SUMMATIVE ASSESSMENT — II (2016-17) SCIENCE Class -1X [Cmbridge court High school Jaipur]

SECTION-A

1. How will you determine the maximum number of electrons that can be accommodated in a 1 particular shell of an atom?

2. Write the symbol and Latin name for the following elements :(a) Sodium (b) Potassium

3. An organism does not have a well defined nucleus and organelles. State its kingdom.

4. Under what condition does an object sink or float when placed on the surface of a liquid ?

5. A man standing in a hall speaks from a distance of 20 metre from a wall. If the speed of 2 sound at worn temperature is 350 m/s, will he be able to hear his own echo ?Justify your answer.

6. (a) Why does Helium has Zero valency ?

(b) Name the scientist and his experiment to prove that nucleus of an atom is positively charged.

7. When 3.0g of magnesium is burnt in 2.00g of oxygen, 5.00g of magnesium oxide is produced. What mass of magnesium oxide will he formed when 3.00g magnesium is burnt in 5.04 of oxygen ? Which law of chemical combination will govern your answer ? State the law.

8. Sodium is represented as Na_{11}^{23} : (a) What is its atomic mass ? (b) Write its gram atomic mass. (c) How many atoms of Na will be there in 115 g of the sample?

9. Differentiate between acute and chronic diseases and classify the Following diseases into 3 these two groups : elephantiasis, dysentery, measles, tuberculosis.

10 (a) How are the Pteridophytes different from Bryophytes ? (b) That is the common characteristic feature found in Thallophyta, Bryophyta and Pteridophyta. Also mention the term used for such characteristic.

11. What is immunisation? How can the functioning of immune system be improved ?

12. Define buoyancy and buoyant force. State the factors on which buoyant force depends .

13. What is the distance of cloud from you when you hear a thunder 3 seconds after the lightning is seen. Given speed of light = 3 x108 m/sec speed of sound: 330 m/sec. Why is lightning is seen few seconds before the thunder is heard during a thunderstorm

14 (a) what is up thrust? (b)) Write applications of (i) Lactometer, (ii) Hydrometer

15.if the work done by a force in moving an object through a distance of 40 cm is 48.4 j(a) find the magnitude of the force (b) The head of a nail becomes warm when it is hammered into a wooden plank. Explain.

16. Kapil's teacher explained in the class about the importance of conserving energy. Thereafter on coming back at home, Kapil changed/replaced incandescent bulbs by CFL's and stressed upon switching off the fans and lights when not in use. This way he was able to bring down the electricity bill.

(i) Define powe. State its SI unit?

(ii) List any two way by which (iii) Why did Kapil change the bulbs at home ?

17. (a) You are given an element $_7^{14}X$. Find out (i) Number of protons, electrons and neutrons in 'X'. (ii) Valency of 'X'. (iii) Electronic Configuration of 'X'.

(b) if bromine atom is available in the form of, $^{79}_{35}Br$ (49.7%) and $^{81}_{35}Br$ (50.3%). Calculate the average atomic mass of bromine atom?

18. (a) Give the number of chambers in the heart of Amphibians and Ayes. (b) Give three adaptations in Ayes which help them to survive in their mode of life.

19. Complete the following table

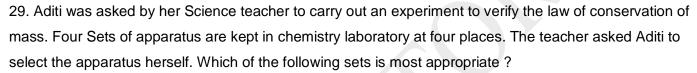| Organ of entry	Kind of microbe	Target organ	Disease
(i) Mouth		Gut linning	
(i) Mouth			Jaundice

(b) State the two important ways through which an infectious disease can be treated. Explain by giving example.

20.(a) Draw a graph showing density or pressure variations with respect to distance for a disturbance produced by sound. Mark the positions of compression and rarefaction on this graph. Name the regions where density and pressure variations are maximum and minimum respectively

(b) Define wave length and time period for a wave

21. (a) Define one Joule of kinetic energy. (b) A ball of mass 2 kg is thrown up with a speed of 10 m/s. Find the kinetic energy of the ball at the time of throwing. Also find the potential energy of the ball at the highests point.

SECTION - B (OTBA) Theme: Health & Environment

22. Do you think consuming fish with high Hg levels can be a problem? How?

23. Of human excreta, faeces are the most dangerous to health. What are the various disease transmission pathways by faeces and how can we prevent the spread of such diseases?

24. Which poisonous gas had leaked during Bhopal Gas tragedy? What were the common 5 ailments seen in the sufferers?

SECTION - 23

25. While doing, an experiment to verify the laws of reflection of sound an angle between one tube and normal is 40^0, the perfect reflection of sound will take place only when :

(a) Angle between the two tubes is 40°.   (b) Angle between the two tubes is 20°.

(c) angle between the two tubes is 80°.   (d) It can he any angle between 0- 40^0.

26. The objective of the experiment to compare the value of pressure exerted by a cuboid when kept on different faces on loose sand is :

(a) to find relationship between the force and mass of the cuboid.

(b) to find the relationship between force and total area of the cuboid

(c) to find the relationship between force and surface area in contact.

(d) to find the relationship between force and volume of the cuboid.

27. Neena, James, Lohit and Madhur did the experiment on measuring the speed of a pulse propagated through a stretched string as follows :

(1) Neena stretched his thick cotton string and gave it a strong horizontal jerk.

(2) James stretched a thin jute string and gave it a mild transverse jerk.

(3) Lohit stretched his thick cotton string very tight and gave it a mild transverse jerk.

(4) Madhur stretched his thin jute string and gave it a strong horizontal jerk.

The best choice is of :

(a) Neena   (b) James   (c) Lohit   (d) Madhur

28 .Ravi after observing the slide of spirogyra sketched it but labelled one part incorrect, that part can be :

(a) Cell wall   (b) Chloroplast   (c) Nucleus   (d) Rhizome

29. Aditi was asked by her Science teacher to carry out an experiment to verify the law of conservation of mass. Four Sets of apparatus are kept in chemistry laboratory at four places. The teacher asked Aditi to select the apparatus herself. Which of the following sets is most appropriate ?

(a) Conical flask, physical balance, cork, ignition tube

(b) Conical flask, physical balance, ignition tube

(c) Conical flask, physical balance

(d) Conical flask, physical balance, cork ignition tube, thermometer

30. When sodium sulphate solution reacts with barium chloride solution the substance which will appear as precipitate is : ((a) Barium chloride (b) Barium sulphate ((c) Sodium sulphate d) Sodium chloride

31. In dicotyledonous plants roots arise from: (a) Plumule (b) Radical (c) Cotyledons (d) Nodes

32. Out of the following characters which best suits a monocotyledonous plant that you have one observed in a garden :

(a) Trirnerous flower (b) reticulate venation (c) pentamerous flower (d) tap root

33. Male mosquito feeds on: (a) blood and sugar (c) nectar and sugar (b) blood (d) blood and nectar

34. In the experiment of finding volume of solid by immersing it into water, the initial reading of water level in graduated cylinder was 16.2 ml. On immersing the given solid completely into water, the water level in graduated cylinder rose to 19.7mL. Find the volume of the solid.

35. Rohan observed that the mass of solid body is more in air as compared to the mass of solid body in water. Explain the observation.

36. An object of volume 200 cm^3 is floating on a fluid with half of its portion inside the fluid as shown below. Find the volume and weight of the fluid displaced by the object.