

# Space and Astronomy

Shivani and Kirti Chhabra

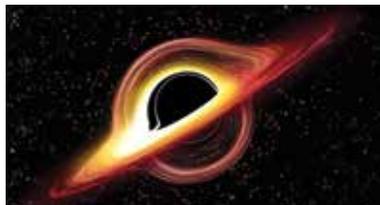
- 1) The space probe made with ion propulsion system was
- a) Stardust
  - b) Clementine
  - c) Venera
  - d) Deep Space 1

- 2) First artificial satellite sent in space was
- a) Sputnik 1
  - b) Sputnik 2
  - c) Explorer 1
  - d) Explorer 2



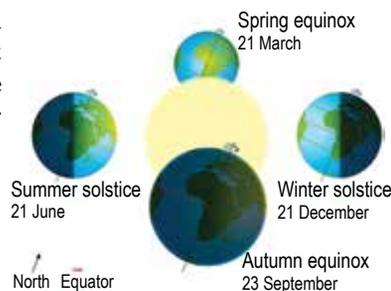
- 3) The name of the dog sent on the first flight to space was
- a) Laika
  - b) Jupiter
  - c) Lucky
  - d) Luna

- 4) Scientists have discovered that the Milky Way has two components, the disc and spherical. What may be the central object of the Milky Way?



- a) A Black Hole
  - b) A Neutron star
  - c) Vacuum
  - d) None
- 5) Which among the following two gases contributes to the beginning of star formation?
- a) Hydrogen & Nitrogen
  - b) Hydrogen & Helium
  - c) Hydrogen & Oxygen
  - d) A Large Magellanic Cloud

- 6) The day on which the Sun's direct rays cross the celestial equator is called:



- a) The ecliptic
- b) Easter
- c) The solstice
- d) The equinox

- 7) Who invented the telescope?
- a) Johannes Kepler
  - b) Galileo
  - c) Archimedes
  - d) Hans Lippershey

- 8) The largest circular storm in our solar system is on the surface of which of the following planets?
- a) Jupiter
  - b) Venus
  - c) Uranus
  - d) Earth

- 9) The biggest asteroid known is:
- a) Vesta
  - b) Icarus
  - c) Ceres
  - d) Eros



- 10) The largest volcano in our solar system is Olympus Mons. This volcano is located on:
- a) Jupiter's moon Callisto
  - b) Venus
  - c) Saturn's moon Titan
  - d) Mars

- 11) Which of the following planets has the greatest eccentricity?
- a) Pluto
  - b) Jupiter
  - c) Mars
  - d) Mercury

- 12) Which one of the following is the largest satellite in the Solar System?

- a) Titan
- b) Triton
- c) Ganymede
- d) Europa



- 13) To the astronaut the sky in space looks
- a) Black
  - b) Red
  - c) Blue
  - d) White

14) Which of the following planets has the largest number of satellites or moons?

- a) Jupiter
- b) Neptune
- c) Earth
- d) Saturn

15) Which planet is called “Evening star”?

- a) Mars
- b) Venus
- c) Saturn
- d) Jupiter

16) Which of the following is the correct order of the planets of the solar system in terms of their increasing distance from the Sun?

- a) Neptune - Venus - Earth - Mercury - Saturn - Uranus - Mars - Jupiter
- b) Mercury - Saturn - Uranus - Neptune - Venus - Earth - Jupiter
- c) Mercury - Saturn - Earth - Uranus - Neptune - Venus - Mars - Jupiter
- d) Mercury - Venus - Earth - Mars - Jupiter - Saturn - Uranus - Neptune



17) How is the atmospheric pressure of Mars as compared to the atmospheric pressure on the Earth? Is it:

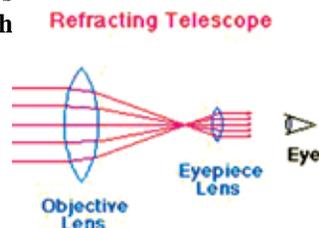
- a) about the same as the earth's
- b) about 100 times as great as the earth's
- c) about 1/200th that of the earth's
- d) half as much as that of the earth's

18) The planet Jupiter has a mass that is:

- a) equal to the combined masses of the earth and Mars
- b) equal to the combined masses of Saturn and Pluto
- c) equal to the combined masses of Saturn, Neptune and Uranus
- d) greater than the combined masses of all of the planets

19) Refracting telescopes always contain which one of the following?

