

SUMMETIVE ASSESSMENT – II (SAMPLE PAPER) SCIENCE CLASS – IX - 7

Time: 3-3and1/2 hr _ Max mark: 100 [includes 10 marks based on Open Text Theme] [code-7RL2FCZ]

Section: A

1 mark

1. As per the law of definite proportional carbon and oxygen combine in ratio 3: 8. Compute the mass of oxygen gas that would be required to react completely with 6 gm carbon.
2. A pore bearing organism like creature "A" belong to a phylum "B" of kingdom Animalia.
3. In which reason is soil erosion very difficult to revert.

2 marks

4. Explain, What is Organ specific manifestation?
5. A man drops a stone of mass 2 kg from the top of a building of height 15m when it reaches the ground, find its kinetic energy.
6. When an object is immersed in the fluid name the two forces acting on it.

3 marks

7. (a) The mass number of an element is 18. It contains 7 electrons. What is the number of proton? and neutron in it.
(b) State the problem of atomic structure which was solved after the discovery of neutron.
- 8.(a)From Rutherford α - particle scattering experiment give the experimental evidence for deriving the conclusion that
(i) Most of the space inside the atom is empty (ii) The nucleus of atom is positively charged (b) An element has mass number 31 and atomic number 15 find (i) The number of neutron in element (ii) The number of electron in element
9. Write three point of difference between an atom and molecules
10. Carolus Linnaeus gave the two kingdom of classification. Later it was changed by Ernst Haeckel (1894) and in 1959 , Whittaker gave the five kingdom classification. Do you think that studying about the work done by earlier scientists or their obsolete theories is useful for student of this generation? Give three reasons.
- 11.What are phanerogams? Name its two groups along with the criteria of division.
12. A man has an audible range from 20Hz to 20kHz. What are the wave lengths of sound in air corresponding to these two frequencies? (Speed of sound is 344m/s)
13. How does the sound produced by a musical instrument , reach your ears? Astronauts need radio telescope to talk to each other on moon why?

14. (A) Name the type of energy possessed by a moving object?

(b) Derive the expression for this energy for an object moving with velocity v and having mass m

15.(a) Define frequency and amplitude. (b) Draw diagram to represent (i) soft sound (ii) Loud sound

16. A solid weighs 75g in air and 55.6 g in water. Find the relative density of the solid. Also state if the object will float or sink when immersed in water.

17. How are clouds formed and what brings us rain.

18. Mention any three important roles of water essential for the life of an organism on the earth's surface.

5 marks

19.(a) Write the chemical formula of all compounds that can be formed by the combination of the following ions: Ca^{2+} , K^+ , Fe^{3+} , Cl^- , SO_4^{2-}

(b) Molar mass of nitrogen is 14u. What will be the mass of one atom of nitrogen in grams?

20. Fill in the blanks

Disease	microbes	Target organ	Mode of transmission
Meningitis	virus	----(a)-----	Fecal contamination
Hepatitis	---(b)----	---(c)-----	Contamination water
---(d)-----	Bacteria	Lungs	---(e)-----
Ringworm	fungus	---(f)-----	Indirect Contact
---(g)-----	Virus	Lungs	---(h)-----
Dengue fever	---(i)-----	Whole body	---(j)-----

21.(a) What kind of food is advised when we fall sick and why? (b) Mention any three basic conditions required for good health.

22. Define frequency and wavelength with reference to sound. Explain what is echo. Write the full form of SONAR. Give two applications of Ultrasound.

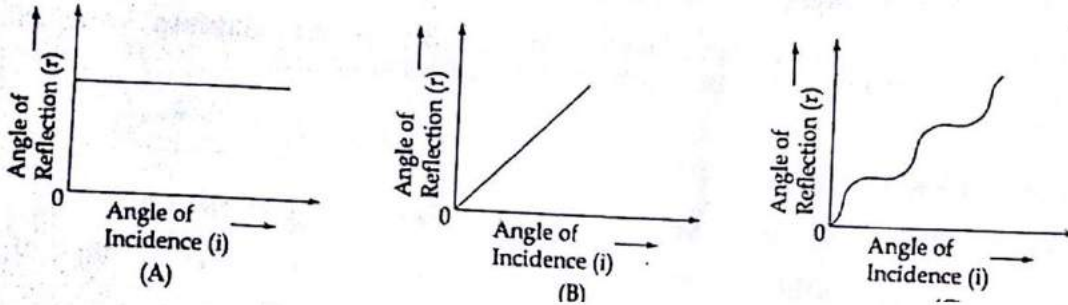
23. (a) Define 1Kwh. (b) How is the power related to the speed at which an object is lifted?

