

D 50695

(Pages : 2)

Name.....

Reg. No.....

**FIFTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2023**

Physics/Applied Physics

PHY 5D 01 (2)/APH 5D 01 (2)—AMATEUR ASTRONOMY AND ASTROPHYSICS

(2019 Admission onwards)

Time : Two Hours

Maximum : 60 Marks

*The symbols used in the question paper have their usual meanings.***Section A (Short Answer Type)***Answer **all** questions in two **or** three sentences.**Each correct answer carries a maximum of 2 marks.*

1. Name two important Branches of Astronomy.
2. Define Apogee.
3. Define par second.
4. What is Chandrasekhar limit ?
5. Explain CMBR.
6. Differentiate apparent magnitude and absolute magnitude.
7. Give a note on variable stars.
8. Explain the properties of black hole.
9. Explain binary stars.
10. Define Photosphere.
11. What are Asteroids ?
12. Describe the main features of Mars.

(Ceiling 20)

Turn over

Section B (Paragraph / Problem Type)

Answer all questions in a paragraph of about half a page to one page.

Each correct answer carries a maximum of 5 marks.

13. Write a note on Amateur observational Astronomy.
14. Explain the specifications of photosphere.
15. Explain different zones of earth.
16. Explain how astronomy is scientifically different from astrology.
17. Briefly explain (a) White dwarf ; and (b) Supernova.
18. Describe the theory of planetary formation in the solar system.
19. Write a note on Indian Astronomy and western Astronomy.

(Ceiling 30)

Section C (Essay Type)

Essays.

Answer in about two pages, any one question.

Answer carries 10 marks.

20.
 - a) Write a note on the shape of Earth.
 - b) What are the various zones of earth ?
 - c) Define longitude and latitude.
21. Give a brief description on the structure and various layers of Sun.

(1 × 10 = 10 marks)