



SSC Board: Std 6 Ch 16: The Universe - question & answers

1. Which celestial bodies form the solar system?
2. What is the difference between stars and planets?
3. How many planets are there in our solar system?
4. What is to be found between Mars and Jupiter?
5. Why do we see only one side of the moon?
6. Which planet has a day longer than its year?

1. Name these –

- (a) Birth place of stars
- (b) Biggest planet in the solar system
- (c) The galaxy which is our neighbour.
- (d) Brightest planet in the solar system
- (e) Planet with largest number of satellites
- (f) Planets without a single satellite
- (g) Planet with a rotation different from other planets.
- (h) A celestial body that carries a tail along.

2. Fill in the blanks.

- (a) The group of galaxies of which our Milky Way is a part is called
- (b) Comets are made of
- (c) The planet appears as if it is rolling along its orbit.
- (d) is a stormy planet.
- (e) The Pole Star is the best example of a type of star.

3. Say if the statements given below are right or wrong. Rewrite the statements after correcting them.

- (a) Venus is the planet closest to the sun.
- (b) Mercury is called a stormy planet.
- (c) Jupiter is the biggest planet.

4. Answer the following.

- (a) What is a special characteristic of the planet Mars ?
- (b) What are the types of galaxies ?
- (c) Which celestial bodies does a galaxy include ?
- (d) Name the different types of stars.
- (e) What are the types of comets and on what basis are they classified?
- (f) What is the difference between meteors and meteorites ?
- (g) What are the characteristics of the planet Neptune ?

5. Match the following.

Group A

- (1) Galaxy
- (2) Comet
- (3) Sun-like star
- (4) Saturn
- (5) Venus

Group B

- (a) From east to west
- (b) 33 satellites
- (c) Spiral
- (d) Sirius
- (e) Halley

Fill in the blanks:

1. A smoky white band full of stars spreading north-south in the sky, is called the _____.
2. The Milky Way is also known as _____.

3. A group of innumerable stars and their planetary systems are together known as a _____.
4. The _____ is the galaxy in which our solar system is located.
5. The Milky Way is a part of the _____ of galaxies.
6. The galaxy that is closest to our Milky Way is called _____.
7. The _____ includes innumerable galaxies, the space between them and also energy.
8. The scientist _____ showed that there exist many galaxies beyond our Milky Way.
9. In 1990, NASA, the American space agency launched the _____ Telescope in the orbit of the earth.
10. The _____ telescope has made it easier to look for stars, to take photographs and to obtain spectrums.
11. The thousands of twinkling stars that we observe in the clear night sky are part of our _____.
12. The birth place of stars are the huge _____.
13. Nebulae are made of dust particles and _____.
14. Generally, the surface temperature of stars ranges from _____.
15. The colour of stars changes according to their _____.
16. _____ stars can be slightly smaller or bigger than the sun.
17. The temperature of red giant stars ranges between _____.
18. _____ stars are even brighter and larger than the red giant stars.
19. The temperature of super nova stars is between _____.
20. More than half of the stars in sky are _____ stars.
21. _____ stars consist of two stars that revolve around each other.
22. The _____ and shape of variable stars is not stable.
23. When a star expands, it emits _____ energy and at such times its brightness _____.
24. When a star contracts, its surface temperature _____ and the star emits _____ energy and appears _____.
25. The _____ consists of the sun, the planets, asteroids, comets and meteors.
26. The planets _____, _____, _____, _____ and _____ can be easily seen.
27. The Mercury, Venus, Earth and Mars are the _____ planets.
28. The Jupiter, Saturn, Uranus and Neptune are _____ planets.
29. _____ planets have rings around them.
30. The crust of all the inner planets is _____.
31. The outer planets have _____ outer cover.
32. The _____ which is at the centre of the solar system
33. The Sun is a _____ coloured star.
34. The surface temperature of the sun is around _____.
35. The size of the sun is so huge that around _____ lakh planets of the size of the earth can be easily placed within it.
36. Due to the _____ force of the sun, the celestial bodies in the solar system revolve around it.
37. The diameter of the sun is approximately _____ km.
38. The sun rotates around its axis and while doing so, it revolves around the centre of the _____ taking the solar system along with it.
39. Planet _____ is closest to the sun.
40. The planet _____ is visible in the morning and the evening if it is away from the sun.
41. _____ is the fastest moving planet.
42. _____ is the brightest planet in the solar system.
43. Planet _____ is seen in the sky in the east before the sunrise and in the west after the sunset.

