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) Saccule
3. The ability to feel movements of body and limbs is known as
   (a) Prosophenosia  (b) Statoconia  (c) Kinesthesis  (d) Action potential
4. Primary visual area in Broadmann’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 intraocular 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 explains the structure and functioning of the human auditory system.
   (8 X 2 = 16)