



# PHYSICS

## BOOKS - LAKHMIR SINGH & MANJIT KAUR

### STARS AND THE SOLAR SYSTEM

#### Exercise

1. Name any two celestial objects which we can see easily in the night sky.

A. Moon

B. Stars

C. Both A and B

D. None of these

**Answer: C**



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2. Name the star (after the sun) which is closest to the Earth.



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3. Name the star which remains fixed at the same place in the sky in the North.



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4. Name the process by which the phenotypically significant mutations are created and cell's genome size is altered.



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5. What is the correct sequence of the stages in bacteriophage lytic cycle ?



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6. The sum of the digits of a seven-digit number is 59. Find the probability that this number is divisible by 11.



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7. Name the constellation which reminds us of a large laddler or a question mark in the night sky.



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8. Which of the following is transcriptionally active protein ?



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**9.** In which season of the year is the constellation Ursa Major visible in the sky ?



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**10.** Give two other names of Ursa Major constellation.



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**11.** In which season of the year are the following constellations visible in the night sky ?

Cassiopeia



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**12.** Which of the following is transcriptionally active protein ?



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**13.** Name the biggest planet of the solar system.



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**14.** Name the smallest planet of the solar system.



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**15.** Which force keeps the members of the solar system bound to the sun ?



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**16.** Why does the sun appear to be bigger and brighter than all others stars ?



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**17.** Which is the main source of heat and light energy for all the members of the Solar System ( like planets and satellites, etc.) ?



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**18.** Name the star having a system of planets with life on one of its planets.



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**19.** Name the planet having a well-developed system of ring around it.



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**20.** Name the planets which lie between the sun and the Earth.



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**21.** How will our Earth look when seen from a space-ship or Moon ?



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**22.** Planet nearest to sun is



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**23.** Name the planet farthest from the sun.



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**24.** Name two planets which have been discovered with the help of telescope.



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**25.** Name the hottest planets.



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**26.** Name the process by which all the three types of non-genetic RNAs are produced on DNA template.



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**27.** Name one planet of the Solar system having life on it.



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**28.** Which characteristics of Mars distinguishes it from other planets ?



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**29.** Red Planet is



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**30.** Which of the following is not an example of connecting link ?



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**31.** Which characteristic of the planet Saturn makes it unique in the Solar System ?



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**32.** Morning and Evening stars are respectively



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**33.** What name is given to the celestial body which revolves around a planet ?



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**34.** Which two planets have asteroids between them ?



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**35.** Name two objects other than planets which are members of the Solar System ?



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**36.** Name the member of the Solar System which appears in the sky like a bright of light with a long, glowing tail.



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**37.** Which celestial body is seen as a bright streak of light coming down the night sky ?



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**38.** Which celestial objects are also called minor planets ?



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**39.** Name one natural and one artificial satellite of the Earth .



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**40.** Name the agency responsible for the development of space science programmes in India.



**Watch Video Solution**

**41.** Name the first artificial satellite launched by India.



**Watch Video Solution**

**42.** Name the technique of collecting information about the Earth from an orbiting satellite.



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**43.** Write the full name of INSAT.



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**44.** Write the full name of IRS.



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**45.** Name two constellations which are visible  
in the sky :

in the summer season



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**46.** Name two constellations which are visible in the sky :  
in the winter season.



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**47.** State whether the following statements are true or false :

Constellation Orion can be seen only with a telescope.



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**48.** State whether the following statements are true or false :

Pole Star is a member of the Solar System.



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**49.** State whether the following statements are true or false :

Mercury is the smallest planet of the solar system.



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**50.** State whether the following statements are true or false :

Uranus is the farthest planet in the Solar System.





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**51.** State whether the following statements are true or false :

There are nine planets in the Solar System.



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**52.** State whether the following statements are true or false :

Comets are members of the Solar System.



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**53.** State whether the following statements are true or false :

INSAT is an artificial satellite.



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**54.** Fill in the following blanks with suitable words :

The stars appear to.....in the sky.



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**55.** Fill in the following blanks with suitable words :

The sun is a.....whereas Orion is a  
.....



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**56.** Fill in the following blanks with suitable words :

The group of stars that appears to form a

recognisable pattern in the sky is known  
as.....



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**57.** Fill in the following blanks with suitable  
words :

The brightest star in the night sky  
is.....



