

PG/Physio/1st Sem/21(CBCS)

2021

PHYSIOLOGY

Paper : PHYS - 101 (Core)

(Anatomy, Nervous System & Sensory Organ)

[CBCS]

Full Marks : 40

Time : Two Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers

in their own words as far as practicable.

**Instruction : Hand written answers in A4 / full scape papers for
3 & 4 marks should not exceed 1 page & 1.5 pages respectively.**

Answer any *five* from the following :

1. Write the difference between the synaptic transmission and neuromuscular transmission. Describe the NMJ blocker. 5+3
2. Classify sleep on the basis of EEG characteristics. What is thalamo-cortical-thalamic system? 3+5
3. What is the importance of Glial cell in brain as non-neural cell? Describe the functions of deep cerebellar nucleus in movement control. 4+4
4. Describe the details of light induced changes occur in molecular and chemical composition of rhodopsin. What do you mean by 'dark current'? 6+2
5. Discuss the structural components of olfactory epithelium with suitable diagram. What do you mean by 'olfactory adaptation'? (4+2)+2

6. Why taste sensation is known as gustation? Write down the chemical basis of sour taste sensation. Discuss structural details of taste buds with suitable diagram. (1+2)+(3+2)
 7. Describe briefly the role of neurotransmitters in maintenance of sleep homeostasis. Mention the sites of formation of CSF with evidence. 5+3
 8. Discuss the recent theory of color vision by cone photoreceptors. What do you mean by 'light' and 'dark adaptation'? 4+(2+2)
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