

SPACE SCIENCE

1. The Great Red Spot on Jupiter is
 - (1) the top of a gigantic volcano.
 - (2) sulfurous clouds over the vertex of a solid obstacle.
 - (3) a violent cyclonic storm.
 - (4) reddish dust.
2. The two planets whose orbits cross (i.e. one planet periodically gets closer to the Sun than the other planet) are
 - (1) Mercury and Venus
 - (2) Neptune and Pluto
 - (3) Venus and Earth
 - (4) Mars and Jupiter
3. In general, the younger a region on the Moon, the
 - (1) farther it is from Earth.
 - (2) more craters it has.
 - (3) fewer craters it has.
 - (4) farther it is from the center of the Moon.
4. The locations of mountains and valleys on Venus are best found by
 - (1) X-rays emitted by the surface.
 - (2) the strength of radio waves given off.
 - (3) landing vehicles on the surface to drive around.
 - (4) radar measurements.
5. On which planet have features been photographed that look like erosion patterns from flowing water?
 - (1) Uranus
 - (2) Mercury
 - (3) Venus
 - (4) Mars
6. The distances of the stars can be inferred from a study of their
 - (1) richness of spectrum.
 - (2) apparent brightness.
 - (3) velocities in the line of sight.
 - (4) spectrum and apparent brightness.
7. An asteroid consists mostly of
 - (1) dust
 - (2) frozen gases
 - (3) ice
 - (4) rock
8. The tail of a comet generally
 - (1) precedes the comet.
 - (2) points away from the Sun.
 - (3) follows the comet.
 - (4) points toward the Earth.
9. If you were an astronaut on the dark side of the Moon and your task was to count meteors, how many would you expect to see in one hour?
 - (1) none
 - (2) about a dozen
 - (3) about 100
 - (4) about the same as on Earth
10. Northern Lights result from
 - (1) sunlight shining on the Earth's north polar cap.
 - (2) light from flares hitting the Earth's upper atmosphere.
 - (3) charged particles from the solar wind hitting the upper atmosphere.
 - (4) lightning discharges high in our atmosphere.

- 11.** The star that lies close to the axis of rotation of the earth
- (1) The Pole Star
 - (2) Ursa Major
 - (3) Ursa Minor
 - (4) Cassiopeia
- 12.** _____ was launched in the honour of Kalpana Chawla, a space scientist of Indian origin, who died in mishap in a space vehicle.
- (1) INSAT-3E
 - (2) INSAT-3D
 - (3) INSAT-1A
 - (4) INSAT-IID
- 13.** Ursa Major moves around the _____.
- (1) Sun
 - (2) Earth
 - (3) Moon
 - (4) Pole Star
- 14.** Pluto was discontinued to be regarded as planet in 2006 due to its
- (1) dwarf size
 - (2) unusual orbit
 - (3) both (1) and (2)
 - (4) rotation
- 15.** Dark Matter filled between space in galaxies is called
- (1) intergalactic space
 - (2) inter planets space
 - (3) air space
 - (4) interstitial space
- 16.** Rotation of Uranus is
- (1) prograde
 - (2) retrograde
 - (3) both (1) and (2)
 - (4) north to south
- 17.** Galilean satellites are moons of
- (1) Mars
 - (2) Venus
 - (3) Saturn
 - (4) Jupiter
- 18.** During annular eclipse earth and moon are
- (1) closer
 - (2) farther apart
 - (3) opposite
 - (4) alike
- 19.** Phobos and Deimos are moons of planet
- (1) Mars
 - (2) Venus
 - (3) Saturn
 - (4) Jupiter
- 20.** A storm system on Jupiter which is three times bigger than earth is the
- (1) Great red spot
 - (2) Cassini
 - (3) Great dark spot
 - (4) Great orange spot
- 21.** Asteroids include
- (1) Hektor
 - (2) Ceres
 - (3) Vesta
 - (4) All of them

