

MENTAL ABILITY

1. 5 km 89 m equals

- (1)*5.089 km
- (2) 50.89 km
- (3) 0.5089 km
- (4) 508.9 km

2. The cost of 6 pencils is ₹ 24. Find the cost of 5 pencils.

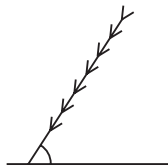
- (1)*₹ 20
- (2) ₹ 10
- (3) ₹ 12
- (4) ₹ 15

3. Which of the figures shows correct fraction for $\frac{1}{4}$?

- (1)* $\times \times \times \times \times \times (\times \times)$
- (2) $\div \div \div \div \div \div (\div)$
- (3) $o o o o o o (o o)$
- (4) $o o o o o o (o o o o)$

4. An arrow makes an angle with the level ground, as shown in the picture. Which best names this angle?

- (1) Obtuse
- (2) Right
- (3) Straight
- (4)*Acute



5. If $A = 7$, which number sentence is true?

- (1)* $A \times 4 = 28$
- (2) $A - 3 = 8$

(3) $12 + A = 7$

(4) $15 \div A = 10$

6. Which of the following are complementary angles?

- (1) $180^\circ, 180^\circ$
- (2) $100^\circ, 80^\circ$
- (3) $50^\circ, 50^\circ$
- (4)* $40^\circ, 50^\circ$

7. 6 min. + 35 sec =

- (1)*5 min. 95 sec.
- (2) 5 min. 50 sec.
- (3) 3 min. 65 sec.
- (4) 6 min. 85 sec.

8. $5\frac{3}{7} = 5 + (O + O + O)$

Here, O stands for

- (1) $\frac{3}{7}$
- (2)* $\frac{1}{7}$
- (3) 3
- (4) 4

9. Find odd one out.

- (1)*Banana
- (2) Malta
- (3) Lemon
- (4) Pineapple

10. Which is false?

- (1)* $2,934,106 < 2,873,014$
- (2) $2,163,489 < 2,289,634$
- (3) $2,874,365 < 2,897,056$
- (4) $2,457,831 < 2,659,678$

SPACE SCIENCE

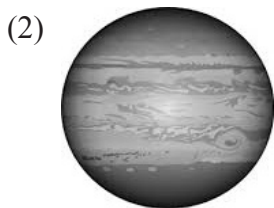
11. What are comets mostly made of?

- (1) Hot, liquid rock (2)* Dirty ice and dust
(3) Rusty metal (4) Poisonous liquid

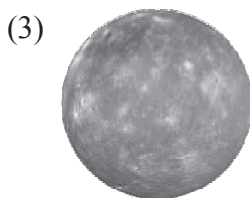
12. Which of these planets is the smallest?



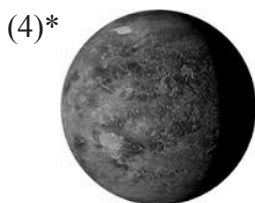
Earth



Jupiter



Uranus



Mercury

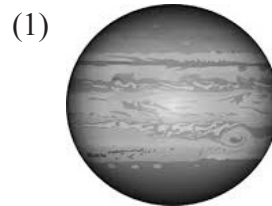
13. Rotation in which Earth rotates is from

- (1)* west to east (2) east to west
(3) north to south (4) south to north

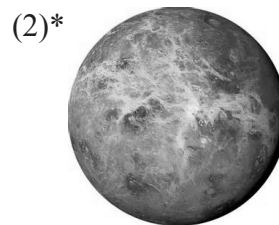
14. Rotation of Earth gives the

- (1) winter season (2) autumn season
(3)* day and night (4) summer season

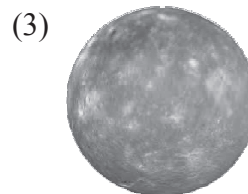
15. The following planets have natural satellites except



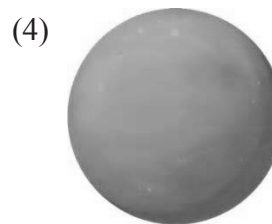
Jupiter



Venus



Uranus



Neptune

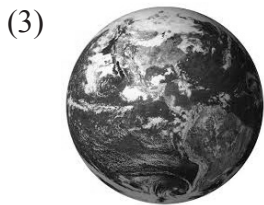
16. Which object in space produces its own light?



