Reg. No.					



BSCPHO 283

Choice Based Credit System IV Semester B.Sc. Degree Examination, September 2022 (2020-21 Batch Onwards) PHYSICS (Open Elective) Basics of Communication and Astronomy

Time: 2 Hours Max. Marks: 40

Instruction: Answer questions from **all** Parts.

PART – A

1. Answer any four of the following questions :

 $(4 \times 1 = 4)$

- a) What is an antenna?
- b) What is uplink?
- c) Mention one use of satellite.
- d) Name invisible region of light beyond violet color.
- e) What do you mean by solar cycle?
- f) What is the percentage of dark matter in the Universe?
- 2. Answer any four of the following:

 $(4 \times 2 = 8)$

- a) What is television? Explain.
- b) What are transducers? Give an example.
- c) Write the block diagram of electronic communication.
- d) What is Astronomy and who is founder of Astronomy?
- e) What is a satellite? Name the natural satellite of the earth.
- f) Write Chandrashekhar Limit and explain.



(4+4+6)

PART - B

Unit - I

3. a) Explain the working of optical fiber communication. b) Write any four disadvantages of satellite communication. c) Write differences between amplitude modulation and frequency modulation. (4+4+6)OR 4. a) What are 1G, 2G and 3G? b) Explain working of loud speaker. c) Explain revolution in electronic communication. (4+4+6)Unit - II 5. a) Explain steady state theory. b) What are Corona and Sunspots? c) Explain Stellar evolution. (4+4+6)OR 6. a) Explain with a neat diagram of formation of Lunar Eclipse. b) State and explain Newton's law of Gravitation.

c) State and explain Kepler's law of Planetary motion.