44. Venus rotates around itself from _____.
45. _____ is the hottest planet.
46. _____ is the third planet of the solar system.
47. Only the planet _____ has life on it.
48. There is a _____ field around the earth.
49. The magnetic field around the earth diverts the harmful rays from the sun towards the _____ regions of the earth.
50. As the soil on Mars contains _____, its colour is reddish.
51. The highest and longest mountain in the solar system _____ is located on Mars.
52. _____ is the largest planet of the solar system.
53. Jupiter is so huge that as many as _____ planets of the size of the earth can get accommodated in it.
54. Jupiter is also called the _____.
55. Though the mass of Saturn is 95 times that of the earth, its _____ is very low.
56. _____ appears as if it is rolling along on its orbit.
57. A season on _____ lasts for about 41 years.
58. The celestial bodies that revolve around a planet without independently revolving around the sun are called _____.
59. The Moon is the _____ of the earth.
60. The Moons periods of rotation and revolution are both of _____ days.
61. Except for _____ and _____ all other planets have satellites but in varying numbers.
62. _____ are small sized bodies could not turn into planets when the solar system was formed, but continued to revolve around the sun.
63. A belt of asteroids has formed between the planets _____ and _____.
64. A small sized celestial body that revolves independently around the sun is called a _____ planet.
65. Pluto takes around _____ years to complete its revolution around the sun whereas it takes around _____ days for one rotation.
66. _____ are formed out of ice and dust particles.
67. Since olden times, the appearance of a _____ has been considered to be an inauspicious event.
68. _____ are made up of frozen matter and dust particles.
69. When they are close to the sun, this frozen matter gets converted into gas due to the _____ heat.
70. Certain _____ appear to have a long feathery tail.
71. Due to their long _____ orbits, the appearance of comets in the sky is very rare.
72. Comets are classified in two main groups - _____ comets and _____ comets.
73. Long period comets take more than _____ years to complete one revolution around the sun.
74. Short period comets take _____ than 200 years to complete one revolution around the sun.
75. _____ appeared in the year 1910 and reappeared in 1986.
76. The central part or nucleus of _____ comet was found to be 16 km long and 7.5 km wide.
77. Halley's comet takes _____ years to complete its revolution around the sun.
78. _____, an American astronomer, proposed that comets consist of an icy cluster of various constituents.
79. Comets came to be called _____.
80. By 1950, Whipple had discovered _____ comets.
81. _____ are rocky pieces originating from the asteroid belt.
82. It is believed that the _____ lake in Maharashtra has been formed by the impact of such a meteorite.

Answer the following:

1. What is a Milky Way?
2. What is Milky way also known as?
3. What is a galaxy?
4. In which galaxy is our Milky Way located?
5. Our Milky Way a part of which galaxy?
6. what does the Milky Way include?
7. Name the galaxy closest to our Milky Way.
8. What does the universe include?
9. Name the various types of galaxies.
10. Name the scientist who showed that there exist many galaxies in our Milky Way.
11. Who launched the Hubble Telescope and in which year?
12. What does the Hubble Telescope do?
13. Name the different colours that the stars radiate.
14. What are nebulae?
15. What is the surface temperature of the stars?
16. Name the different type of stars.
17. Describe Sun-like stars.
18. Name some Sun-like stars
19. Describe Red giant stars.
20. Describe super nova stars.
21. Describe binary stars.
22. Describe variable stars.
23. What does the solar system consists of?
24. Name the planets that can be easily seen.
25. Name the inner and the outer planets.
26. Describe the sun.
27. Describe Mercury.
28. Describe Venus.
29. Describe Earth.
30. Describe Mars.
31. Describe Jupiter
32. Describe Saturn
33. Describe Uranus
34. Describe Neptune.
35. What is a satellite?
36. Describe the moon
37. Name the planets that have satellites.
38. Name the planets that do not have satellites.
39. What are asteroids?
40. Where do you find the asteroids in our solar system
41. What is a dwarf planet?
42. Name a dwarf planet.
43. Describe Pluto.
44. What is a comet?
45. Why to certain comets appear to have a long feathery tail?
46. Why is the appearance of comets very rare?
47. What are long period comets?
48. What are short period comets?
49. In which years did Haley's comet appear?
50. How long does Halley's Comet takes to complete its revolution around the sun?
51. What is a meteor fall?
52. What are meteors?
53. What are meteorites?