

Second Semester BSc Degree Examination April/May
PSYCHOLOGY
Complementary Course
ZO 1231.2- Biological Basis of Sensory Processes
(For Psychology)

Time : 3 Hours

Maximum Marks :80

1. Answer all questions. Each carries one mark

A) Choose the correct answer.

1. The aperture through which light passes into the eye is
(a) Iris (b) Cornea (c) Pupil (d) Fovea
2. The sense organ present in each semicircular canal is called
(a) Crista (b) Macula (c) Utricle (d) Sacculle
3. The ability to feel movements of body and limbs is known as
(a) Prosopagnosia (b) Stomatognathia (c) Kinesthesia (d) Action potential)
4. Primary visual area in Brodmann's area
(a) 4 (b) 6 (c) 17 (d) 18

II. Fill in the blanks:

5. Pacinian corpuscle is a
6.is the SI unit of power of vision.
7.is the hypersensitivity to pain.
8. The membranous labyrinth of inner ear is filled with the viscous fluid known as.....

III. State whether true or false:

9. Tear glands are otherwise known as lacrimal glands.
10. Iris is the coloured portion visible in the eye.

11. Tactorial membrane is associated with perception of smell.
 12. Superior olivary nucleus helps to determine the direction of sound
 13. The weight of the human brain is 1.35kg.
- (1X 13 =13)**

IV. Match the following

- | | |
|-------------------------|----------------------|
| 14. Ischaemia | Olfactory epithelium |
| 15. Erythrolabe | Visceral Pain |
| 16. Sustentacular cells | Amacrine cells |
| 17. Retina | Colour Vision |
- (2)**

V. Answer any 8 questions in two sentences each. Each question carries 3 marks

18. Eustachian tube
19. Taste buds
20. Olfactory bulbs
21. Classification of pain
22. Cataract
23. Basilamembrane
24. Timbre
25. Prepyriform area
26. Pain receptors
27. Olfactory epithelium
28. Hypermetropia

(8 X 3 = 24)

VI. Answer any 5 questions in two sentences each. Each question carries 5 marks

29. Describe the photochemistry of vision.
30. Describe volley principle.
31. Write a note on semicircular canals.
32. Explain the theories of colour vision
33. Outline the pain suppression pathways
34. How are the hair cells of organ of corti stimulated
35. Explain the neural mechanism of olfaction
36. Explain the intra ocular pressure and its regulation.

(5 X 5=25)

VII. Answer any 2 questions in two sentences each. Each question carries 8 marks

37. Explain the image formation on the retina.
38. Describe the pain perception and physiology of pain suppression
39. With the help of a suitable diagram explain the structure and functioning of the human auditory system.

(8 X 2 = 16)