(c) If an electric iron of 1600W is used for 45 min every day, find the electric energy consumed in a month of March.

24. What is meant by depletion of the ozone layer? Mention one important feature of ozone in the atmosphere. Identify the factor responsible for the creation of the ozone hole?

Section: B OBTA Section- C

25. For reflection of sound by metal plate, the graph which shows the best observation between angle of incidence and angle of reflection are:



- (a) A (b) B (c) C (d) both (A) and (B)

26. Choose the correct statement:

- (a) For given value of force, the pressure varies inversely with density
- (b) For given value of force, the pressure varies inversely with area
- (c) For given value of force, the pressure varies directly with density
- (d) For given value of force, the pressure varies directly with density

27. We chose a slinky of larger length to perform experiment on speed of pulse because

- (a) pulse cannot formed on short slinky
- (b) pulse cannot move easily
- (c) Time taken from one end to another can be accurately determined
- (d) it is easier to perform

28. Needle shaped structure in pinus plant is

- (a) Leaf (b) Shoot (c) stem (d) reproductive part

29. During fusion reaction two lighter atoms combine to form a heavy atom . If the atomic mass of reactant is x g and y gm , thn mass of product is

- (a) $(x + y)g$ (b) less than $(x + y)g$ (c) greater than $(x + y)g$ (d) $(x - y)g$

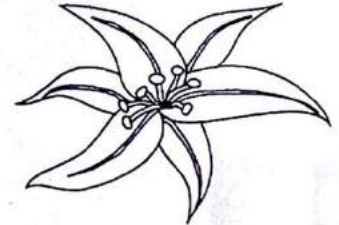
30. Which of the following pair is suitable for the law of conservation:

- (a) Barium chloride and sodium chloride (b) Barium sulphate and sodium sulphate
- (c) Copper sulphate and sodium carbonate (d) sodium sulphate and sodium carbonate

Hint The Law of Conservation of Mass can be verify by using following solutions: 1. Copper sulphate solution and sodium carbonate solution. 2. Barium chloride solution and sodium sulphate solution. 3. Lead nitrate solution and sodium chloride solution.

31. Observe the diagram to identify it as :

- (a) Trimerous flower and monocotyledonous plant
- (b) Trimerous flower and dycotyledonous plant
- (c) pentamerous flower and monocotyledonous plant
- (d) pentamerous flower and dycotyledonous plant

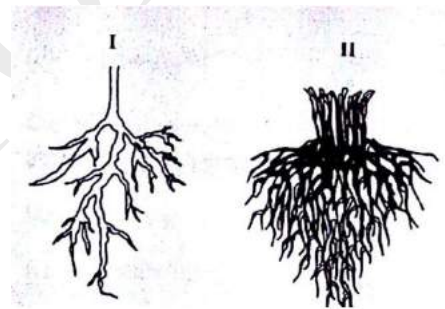


32. Having studies the mouth part of mosquito a student concluded that it adopt for

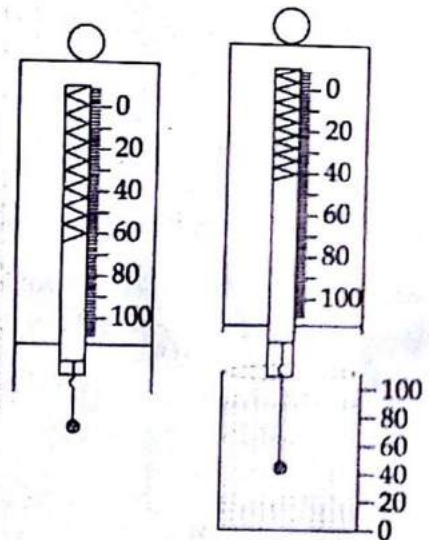
- (a) piercing the bones of animal
- (b) piercing the skin of animal
- (c) piercing the skull of animal
- (a) piercing the shell of animal

33. Identify these two kinds of roots

- (a) I and II are dicotyledonous root
- (b) I and II are monocotyledonous root
- (c) I is monocotyledonous root and II is dicotyledonous root
- (d) I is dicotyledonous root and I is monocotyledonous root



34. A student note down observation in two spring balance and the measuring cylinder as shown below. How much will be the volume of solid? Mass of solid is 60 gm then what will be the density of the material of solid



35. How do cockroaches breath? On which side of the body are these structure present

36. What do you understand by relative density of a material give its unit?