

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2019
(Third Semester)

Branch - PSYCHOLOGY

PHYSIOLOGICAL PSYCHOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10x1 = 10)

- 1 Each gene is part of a very large molecule called _____.
(i) Deoxyribonucleic acid (ii) Deribonucleic acid
(iii) Mitochondria (iv) Haemophilia
- 2 _____ nerves carry information to CNS.
(i) efferent (ii) afferent
(iii) enferent (iv) all the above
- 3 The fiber tract that connects both cerebral hemispheres is _____.
(i) Pons (ii) gyrus
(iii) corpus callosum (iv) spinal cord
- 4 The _____ are the input ride of the neuron.
(i) axons (ii) synapse
(iii) dendrites (iv) node of Ranvier
- 5 _____ gradient moves ions from areas of high concentration to areas of low concentration.
(i) chemical (ii) electrical
(iii) mechanical (iv) none
- 6 In females _____ hormone stimulates release of eggs from the ovaries.
(i) Luteinizing (ii) Follicle-stimulating
(iii) ACTH (iv) Prolactin
- 7 Melatonin is secreted by _____ gland.
(i) thymus (ii) pitutary
(iii) adrenal • (iv) pineal
- 8 Decrease in response to a stimulus after repeated presentations is _____.
(i) Habituation (ii) Instrumental Learning
(iii) Associative Learning (iv) Artificial Learning
- 9 In fMRI T stands for
(i) fundamental (ii) fractional
(iii) future (iv) functional
- 10 _____ coined the term 'selfish gene'
(i) Darwin (ii) Dawkins
(iii) Donald (iv) David

Cont...

SECTION - B (35 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks

(5 x 7 = 35)

- 11 a Explain Darwin's theory of evolution.
OR
b Analyze the theory of kin selection.
- 12 a Describe the types of receptor neurons.
OR
b State the functions of autonomic nervous system.
- 13 a Draw the structure of a neuron & explain its function.
OR
b Narrate the toxic effect of neurotransmitter excitation.
- 14 a Differentiate between agonist and antagonist hormones.
OR
b Describe the biological basis of normal & abnormal expressions of personality.
- 15 a Explain the functions of MRI.
OR
b Explicate neural plasticity.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks

(3 x 10 = 30)

- 16 Discuss the genetic disease caused by Cell Mutation.
- 17 Discuss on lateralization & specialization.
- 18 Explain how the nerve impulses are conducted within a neuron and between neurons.
- 19 Analyze Indian perspective to physiological psychology.
- 20 Describe Hebb's theory.

Z-Z-Z

END