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**58.** Fill in the following blanks with suitable words :

Ursa Major constellation appears to revolve around the .....star in the night sky.



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**59.** Fill in the following blanks with suitable words :

Orion constellation can be used to locate the position of.....star whereas Ursa Major

constellation can be used to locate the  
.....star in the night sky.



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**60.** Fill in the following blanks with suitable words :

The planet which is farthest from the sun  
is.....



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**61.** Fill in the following blanks with suitable words :

The planet which appears reddish in colour is.....



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**62.** Fill in the following blanks with suitable words :

The small heavenly bodies revolving around



the Sun between the orbits of Mars and Jupiter are called .....



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**63.** Fill in the following blanks with suitable words :

Asteriod are found between the orbits of .....and.....



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**64.** Fill in the following blanks with suitable words :

Shooting star are actually not.....



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**65.** Fill in the following blanks with suitable words :

A celestial body that revolves around a planet is known as.....



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**66.** Fill in the following blanks with suitable words :

A meteoroid becomes a.....on entering Earth's atmosphere.



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**67.** Fill in the following blanks with suitable words :

The long distance transmission of television

programmes has been made possible with the help of ..... satellites.



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**68.** What is meant by 'celestial objects' ?



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**69.** Name any three celestial objects.



**Watch Video Solution**

**70.** What is a star ?



**Watch Video Solution**

**71.** Name the star nearest to the Earth.



**Watch Video Solution**

**72.** Why does Pole Star appear to be stationary in the sky ?



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**73.** Do all the stars in the sky move ? Explain .



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**74.** What is a constellation ?



**Watch Video Solution**

**75.** Name any two constellations.



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**76.** How much time does light take to reach us from the sun ?



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**77.** How much time does light take to reach us from the next nearest star 'Proxima Centauri' ?



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**78.** What is Solar System ?



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**79.** Name the different types of celestial objects which are members of the Solar System.



**Watch Video Solution**

**80.** What are planets ?





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**81.** How many planets are there in the Solar System ?



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**82.** Name all the planets of the Solar System in the order of their increasing distances from the sun.



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**83.** What are inner planets and outer planets ?

Name them .



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**84.** Why is it difficult to observe the planet

Mercury ?



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**85.** State one way in which the planets can be distinguished the stars in the night sky.



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**86.** What are the various environmental conditions available on Earth which are responsible for the existence and continuation of life on Earth ?



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**87.** State one important consequence of the following : Rotation of Earth on its axis.



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**88.** State one important consequence of the following : Motion of tilted Earth around the Sun.



**Watch Video Solution**

**89.** What is a satellite?



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**90.** Name the natural satellite of the Earth.



**Watch Video Solution**

**91.** Moon does not have light of its own. How are we able to see the Moon ?



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**92.** Name the constellation which appears to have the shape of :

a big bear



**Watch Video Solution**

**93.** What is asteroids ? Where are they located ?



**Watch Video Solution**

**94.** State two difference between the artifical satellite of the Earth and its natural satellite Moon.



**Watch Video Solution**

**95.** What is an artificial satellite ?



**Watch Video Solution**

**96.** Name any two artificial satellite launched by our country.



**Watch Video Solution**

**97.** State three uses of artificial satellites.



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**98.** Define light year.



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**99.** How many kilometres make 1 light year ?



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**100.** What is a comet ?



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**101.** Name the comet which was last seen in 1986 after period of 76 years.



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**102.** When does a comet become visible to us ?



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**103.** What happens to the tail of a comet when it moves far away from the sun ?



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**104.** What is a meteor ?



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**105.** What is the other name of a meteor ?



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**106.** What is the difference between a star and a shooting star ?



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**107.** What are meteorites ?



**Watch Video Solution**

**108.** What is the difference between a meteor and a meteorite ?



**Watch Video Solution**

**109.** What are meteoroids ?



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**110.** What is the difference between a full Moon and a new Moon ?



[Watch Video Solution](#)

**111.** After how many days a full Moon changes into a new Moon ?



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**112.** What is meant by the phases of the Moon ?



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**113.** What causes the phases of the Moon ?



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**114.** Which of the following is not a planet of the Sun ?

A. Sirius

B. Mercury

C. Saturn

D. Earth

**Answer:**



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**115.** Ursa Major is a :

A. star

B. planet

C. constellation

D. satellite

**Answer: A::C**



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**116.** Which of the following is not a member of the Solar System ?

