv) Anterior pituitary

**Cont...**

**SECTION - B (35 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks

( 5 x 7 = 35)

- 11 a Analyze the trichromatic theory of colour vision.  
OR  
b Describe the types of hearing loss.
- 12 a Explain the somatosensory receptors.  
OR  
b Describe the taste receptors.
- 13 a Summarize the types of muscles.  
OR  
b Explain the voluntary and involuntary movements.
- 14 a Explain the role of suprachiasmatic nucleus(SCN).  
OR  
b Analyze the brain mechanism that regulate body temperature.
- 15 a Narrate the sex differences in the hypothalamus.  
OR  
b Explain the role of amygdala in fear and anxiety.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks

(3 x 10 = 30)

- 16 Discuss the structure of the ear with diagram.
- 17 Examine the ways of relieving pain.
- 18 Enumerate the symptoms, causes and treatment for Parkinson's disease.
- 19 Analyze the functions of sleep.
- 20 Highlight the role of hippocampus in memory .

Z-Z-Z

END