Chapter- 1

THE EARTH IN THE SOLAR SYSTEM

QUESTION BANK

MCQ:

1. Which Planet is closest to the Sun
    a. Venus
    b. Mercury
    c. Earth
    d. Jupiter
2. The Planet which is also known as the morning or evening star
    a. Mercury
    b. Jupiter
    c. Uranus
    d. Venus
3. The Earth is located in
    a. The Milky Way Galaxy
    b. Ursa Major
    c. Orion
    d. Canis Major
4. The movement of the Earth about its own axis is called
    a. Revolution
    b. Rotation
    c. A solar day
    d. Orbit
5. The rotation of the Earth causes
    a. Seasons
    b. Eclipses
    c. Day and night
    d. Unequal lengths of day and night
6. The star that is always found directly over the northern horizon
    a. Taurus
    b. The pole star
    c. Canis Major
    d. Orion
7. The celestial bodies which have a long shining tail are
    a. Asteroids
    b. Meteoroids
    c. Comets

d. None of these

8. Stars are
   a. Huge balls of very hot gases that emit heat and light
   b. Formed from huge clouds of dust and gas
   c. Found in very large clusters called galaxies
   d. All of the above
9. The Jovian planets are
   a. Mercury, Venus, Mars and Earth
   b. Venus, Mars, Jupiter and Saturn
   c. Mars, Jupiter, Uranus and Neptune
   d. Jupiter, Saturn, Uranus and Neptune
10. The Planet which does not have any satellite
   a. Mars
   b. Jupiter
   c. Mercury
   d. Saturn
11. What is the difference between heavenly bodies and celestial bodies?
   (a) Same
   (b) No difference
   (c) Both (a) and (b)
   (d) Neither (a) nor (b)
12. Strike out the odd one characteristic feature of a star-

(a) Huge balls of very hot gaseous matter
(b) Self luminous
(c) Formed of huge clouds of dust and gas
(d) None of these

13. How often the stars are found?
   (a) Small groups
   (b) Large groups or clusters
   (c) In groups of 2-3
   (d) As single unit
14. Identify the correct pattern of universe formation-
   (a) Universe > star> galaxy
   (b) Galaxy>universe> star
   (c) Star> Galaxy> Universe
   (d) None of these
15. The basis for identification of stars as constellation is/ are-

(a) Pattern
(b) Shape
(c) Size
(d) Temperature

16. ORION constellation is shaped as-

(a) Traveler
(b) Cook
(c) Captain
(d) Hunter

17. Solar means-
(a) By the sun
(b) From the sun
(c) Of the sun
(d) Upon the sun

18. Geocentric means-
(a) Centered around the Earth
(b) Covering the Earth
(c) Towards the Earth
(d) Away from the Earth

19. Heliocentric means-
(a) Centered around the Sun
(b) Covering the Sun
(c) Towards the Sun
(d) Away from the Sun

20. The Heliocentric theory was framed in-
(a) 1543 CE
(b) 1903 CE
(c) 1287 CE
(d) 875CE

21. How old is the Sun?
(a) 9 billion years
(b) 5 million years
(c) 10 million years
(d) None of these

22. Identify the gases that the Sun is made up of-
(a) Hydrogen & helium
(b) Nitrogen & Argon
(c) Xenon & Helium
(d) Helium & Nitrogen

23. The distance from the Sun to the Earth is-
(a) 149 billion km
(b) 149 million km
(c) 152 billion km
(d) 152 million km

