



**WEST BENGAL STATE UNIVERSITY**  
B.Sc. Honours 5th Semester Examination, 2021-22

**PHYACOR11T-PHYSIOLOGY (CC11)**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.  
Candidates should answer in their own words and adhere to the word limit as practicable.  
All symbols are of usual significance.*

**Answer any five questions from the following**

8×5 =40

1. (a) What is binocular vision? 2+3+3  
(b) What are the different kinds of photosensitive pigments found in the human retina?  
(c) How does vitamin A cause night blindness?
2. (a) Describe the site and function of amacrine cell. 3+5  
(b) Describe the neural pathway that transmits visual information from retina to visual cortex.
3. (a) What is amplitude and range of accommodation? 2+4+2  
(b) Name the muscles responsible for eye ball movement and for fixation of eye to the near object.  
(c) What is astigmatism?
4. (a) What is cochlea? Describe its structure. Describe its role in frequency analysis of sound. 2+2+2+2  
(b) Define with diagram the helicotrema.
5. (a) Describe the structure of olfactory receptors with suitable diagram. 4+4  
(b) Describe the neural pathway carrying olfactory impulses to brain.
6. (a) Discuss the neural mechanism of discrimination of different types of smell sensation. 4+2+2  
(b) What are basic taste modalities? What is meant by “after-taste”?
7. Write short notes on any *two* of the following: 4+4  
(a) Fovea centralis  
(b) Cochlear microphonics  
(c) Audiometry.

8. (a) Discuss the photochemical changes that occur when light falls on the retina. 4+4
- (b) Describe the role of vestibular apparatus in maintenance of balance and equilibrium.

**N.B. :** *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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