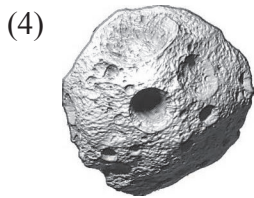
Moon



Star



Planet



Asteroid

17. This is a picture of



- (1) A spiral galaxy
- (2) A gliter galaxy
- (3) An elliptical galaxy
- (4)*An irregular galaxy

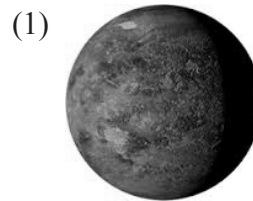
18. What is the diameter of mercury?



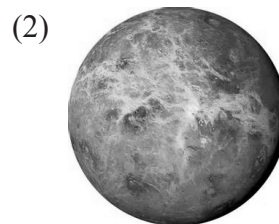
Mercury

- (1)*3032 miles
- (2) 4032 miles
- (3) 5032 miles
- (4) 6032 miles

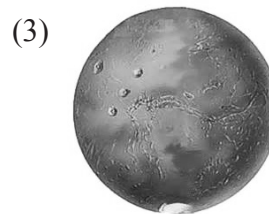
19. Which of the following are not called “terrestrial planets”?



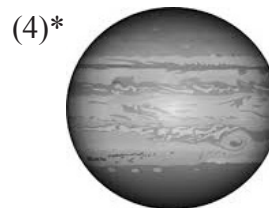
Mercury



Venus

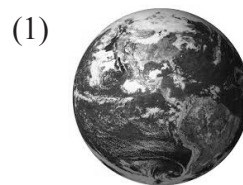


Mars

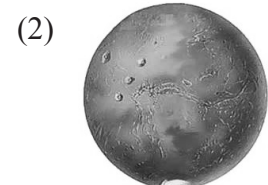


Jupiter

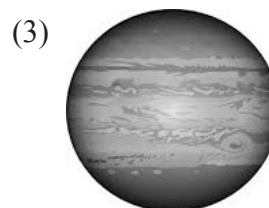
20. Asteroids revolve around _____.



Earth



Mars

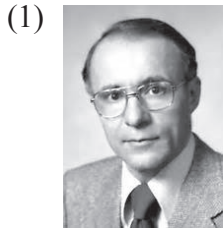


Jupiter



Sun

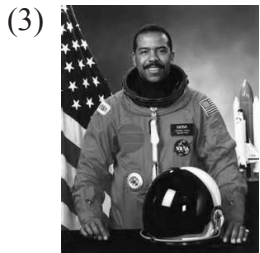
21. Who observed galaxies moving away from us?



Arno Penzias



Edwin Hubble



Bernard Harris Jr.

(4) Both (1) and (3)

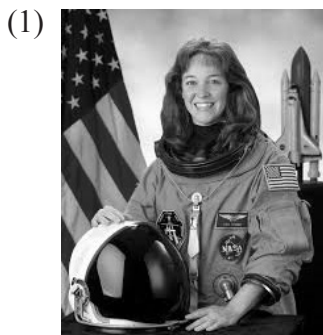
22. The red color during a lunar eclipse is due to

- (1) dust in space
- (2) dust in the moon's atmosphere
- (3)*dust in the earth's atmosphere
- (4) dust from mars

23. Which of the following phenomena cannot be observed on the surface of the Moon?

- (1) Rising and setting of the Sun
- (2) Solar eclipse
- (3) Motion of comets
- (4)*Twinkling of stars

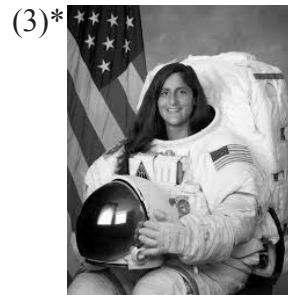
24. Which female astronaut spent the maximum time in space?



