



WEST BENGAL STATE UNIVERSITY
B.Sc. Honours 1st Semester Examination, 2021-22

PHYACOR01T-PHYSIOLOGY (CC1)

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) Discuss in brief about the cytoskeleton of a cell. 4+4
(b) Describe about different types of protein present in the cell membrane.
2. (a) What is gap junction? 2+4+2
(b) Briefly discuss about Sodium-potassium pump.
(c) What is p53?
3. (a) What is vesicular transport system? 2+4+2
(b) Discuss about different types of vesicular transport system.
(c) What is peroxisome?
4. (a) What do you mean by second messenger system? 2+3+3
(b) Write about the structure of G-protein coupled receptors.
(c) Describe the role of IP₃ and DAG in signal transduction.
5. (a) Explain the term: uniport, symport and antiport. 3+2+3
(b) What is the function of kinesin?
(c) Define chiasma and crossing over.
6. (a) Describe the mechanism of apoptosis. 4+4
(b) Explain the functional significance of rER and sER.
7. (a) What is the difference between cell ageing and senescence? 2+3+3
(b) What are the symptoms of ageing?
(c) How is ROS related to ageing?

8. (a) Define Homeostasis. 2+3+3
- (b) Describe the function of golgi apparatus.
- (c) Briefly discuss about the role of different factors in the maintenance of internal environment.

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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