A. Asteroids



B. Morning Star

C. Satellites

D. Constellations

**Answer: A::C**



**View Text Solution**

**117.** Which of the following is not a planet ?

A. Mercury

B. Saturn

C. Mars

D. Moon

**Answer:**



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**118.** Phases of the Moon occur because :

A. we can see only that part of the Moon  
which reflects light towards us

B. our distance from the Moon keeps changing

C. the shadow of the Earth covers only a part of the Moon's surface.

D. the thickness of the Moon's atmosphere is not constant.

**Answer: A::C::D**



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**119.** Which of the following is not a member of the solar system ?

- A. an asteroid
- B. a satellite
- C. a constellation
- D. earth

**Answer: A::C**



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**120.** After the sun, the next nearest star to the Earth is :

- A. Alpha Centauri
- B. Pole star
- C. Sirius
- D. Proxima Centauri

**Answer: A::C**



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**121.** The distances between the various celestial objects are usually expressed in the unit of :

- A. kilometres
- B. light minutes
- C. light years
- D. light seconds

**Answer: C**



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**122.** Which of the following constellations are visible in the summer season ?

A.Cassiopeia B.Orion C.Leo Major D.Big Bear

A. A and B

B. B and C

C. A and D

D. B and D

**Answer: A::D**



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**123.** The brightest star in the night sky called Sirius is located close to one of the following constellations. This constellation is :

A. Great Bear

B. Leo Major

C. Cassiopeia

D. Orion

**Answer:**



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**124.** Asteroids revolve around the sun between the orbits of the planets :

A. Mars and Earth

B. Venus and Mars

C. Jupiter and Mars

D. Mars and Saturn

**Answer: A::D**



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**125.** The largest planet of solar system is

A. Mars

B. Saturn

C. Mercury

D. Jupiter

**Answer: D**



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**126.** The planet with a system of well developed rings encircling it is :

A. Jupiter

B. Venus

C. Saturn

D. Neptune

**Answer: C**



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127. The two pointer stars the line passing through which points to the direction of pole star are a part of the constellation called :

A. Ursa Major

B. Orion

C. Cassiopeia

D. Leo Major

**Answer: A**



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**128.** Mark the following statements as true (T) or false . Mercury is the smallest planet of the solar system. ( )

A. Earth

B. Mars

C. Mercury

D. Saturn

**Answer: C**



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**129.** Which of the following are non-luminous objects ?

A.Orion B.Morning Star C.Moon D.Pole star

A. A and B

B. B and C

C. B and D

D. only C

**Answer:**



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**130.** Which of the following planets show phases like the moon ?

A.Venus B.Mercury C.Jupiter D.Mars

A. A and B

B. B and C

C. A and C

D. C and D

**Answer: A::B::D**



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**131.** Which of the following is the hottest planet in the Solar System ?

A. Earth

B. Mercury

C. Venus

D. Mars

**Answer: C**



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**132.** Which of the following constellations are visible in the summer season ?

A.Cassiopeia B.Orion C.Leo Major D.Big Bear

A. A and B

B. B and C

C. A and C

D. C and D

**Answer: A::C::D**



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**133.** The agency responsible for the development of space science programmes in India is :

A. INSAT

B. ORS

C. IRS

D. ISRO

**Answer: D**



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**134.** X is a group of stars which is visible during the summer season in the early part of the night. It can be seen clearly in the month of April in the northern part of the sky. It resembles a bowl with a handle. It also resembles as big kite with a tail.

What is the general name of group of stars like X ?



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**135.** X is a group of stars which is visible during the summer season in the early part of the night. It can be seen clearly in the month of April in the northern part of the sky. It resembles a bowl with a handle. It also resembles as big kite with a tail.

Write any two name of X.



**View Text Solution**

**136.** X is a group of stars which is visible during the summer season in the early part of the night. It can be seen clearly in the month of April in the northern part of the sky. It resembles a bowl with a handle. It also resembles as big kite with a tail.

Which famous star can be located in the sky with the help of X ?



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**137.** In which direction do stars appear to move in the sky ?



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**138.** Why do they appear to move in this direction ?



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**139.** Which star in the night sky can be located with the help of :

Orion constellation ?



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**140.** Which star in the night sky can be located with the help of :

Ursa Major constellation ?



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