Lisa Nowak



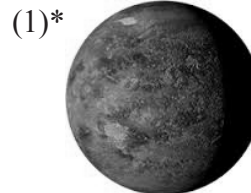
Kalpana Chawla



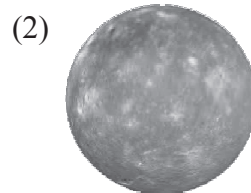
Sunita Williams

(4) All of these

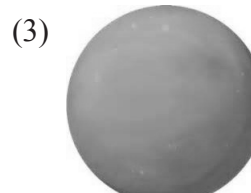
25. Which planet has the fastest revolution time?



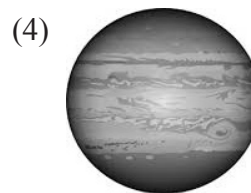
Mercury



Uranus



Neptune



Jupiter

INTERACTIVE SECTION

26. Why does the moon appear to shine in the night sky?

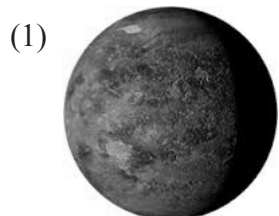
- (1) The moon makes its own light.
- (2)*The moon reflects the sun's light.
- (3) The moon lights up when it becomes dark.
- (4) The moon reflects the Earth's light.

27. John Glen was first man who

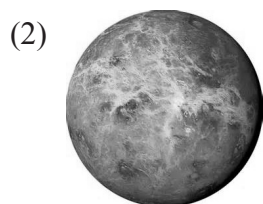
- (1) went in space
- (2)*orbit the earth
- (3) went on moon
- (4) died in first flight



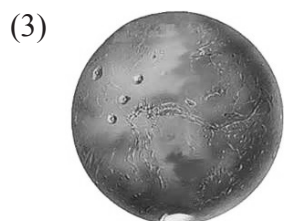
28. Planet which has highest density in Solar System is



Mercury



Venus



Mars



Earth

29. In June solstice, season in north of equator is

- (1)*summer
- (2) winter
- (3) spring
- (4) autumn

30. Considering facts about Jupiter, number of known rings of planet Jupiter are

- (1) 2
- (2) 5
- (3) 3
- (4)* 4

31. Nuclear fusion that took place in Sun converts

- (1)*hydrogen into helium
- (2) helium into hydrogen
- (3) uranium into hydrogen
- (4) uranium into helium

32. Known number of moons of planet Saturn are

- (1) 43
- (2) 58
- (3) 67
- (4)* 62

33. Total lunar eclipses are also known as

- (1)*blood moon
- (2) red moon
- (3) full moon
- (4) earth's umbra

34. Orbits of comets are

- (1)*Elliptical orbits
- (2) Aero-centric orbits
- (3) Heliocentric orbits
- (4) Galactocentric orbits

35. Age of central star of our Solar System Sun is

- (1)*4.6 Billion years
- (2) 5.6 Billion years
- (3) 3.6 Billion years
- (4) 3 Billion years

36. Second densest planet in solar system is

(1)*



Mercury

(2)



Venus

(3)



Mars

(4)



Earth

37. Largest star

(1) Sirius

(2) Pole Star

(3)*Betelgeuse (Alpha Orionis)

(4) Orion

38. Which of the star remains in the same position in the sky?

(1) Vega

(2)*Pole Star

(3) Aldebaran

(4) Sirius

39. The word planet came from _____ language.

(1)*Greek

(2) English

(3) Sanskrit

(4) Roman

40. Neil Armstrong step on the surface of the moon on _____.



(1) 29 July 1959

(2) 29 July 1979

(3)*29 July 1969

(4) 29 July 1949

* denotes answer.



END OF THE EXAM