- a) Mirrors
- b) Lenses
- c) Television systems
- d) Film



20) Which of the following is true for Orion? Orion is:

- a) the brightest star in the sky
- b) a constellation
- c) the name given to a NASA spacecraft
- d) an asteroid



21) ISRO will launch India's second mission to the Moon called \_\_\_\_\_.

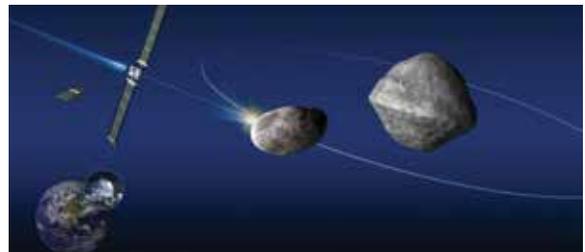
- a) Chandrayaan-1
- b) Chandrayaan-2
- c) Chandrayaan
- d) None of these

22) The National Aeronautics and Space Administration (NASA) successfully tested a supersonic landing parachute that will be deployed in its Mars rover mission set to launch in which year?

- a) 2030
- b) 202
- c) 2020
- d) 2050

23) NASA has built its first mission to work as a planetary defence mechanism against cosmic impacts called DART. What does it stand for?

- a) Double Asteroid Reducing Test
- b) Double Asteroid Reduction Test
- c) Double Asteroid Redirection Test
- d) Double Asteroid Redirecting Test



24) NASA scientists have developed technology to help \_\_\_\_\_ land during emergencies.

- a) Drones
- b) Planes
- c) Jets
- d) Choppers

25) Which famous scientist and former Indian president had a bacteria named after him that has been found only on the International Space Station (ISS) and has not been found on Earth?

- a) President Abdul Kalam
- b) President Pratibha Patil
- c) President Pranab Mukherjee
- d) None of the above

26) NASA launched a stadium-sized \_\_\_\_\_ balloon to detect ultra high energy cosmic particles from beyond the galaxy as they penetrate to the atmosphere of the Earth.

- a) Helium
- b) Carbon
- c) Pressure
- d) None of the above

27) Which type of high power batteries for e-vehicles and automobiles have been indigenously developed by ISRO?

- a) Carbon
- b) Lithium-ion
- c) Nickel Cadmium
- d) Lead Acid



28) NASA space-based centre can see through fogs to observe which foundation of the ocean's food web?

- a) Phytoplankton
- b) Algae
- c) Fungi
- d) Bacteria

29) China launched a weather satellite on 10<sup>th</sup> December 2016. What was it called?

- a) Fengyun-4
- b) Shengyun-4
- c) Tengyun-4
- d) None of the above



30) As part of the cleanup effort of outer space, what tool(s) are the Japanese using?

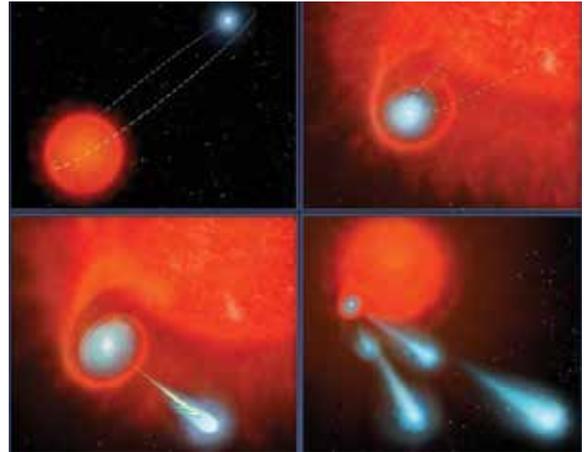
- a) Fishing net
- b) Laser technology
- c) Both a and b
- d) Neither of the above

31) NASA has planted lettuce on the International Space Station — this will help in preparing astronauts for a future manned mission to which planet?

- a) Earth
- b) Mars
- c) Saturn
- d) Both a and b

32) What are the “Great Balls of Fire”?

- a) Super hot blobs of gas being ejected near a dying star
- b) Rays of the sun
- c) Light emitted from a dying star
- d) None of the above



33) ScatSat is a/for

- a) Communication Satellite
- b) Educational Satellite
- c) GPS Satellite
- d) Weather monitoring

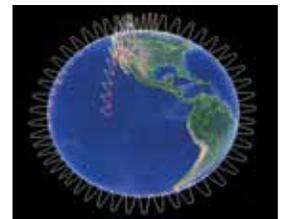


34) ISRO is developing technology which will allow what action in space?

