COURSE    : INDEPENDENT COURSE
PAPER     : POPULAR ASTRONOMY

TIME     : 3 HOURS                 MAX. MARKS: 100

## SECTION A

**ANSWER ALL THE QUESTIONS :**                    **(10 × 2 = 20)**

1. Describe the shape of the Earth.
2. What is special about the Pole star?
3. What are conjunction and opposition?
4. Describe Diurnal libration?
5. Describe Bode's law.
6. State Kepler' laws
7. Name four members of Winter constellations
8. What is Sidereal time?
9. Write about shapes of Galaxies.
10. Define Zodiacal belt?

## SECTION B

**ANSWER ANY FIVE QUESTIONS :**                    **(5 × 8 = 40)**

11. Explain the effects of Refraction, parallax and dip of a horizon.
12. Discuss about the types of solar and lunar eclipses.
13. Write a note on the space probes to moon.
14. Give a brief note on calendars.
15. Write a note on Milky way.
16. Discuss the following Zodiacal constellations: i) Orion; ii) Ursa Major; iii) Sagittarius.
17. Why are different seasons caused?

## SECTION C

**ANSWER ANY TWO QUESTIONS :**                    **(2 × 20 = 40)**

18. a) Discuss in detail the successive phases of moon using formula.
    b) Compare solar and lunar eclipse.

19. a) Discuss direct and retrograde motion of the planets.
    b) Write short notes on stellar motion.

20. Write short notes on **any three** of the following :
    a) Magnitude of stars; b) Solar system; c) Sun; d) Comets.

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