152 Exemplar Problems

Chapter 17

MULTIPLE CHOICE QUESTIONS

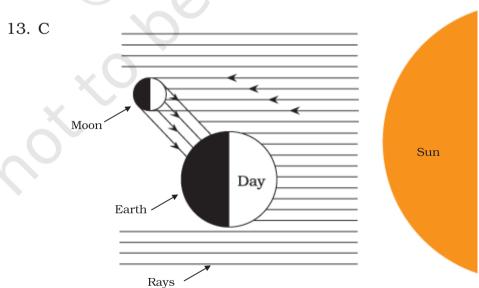
- 1. d
- 2. a
- 3. b
- 4. c

- 5. a
- 6. d
- 7. a

VERY SHORT ANSWER QUESTIONS

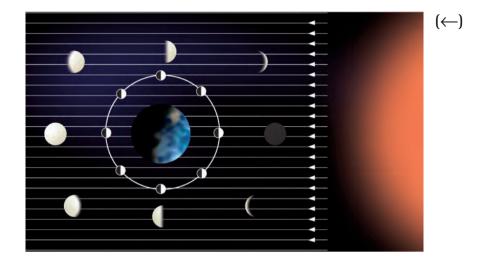
- 8. No, they emit light all the time.
- 9. Boojho is correct.
- 10. a. False; b. False; c. True; d. True; e. True; f. False
- 11. Approximately 29 days.
- 12.





Answers 153

14.



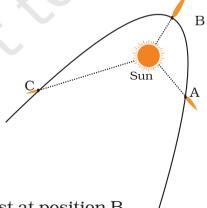
SHORT ANSWER QUESTIONS

- 15. We will see the change after 10 years.
- 16. The brightness of a meteor is extremely small compared to that of the sun, therefore, it is not seen during day time.
- 17. It changes its shape because we see only that part of the moon from which the light of the sun is reflected towards us.
- 18. No, because the position of the moon keeps changing during the night.

Long Answer Questions

19. No. The phases are seen because the moon does not emit its own light and reflects the light of sun.

20.



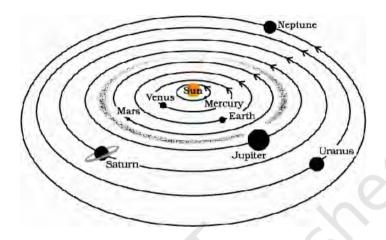
The tail will be longest at position B.

EXEMPLAR PROBLEMS

21. This is because the period of rotation of the moon on its axis is equal to the period of its revolution round the earth.

22. (a) in the eastern part of the sky; (b) in the western part of the sky

23.



- 24. Hint: Life may no longer exist. (See page 227-228 of textbook)
- 25. Locate the two end stars of Ursa Major. Imagine a straight line passing through these stars as shown in the figure below. Extend this imaginary line towards the north direction. This line will lead to a star which is not too bright. This is pole star.

