

2023

PHYSIOLOGY — HONOURS

Paper : CC-11

(Special Senses)

Full Marks : 50

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Group - A

1. Answer *any five* questions :

2×5

- (a) Define electro-olfactogram.
- (b) What are meant by dichromats and trichromats?
- (c) What is cochlear microphonic potential?
- (d) What do you mean by the term Presbycusis?
- (e) What is masking?
- (f) What is eustachian tube? Mention its function.
- (g) What do you mean by anosmia?
- (h) What is phasic and tonic adaptation?

Group - B

2. Answer *any two* questions :

- (a) What is Argyll-Robertson Pupil and Glaucoma? 2½+2½
- (b) Write a short note on audiometry. 5
- (c) Describe different types of cells present in the taste bud with suitable diagram. 3+2
- (d) Discuss the location and functions of the following (*any two*) : 2½+2½
 - (i) Ebner's gland
 - (ii) Amacrine cells
 - (iii) Muller cells.

Please Turn Over

Group - C

3. Answer *any three* questions :

- (a) (i) What are meant by magnocellular and parvocellular pathways in vision?
(ii) What are the factors that affect visual acuity?
(iii) Describe the process of accommodation of eye. 4+3+3
- (b) (i) Describe the histological structure of retina with a suitable diagram.
(ii) What do you mean by impedance matching?
(iii) Distinguish between outer and inner hair cells of the cochlea. 5+2+3
- (c) (i) What is myopia and how it is corrected?
(ii) Briefly describe the neural pathway carrying taste sensation with a diagram.
(iii) What are the basic taste modalities? (1+1)+(4+2)+2
- (d) (i) Explain the difference between special senses and general senses.
(ii) Why do photoreceptors remain depolarized in darkness? —Explain.
(iii) State the Ferry-Porter law with its significance. 3+4+3
- (e) (i) Describe the process of olfactory transduction.
(ii) Name the receptors for photopic and scotopic vision.
(iii) What is cataract? 6+(1+1)+2
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