22. Light of proxima centauri reaches earth in time period of
- (1) 4 years
 - (2) 4.2 years
 - (3) 2 years
 - (4) 365 days
23. The coldest planet in the solar system is
- (1) Pluto
 - (2) Venus
 - (3) Uranus
 - (4) Jupiter
24. Which of the following planets has a revolution time which is shorter than its rotation time?
- (1) Jupiter
 - (2) Venus
 - (3) Mars
 - (4) Uranus
25. Which planet looks reddish in the night sky?
- (1) Jupiter
 - (2) Saturn
 - (3) Mars
 - (4) Mercury
26. The planet that lies at the outermost orbit of the solar system is:
- (1) Saturn
 - (2) Neptune
 - (3) Mercury
 - (4) Uranus
27. Which of the following planets is named after a Greek God, unlike others which are named after Roman Gods?
- (1) Uranus
 - (2) Neptune
 - (3) Jupiter
 - (4) Mercury
28. Which planet has the fastest revolution time?
- (1) Mercury
 - (2) Uranus
 - (3) Neptune
 - (4) Jupiter
29. What is the average distance (approximate) between the Sun and the Earth?
- (1) 70×10^5 km
 - (2) 100×10^5 km
 - (3) 110×10^6 km
 - (4) 150×10^6 km
30. NASA's Deep Impact space mission was employed to take detailed pictures of which comet nucleus?
- (1) Halley's Comet
 - (2) Hale-Bopp
 - (3) Hyakutake
 - (4) Tempel 1
31. Storms of gases are visible in the chromospheres of the Sun during
- (1) Cyclones
 - (2) Anticyclones
 - (3) Lunar eclipse
 - (4) Solar eclipse
32. If you look outside at night to see a galaxy it is
- (1) very easy because of their shape
 - (2) very hard because they look like stars
 - (3) very hard because they are invisible
 - (4) very easy because of their color
33. Jupiter has a thick atmosphere of _____ which reflects most of the sunlight falling on it.
- (1) Oxygen
 - (2) Helium
 - (3) Nitrogen
 - (4) Hydrogen

34. The planet also known as morning star is _____

- (1) Mars
- (2) Mercury
- (3) Jupiter
- (4) Venus

35. Meteors are commonly known as

- (1) Comets
- (2) Stars
- (3) Asteroids
- (4) Shooting stars

36. The un-burnt piece of meteor which reaches the surface of the earth is

- (1) Celestial bodies
- (2) Meteorites
- (3) Comets
- (4) Stars

37. A system which is made up of sun, moon, planets, asteroids and other objects which orbit sun is known as

- (1) lunar system
- (2) space

(3) solar system

(4) galaxy

38. Natural satellites of planets are

- (1) moons
- (2) sun
- (3) spacecraft
- (4) hover crafts

39. Chiron is the largest _____ in the Universe.

- (1) Comet
- (2) Asteroid
- (3) Meteoroids
- (4) Dwarf planet

40. Temperature of Sun is

- (1) 7000°C
- (2) 8000°C
- (3) 6000°C
- (4) 9000°C

INTERACTIVE SECTION

41. Rank of earth as per size is

- (1) fourth
- (2) fifth
- (3) sixth
- (4) seventh

42. Rhea is the fifth natural satellite of

- (1) Mercury
- (2) Venus
- (3) Saturn
- (4) Neptune

43. The largest crater on the surface of moon is called

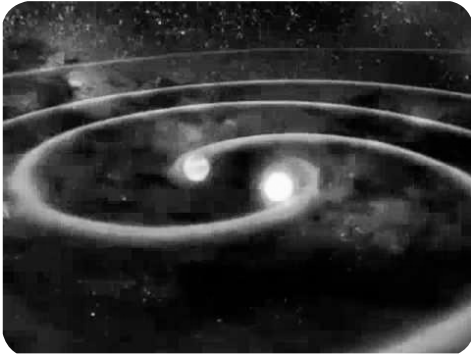
- (1) Bailly
- (2) Tycho
- (3) Plato
- (4) Davy

44. What is a spring tide?

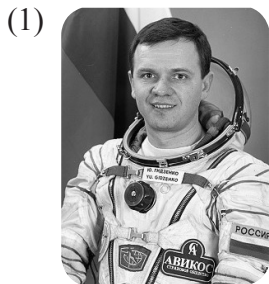
- (1) A tide that occurs when the difference between highest and lowest tides is the least.
- (2) A tide that occurs when the difference between highest and lowest tides is the most.
- (3) A tide that occurs every 100 years.
- (4) A tide that occurs whenever there is a full moon three months in a row.

45. A space spinoff is
- (1) When 2 spaceships spin in space
 - (2) Something developed for use in space that has uses on Earth
 - (3) Something developed for use on Earth that has uses in space
 - (4) When a spacecraft crashes before entering orbit

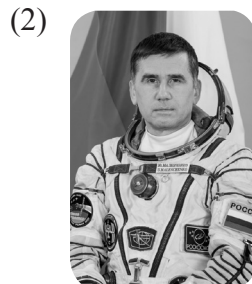
46. A binary star is a star system consisting of



- (1) four stars
 - (2) three stars
 - (3) two stars
 - (4) one star
47. Which Russian astronaut became the first person to be married in space, while he was on the International Space Station?



