TB165390D

Reg. No.: .....

Name : .....

# B. Sc. DEGREE (C.B.C.S.S.) EXAMINATION, OCTOBER 2018 (2016 Admission Regular & 2015 Admission Supplementary) SEMESTER V- OPEN COURSE (PHYSICS) PH5D01ATB – AMATEUR ASTRONOMY

### **Time: Three Hours**

#### Maximum Marks: 80

## PART A

### I. Answer all questions. Each question carries 1 mark.

- 1. Define asterism.
- 2. What is a protostar?
- 3. Which is our galaxy? What is its type?
- 4. Write a note on coronal mass ejection
- 5. How did Ptolemy explained the retrograde motion of planets?
- 6. Define the term equant.

 $(6 \times 1 = 6)$ 

### PART B

#### **II.** Answer any seven questions. Each question carries 2 marks.

- 7. Why do stars twinkle while the planets do not?
- 8. What are constellations? Give its classification.
- 9. Briefly discuss the features of Crux.
- 10. What are red giants?
- 11. What are absolute and apparent magnitudes?
- 12. Distinguish between granules, spicules and faculae seen on the surface of sun.
- 13. Discuss the surface features of the planet mercury.
- 14. Why Venus is called the twin of earth?
- 15. What is cosmological principle?
- 16. Explain the terms epicycle and deferant.

(7x 2 = 14)

### PART C

#### **III.** Answer any five questions. Each question carries 6 marks.

- 17. Differentiate between solar and sidereal day.
- 18. Write an account of various aberrations in telescopes? How are they rectified?
- 19. Explain the life cycle of a star massive than the Sun.
- 20. Explain and label the diagram representing stellar evolution.
- 21. Describe the surface features of Moon
- 22. Discuss the internal structure of the sun. Also explain how the energy produced in the core reaches the outer layers of the sun.