- a) Lifting humans in the spacecraft
- b) Transferring humans from one vehicle/spacecraft to another in space
- c) Moving objects from a spacecraft on to the space station
- d) None of the above

35) NASA's ATom mission is for

- a) Analysing gas molecules of Mars's atmosphere
- b) Analysing atoms and molecules of elements in meteorites
- c) Finding the amount of pollution in remote corners of the Earth
- d) None of the above



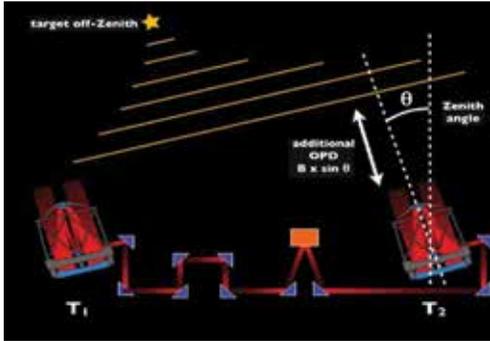
36) The Magellanic Clouds are visible from?

- a) Northern hemisphere
- b) Southern hemisphere
- c) Both Northern hemisphere & Southern hemisphere
- d) Neither Northern nor Southern Hemisphere

37) The only planet that shows phases is \_\_\_\_\_?

- a) Earth
- b) Venus
- c) Jupiter
- d) Saturn

- 38) The device employed to measure the diameters of stars and our galaxy (Milky Way) is called:
- Photometer
  - Barometer
  - Viscometer
  - Interferometer



- 39) The planet that completes one revolution in 88 days around the Sun is:
- Mercury
  - Venus
  - Mars
  - Saturn

40) Hale Bopp is a \_\_\_\_.

- Planet
- Meteor
- Satellite
- Comet



41) A celestial body that has its own heat and light is called

- Planet
- Moon
- Star
- Satellite

42) Planet with nearly equal rotation and revolution time to the Earth is \_\_\_\_.

- Venus
- Mercury
- Uranus
- Mars

43) What is sidereal day?

- Time taken by the Earth to complete one rotation with respect to a fixed star at infinity
- Time taken by the Earth to complete one revolution with respect to the Moon
- Time taken by the Earth to complete one rotation with respect to the Moon
- Time taken by the Earth to complete one rotation with respect to the Sun

44) Most primitive bodies in the Solar System are

- Comets
- Kuiper
- Meteorites
- Planets

45) Which of the following phenomena cannot be observed on the surface of the Moon?

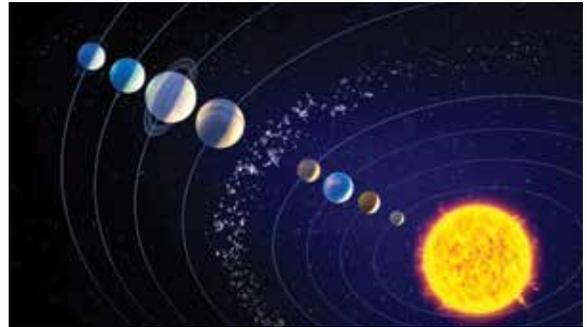
- Rising and setting of the Sun
- Solar eclipse
- Motion of comets
- Twinkling of stars

46) A star of which colour can be said to be the coolest?

- Yellow
- Blue
- Red
- Black

47) The planets on either side of the Earth are:

- Mercury and Venus
- Mars and Jupiter
- Mars and Venus
- Venus and Saturn



48) First human to travel into space

- Alan Shepard
- Neil Armstrong
- Yuri Gagarin
- Vladimir Komarov



49) The observation of objects in space is known as

- Astronomy
- Telescope
- Space exploration
- Meteorology

50) First moon landing mission was launched by

- USA
- USSR
- China
- France

#### Answers

- 1) d 2) a 3) a 4) a 5) b 6) d 7) d 8) a 9) c 10) d  
 11) a 12) c 13) a 14) a 15) b 16) d 17) c 18) d 19) b 20) b  
 21) b 22) c 23) c 24) a 25) a 26) c 27) b 28) a 29) a 30) c  
 31) b 32) a 33) d 34) b 35) c 36) b 37) b 38) d 39) a 40) d  
 41) c 42) a 43) a 44) a 45) d 46) c 47) c 48) c 49) a 50) a

Contributed by Ms Shivani, Research Intern and Ms Kirti Chhabra, Former Research Intern, CSIR-NISCAIR, New Delhi