Yuri Gidzenko



Yuri Malenchenko



Sergei K. Krikalev

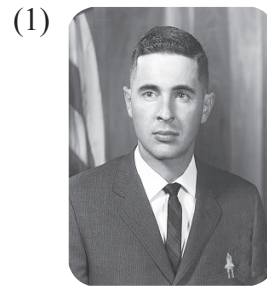


Vladimir Dezhurov

48. The crew of which Apollo mission spent the longest time on the Lunar surface?

- (1) Apollo 7
- (2) Apollo 17
- (3) Apollo 12
- (4) Apollo 9

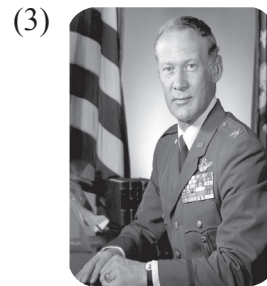
49. Along with Neil Armstrong and Michael Collins, who was the third member of the Apollo 11 crew?



William Anders



James A. Lovell, Jr

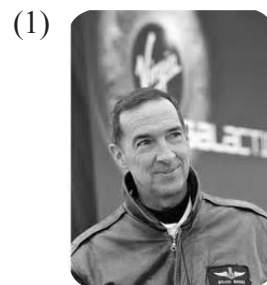


Buzz Aldrin

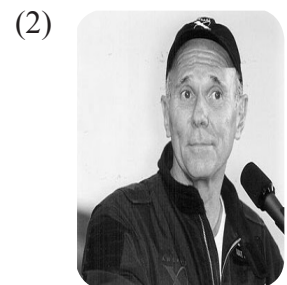


Fred Haise

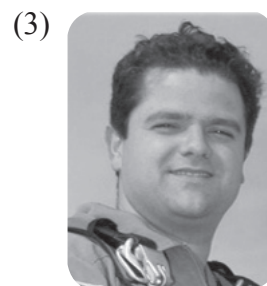
50. Who was the pilot of SpaceShipOne, the spaceplane that completed the first privately funded human spaceflight?



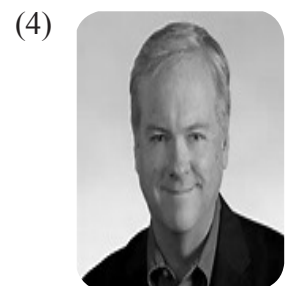
Brian Binnie



Mike Melvill



Peter Siebold



Doug Shane

51. A star of which colour can be said to be the coolest?
- (1) Yellow
 - (2) Blue
 - (3) Red
 - (4) Black
52. In order to know the time, the astronauts orbiting in an earth satellite should use:
- (1) a watch having mainspring to keep it going
 - (2) a pendulum clock
 - (3) either a pendulum clock or a watch
 - (4) an alarm clock
53. Black hole is:
- (1) A dark hollow cavity
 - (2) A massive collapsing star
 - (3) The other side on the moon
 - (4) The other side of sun
54. The solitary moon of Pluto is named after the boatman of Greek mythology who ferries the dead across the River Styx. Its name is
- (1) Erebus
 - (2) Charon
 - (3) Nox
 - (4) Persephone
55. Which civilization developed and implemented the first solar calendar?
- (1) Babylonian
 - (2) Greek
 - (3) Egyptian
 - (4) Aztec
56. What is the hottest region of the sun?
- (1) The core
 - (2) The photosphere
 - (3) The chromosphere
 - (4) The corona
57. In which spectral region is it possible for astronomers to observe through clouds?
- (1) Visual
 - (2) Radio
 - (3) Ultraviolet
 - (4) X-ray
58. The Magellanic Clouds are
- (1) irregular galaxies
 - (2) spiral galaxies
 - (3) elliptical galaxies
 - (4) large clouds of gas and dust
59. Which one of the following moon features is named Copernicus?
- (1) Sea
 - (2) Crater
 - (3) Mountain range
 - (4) Rill
60. Hercules is a constellation which is commonly viewed in the summer in Northern hemisphere. In which of the seasons is the constellation "Pegasus" normally viewed?
- (1) Autumn
 - (2) Summer
 - (3) Spring
 - (4) Winter



END OF THE EXAM