24. The surface temperature of the Sun is about-
(a) 6300 degree celcius
(b) 4321 degree celcius

(c) 5700 degree celcius
(d) 2100 degree celcius

25. At the centre of the Sun, the temperature is about-
    (a) 15 million degree celcius
    (b) 21 million degree celcius
    (c) 51 million degree celcius
    (d) 09 million degree celcius
26. In which part of the Sun the temperature is about 15 million degree celcius?
    (a) Periphery
    (b) Around everywhere
    (c) At the poles
    (d) At the centre
27. Which figure among the following represents the diameter of the Sun?
    (a) 1,392,000 km
    (b) 2,565,217 km
    (c) 5,982,023 km
    (d) 7,231,984 km
28. Whose around does a planet orbit?
    (a) Star
    (b) Galaxy
    (c) Supernova
    (d) Universe
29. Strike out the odd feature of the characteristics of Earth-
    (a) The only planet to have life
    (b) Third planet from the Sun with context to distance
    (c) The smallest among inner planets
    (d) Not a perfect sphere
30. Earth is called blue planet because-
    (a) Two third of the Earth is covered by water
    (b) As the trees are being cut rapidly, so the water amount is increasing
    (c) Continuation Water cycle
    (d) All of these
31. Spheroid refers to-
    (a) Flatness of Earth's surface at poles
    (b) Earth being a perfect sphere
    (c) Earth being surrounded by atmosphere
    (d) Earth's majority surface being covered by water.
32. How much of the Earth's part is covered by water?
    (a) Two-third
    (b) Two-fifth
    (c) Two- seventh
    (d) Two/ two

33. The movement "rotation" of the Earth causes-
(a) Change in seasons
(b) Change of day into night and the vice versa
(c) Formation of clouds in the apparent sky
(d) Phenomenon of climate change & rainfall
34. The movement "revolution" of the Earth causes-
(a) Phenomenon of climate change & rainfall
(b) Change of day into night and the vice versa
(c) Change in seasons
(d) Formation of clouds in the apparent sky
35. Find the odd one out-
(a) Uranus
(b) Neptune
(c) Venus
(d) Mars
36. Distance between Earth & its moon is-
(a) 384,400 km
(b) 384,124 km
(c) 348,765 km
(d) 348, 932 km
37. The time taken by Moon for revolution around Earth is-
(a) 8 days and 20 hours
(b) 21 days and 17 hours
(c) 39 days and 12 hours
(d) 27 days and 8 hours
38. The maximum temperature recorded on Moon is-
(a) 100 degree celcius
(b) 129 degree celcius
(c) 234 degree celcius
(d) 78 degree celcius
39. The minimum temperature recorded on Moon is-
(a) -123 degree celcius
(b) -150 degree celcius
(c) 0 degree celcius
(d) 10 degree celcius
40. On which date the astronauts did land on the Moon first-
(a) 13th June 1950
(b) 29th July 1969
(c) 26th February 1982
(d) 03rd April 2001
41. The celestial bodies that revolve around the Sun between the orbits of Mars and Jupiter are known as –

(a) Asteroids
(b) Planetoids
(c) Both (a) & (b)
(d) None of these

42. Asteroids/Planetoids are-
(a) celestial bodies that revolve around the Sun between the orbits of Venus and Earth
(b) celestial bodies that revolve around the Sun between the orbits of Jupiter and Saturn
(c) celestial bodies that revolve around the Sun between the orbits of Mars and Jupiter
(d) celestial bodies that revolve around the Sun between the orbits of Saturn and Uranus

43. The rock pieces that revolve around the Sun at tremendous speed are known as-
(a) Meteoroids
(b) Meteors
(c) Meteorealm
(d) None of these

44. Meteoroids enter Earth's atmosphere due to-
(a) Force of gravity of the Earth
(b) Force of friction
(c) Force of Coriolis
(d) None of these

45. What role does the force of Earth's gravity play with context to meteoroids?
(a) It attracts them to enter into Earth's atmosphere
(b) It repels them back into the space
(c) It makes them shine like diamond
(d) All of these

46. The glowing or shining of the meteoroids, as they enter into the Earth's atmosphere happens due to-
(a) Force of gravity of the Earth
(b) Force of friction
(c) Force of coriolis
(d) All of these

47. What happens to the meteoroid(s), due to frictional force, after entering into the Earth's atmosphere-
(a) They grow in size
(b) They start glowing or shining
(c) They develop scars upon their bodies
(d) They change color into green

48. What type of landform is seen upon the Earth's surface when hit by meteorites?
(a) Dent
(b) Crater
(c) Both (a) and (b)
(d) None of these

