

PERIODIC ASSESSMENT - III (2020-21)

STD- IX

SUBJECT- SCIENCE _____

Max. Marks- 40

SET-1

1. State the Atomicity of Hydrogen sulphide.

- A. 1
- B. 2
- C. 3
- D. 4

2. Which has more number of particles?.

- A. 46g of Na atom
- B. 8g of oxygen gas
- C. 0.1mol of carbon atom
- D. 28g of nitrogen gas

3. Who discovered the nucleus of atom?

- A. J.J. Thomson
- B. E. Goldstein
- C. J. Chadwick
- D. E. Rutherford

4. Canal rays consists of _____ charged particles.

- A. Positive
- B. Negative
- C. Neutral
- D. Depends on the nature of electrode

5. You are aware of Polio Eradication Programme in your city. Children are vaccinated because

- (a) vaccination kills the polio causing microorganisms
- (b) prevents the entry of polio causing organism
- (c) it creates immunity in the body
- (d) All of the above

6. Vectors can be defined as-

- (a) animals carry the infecting agents from sick person to another healthy person.
- (b) microorganisms which cause many diseases.
- (c) infected person.
- (d) animals suffering from a disease and transmit the infecting agents from sick person to another healthy person.

7. Acceleration due to gravity is _____ when an object is thrown vertically upwards

- a) Zero
- b) Positive
- c) Negative
- d) Either [a] or [b]

8. The value of acceleration due to gravity on the surface of earth be denoted by 'g'. If the radius of earth is 6400km, then what will be the acceleration due to gravity at a point 3200 km above the earths surface.

- a) $g/9$
- b) $2g/9$
- c) $4g/9$
- d) $g/2$

9. The gravitational force between two object is 'F' . If masses of both the objects are halved without changing the distance between them , the gravitational force between them would be

- a) $F/4$
- b) $F/2$
- c) F
- d) $2F$

10. A stone is released from a top of tower 19.6m. The final velocity of the stone just before touching the ground is

- a) Zero
- b) 19.6m/s
- c) 9.8m/s
- d) 4.9m/s

Read the paragraph and answer the questions (Q .No- 11 to 14) that follows. Arpit's gardener was coughing continuously since last few days and was having low grade fever. He was taking home made remedial treatment .One day Arpit's physician visited their home. Arpit got his gardener checked on that day. The gardener was advised to get his chest X-ray and sputum tested in the neighbouring Infectious Disease Hospital.

11. The type of disease and the name of the disease the gardener was suffering from-

- a)acute ,Typhoid
- b)chronic, Common cold
- c)infectious, Jaundice
- d)chronic ,Tuberculosis

12. The treatment suggested by the doctor includes-

- a)vaccination with MMR
- b)3-4 months antibiotics(DOTS)
- c)regular saline solution
- d)blood transfusion

13. TB is diagnosed by-

- a) Chest X-ray
- b) Sample of sputum
- c) Skin test
- d) a) and b)

14. The level of the cause of the disease includes-

- a)only immediate cause
- b)only contributory cause
- c)both a) and b)
- d)only microbes

Read the following paragraph and answer the questions (Q.No-15 to -18) that follows. Gravity is an invisible force that pulls objects toward each other. Earth's gravity is that, what keeps you on the ground and what makes things fall. Albert Einstein described gravity as a curve in space that wraps around an object—such as a star or a planet. The force of gravity attracts physical objects towards the earth's centre. Because of the force of gravity we fall down when we jump from building. The force of gravity or gravitational force is greater near the earth's surface & becomes less while going up or away from the surface of the earth. At a certain point above the earth's surface this force becomes 0. All planets moving in the Milky Way have their own gravity. The intensity of force varies planet to planet. For instance, Moon's gravitational force is 1/6th as compared to earth's gravitational force. When we throw an object up it is due to the force of gravity it falls down. On Earth, gravity gives weight to physical objects, and the Moon's gravity causes the ocean tides. The gravitational attraction of the original gaseous matter present in the Universe caused it to begin coalescing, forming stars – and for the stars to group together into galaxies – so gravity is responsible for many of the large-scale structures in the Universe. Gravity has an infinite range, although its effects become increasingly weaker on farther objects.

15. The force with which the earth attracts an object towards its centre is called _____ of the object.

- a) Mass
- b) Weight
- c) Acceleration
- d) Distance

16. The weight of a body is 30kgw on moon. Its weight on earth's surface is

- a) 180 kgw
- b) 5 kgw
- c) 15 kgw
- d) 60 kgw

17. The Value of gravitational constant

- a) is same in different medium
- b) is different in different medium
- c) depends on the temperature of the medium
- d) depends on the mass of the heavenly object.

18. iv) When we throw an object up, due to the force of gravity it falls down. That time

- a) only earth attracts the object
- b) only object attracts the earth
- c) both repel each other
- d) both attract each other

19. Assertion (A): Aluminium foil cannot be used in alpha –particle scattering experiment. Reason (R): Aluminium is highly malleable metal.

- A. Both Assertion and reason are true and Reason is the correct explanation of Assertion
- B. Both Assertion and reason are true and Reason is NOT the correct explanation of Assertion
- C. Assertion is TRUE and reason is FALSE
- D. Both Assertion and reason are FALSE.

20. Assertion(A):-Gravitational force of attraction of earth on an apple is equal to the gravitational attraction of an apple on earth. Reason(R):-Newton's law of gravitation obey Newton's third law.

- a) Both assertion(A) and reason (R) are true and reason is the correct explanation of the assertion.
- b) Both assertion(A) and reason (R) are true and reason is not the correct explanation of the assertion.
- c) Assertion(A) is true but reason (R) is false.
- d) Assertion(A) is false but reason (R) is true.

21. Calculate the formula unit mass of following compounds. i) Sodium Sulphide ii) Ammonium nitrate (Atomic mass of Na-23u, S-32u, O-16u, N-14u, H-1u)

22. Name the target organs for the following diseases.(a) Hepatitis targets(b) Fits or unconsciousness targets(c) Pneumonia targets(d) Fungal disease targets

23. a) Some children fall ill more frequently than others living in the same locality. Give reason. b) Becoming exposed to or infected with an infectious microbe does not necessarily mean developing noticeable disease. Explain.

24. Amit buys few grams of gold at the poles as per the instruction of his friends. He hands over the same when he meets him at equator. Will the friend agree with the weight of gold bought? Give reason to support your answer.

25. A stone is allowed to fall from the top of a tower 60 m high and at the same time another stone is projected vertically upwards with velocity 72 km/h. Calculate when and where the two stones will meet .(Take $g=10\text{m/s}^2$)

26. a) Our surrounding area should be free of stagnant water. Explain giving reason. b) Antiviral drugs harder to make in comparison to antibiotics. State the reason.

27. a) Write the postulates of Thomson's model of an atom. b) State the nature of the charge carried by cathode rays.

28. Calculate the number of Aluminium ions present in 0.102 g of Aluminium oxide.
(Atomic mass of Al = 27 u)