49. The dents or craters type of landform that is found upon the surface of the Earth is made by which type of celestial bodies?
    (a) Meteors
    (b) Meteoroids
    (c) Meteorites
    (d) None of these
50. NASA stand for-
    (a) National Aerospace and Supply administration
    (b) National Aeronautics and Space Administration
    (c) National Automatic Standard Corporation
    (d) Neo-American Suvey of Academics
51. ISRO stand for-
    (a) Indian Space Research Organisation
    (b) Indian Survey on Rational Operations
    (c) Indian Solar Radiator Organ
    (d) Indigo Supply & Research Organisation

1 MARK

Q1:-Define the following terms:-

i) Star ii) Solar System iii) Planet iv) Asteroid v) Meteor

Q2:-Which planet is closest to the Sun?

Q3:- Name largest planet of the Solar System?

Q4:- Define Universe.

Q5:- Which planet is called as the red planet?

Q6. Give examples of heavenly/ celestial bodies.

Q7. By which material(s) the stars are formed of?

Q8. When does a star start shrinking into a thick disc and starts spinning rapidly?

Q9. What action does take place when the centre of a cloud becomes thicker?

Q10. Which type(s) of energy is/ are released when a chain of reaction takes place in a spinning star?

Q11. The cluster of stars are called as _____.

Q12. Name our galaxy.

Q13. Why is the constellation Ursa Major is known as Big Dipper?

Q14. Mention the apparent position of the Pole star/ Dhruv nakshatra.

Q15. _____ put forwarded the Geocentric theory.

Q16. _____put forwarded the Heliocentric theory.

Q17. _____ of the Sun holds the entire solar system together.

Q18. Which light do the planets reflect?

Q19. Give examples of dwarf planets.

Q20. Why Earth is not a perfect sphere?

Q21. The celestial objects revolving around planets are called their_____.

Q22. Give examples of those planets of our solar system that doesn't have a single natural satellites.

Q23. Define asteroids

Q24.Name the astronauts who had landed on the Moon first?

Q25. What makes the meteoroids enter the Earth's atmosphere?

Q26. What are meteors or shooting stars?

Q27. Give examples, each of best space research centres at both international and national levels.

2 MARKS

Q1:- What are constellations? Give two examples.

Q2:- Differentiate between Jovian and terrestrial planets.

Q3:-Distinguish between a planet day and planet year.

Q4: What are the two movements of the Earth on its axis?

Q5. Define Constellation with suitable examples.

Q6. What was the importance of Pole star during ancient times and was used by whom?

Q7. What comprises of the solar system?

Q8. What essential condition(s) are required upon the surface of the Earth for the sustenance of the life/ survival, with respect to Sun?

Q9. Differentiate between rotation and revolution with context to planets?

Q10. What is the speciality of giant or jovian or outer planets? Suggest examples.

OR

How were the jovial planets formed/ did come into existence?

Q11. How were the inner or terrestrial planets formed/ did come into existence?

Q12. Compare and contrast the variations in the types of movement performed by our planet Earth?

Q13. Why do we always see the same side of the Sun?

Q14. How did the asteroids/ planetoids come into existence?

Q15. What are meteorites? Give one example of crater created by them that is found upon the surface of the Earth.

Q16. Differentiate between NASA & ISRO.

3 MARKS

Q1:- What makes a Earth a unique planet?

Q2:- List three differences between stars and planets.

Q3:- Distinguish between Geocentric and Heliocentric theory.

Q4:-Why is Earth called as the Blue Planet?

Q5:- Why do we get to see only one side of the Moon from the Earth?

Q6. Mention the favourable conditions required for the sustenance of life upon the Earth?

5 MARKS

Q1:-What are favourable conditions that facilitate life on the Earth?

Q2:-What is the Solar System? List the planets in the order of the ir distance from the Sun.

Q3:-What are the different phases of the Moon?

Q4. Is the Earth flat? Yes or no? Support your answer with suitable points.