PERIODIC ASSESSMENT - III (2020-21)

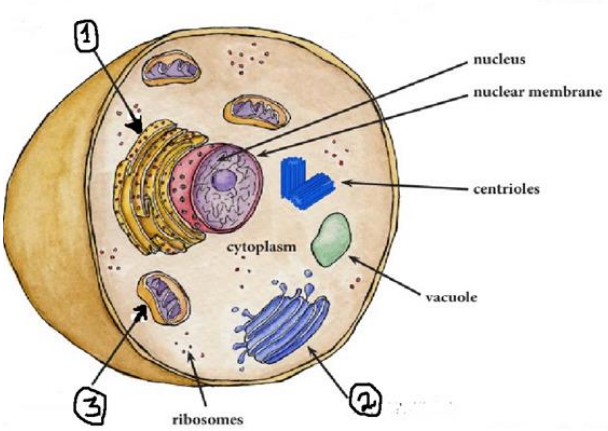
STD- VIII **SUBJECT- SCIENCE**

TIME- 90 Minutes **Max. Marks- 40**

	General instruction:- **1. Answer all questions.** **2. The MCQs are to be answered by choosing most appropriate answer from the options.** **3. The short answer type questions are to be answered in few sentences.**	
1	The correct order for level of organization in multicellular organism from most complex to the simplest is -------. a. Cells → Tissues → Organs → Organ Systems → Organisms b. Organisms → Tissues → Organs → Organ Systems → Cells c. Organisms → Organ Systems → Organs → Tissues → Cells d. Cells → Organisms → Organs → Organ Systems → Tissues	c
2	Assertion (A): Nucleus contains the thread like structures called the nucleolus. Reason (R): Chromosomes carry genes and help in inheritance of characters from parents to offsprings. a. A and R are true but R is the correct explanation of A. b. A and R are true but R is not the correct explanation of A. c. A is not true and R is true. d. A is true and R is not true.	c
3	The point vertically above the seismic focus is called ----------. a. Epicentre b. focus c.tectonic plate d. wave front	a
4	In Richter scale, an increase of two in the magnitude means ---------- times more destructive energy. a. thousand b. two c. hundred d. four	c
5	The speeds of red and blue colour lights are equal in medium A but different in medium B. The mediums A and B can be ---------- respectively. a. air and glass b. glass and water c. glass and air d. water and glass	a
6	The refractive index of glass with respect to air is a. 1.3 b.1.5 c. 2.4 d. 1.7	b
7	When light will travel from optically denser medium to optically rarer medium obliquely then the speed of light in the second mediumwill ----------. a. Increase b. decrease c. remain same d. increase sometimes	a
8	The rainbow is formed because of a. Reflection of sunlight b. refraction of sunlight c. dispersion of sunlight d. Both reflection and refraction of sunlight.	c
9	Write the correct option Assertion The convex lens is used as a “reading glass”.	A

	Reason Convex lens form virtual, erect and magnified image when the object is between optical centre and focus of the lens. **A** Both Assertion and Reason are correct and Reason is the correct explanation for Assertion **B** Both Assertion and Reason are correct but Reason is not the correct explanation for Assertion **C** Assertion is correct but Reason is incorrect **D** Assertion is incorrect but Reason is correct	
10	The process of removing impurities from the ore is called a. concentration of the ore b. metallurgy c. refining d. reduction	a
11	Which of the following metal occurs in native state? a. Platinum b. Sodium c. Aluminium d. potassium	a
12	Which gas is evolved when a metal reacts with dilute acid? a. Oxygen b. Carbon dioxide c. Hydrogen d. Nitrogen	c
13,14,15,16	Discovery of Cell Work on the study of cells continued for more than last three and a half centuries. It requires microscopes. Techniques like preservation, staining and mounting were needed to distinguish various cellular components. The microscope was first built by Z.Janssen and then modified by Robert Hooke. He developed a new microscope with which he studied the internal structure of a number of plants. His work is famous for the study of cork cells. He took a piece of cork, prepared thin slice and observed under the microscope. The piece of cork was found to have a honeycomb structure with a number of compartments. He named the compartments as cellulae. In the beginning of 19th century, it was clear that the bodies of organisms are made of one or more cells. Then various organelles were discovered inside the cells. An electron microscope has elaborated our knowledge of cells.	

13	Which is not correct? a) Cells are units of function in living organisms b) Cell organelles can survive independently c) All activities of life are performed by cells d) Growth of an organism involves growth and multiplication of its cells	b
14	There is a wide variation in the size, shape and activities of the cells. Based on this statement, which is not the correct size of the given cells? a) Size of Mycoplasma is 0.1 µm b) Size of Liver cell is 20 µm c) Size of Chara is 10 cm d) Size of Red Blood cell is 70 µm	d
15	What is used as a stain to observe the plant cells by using onion peel (thin membrane like layer)? a) Methyl chloride b) Saffranin c) Ethylene Bromide d) Copper sulphate solution	b
16	The structure which Robert Hooke observed under his self-designed microscope was (a) cell wall (b) cell membrane (c) both (a) and (b) (d) living cell	a
17,18, 19,20	Yamuna Action Plan The Yamuna is a major tributary of river Ganga with a total length of 1370 km. It is one of the most polluted rivers in the world especially around New Delhi which dumps about 60% of its waste into the river. Though numerous attempts have been made to clean it, the efforts have proven to be futile. The Yamuna is getting polluted due to the disposal of effluent, garbage, domesticsewage, animal dead bodies etc. These pollutants make its water toxic. In addition , the Yamuna water remains stagnant for almost nine months of the year aggravating the situation. Several orders have been passed by the court that untreated effluent should not be allowed to go into the river. Alot of money has also been spent in Yamuna action plan. Sewage plants have been repaired and rebuilt, but pollution of river water has not come under control. The concerned authorities need to identify the problems and take timely action to achieve the targets.	
17	Which of the following is not a major way of water pollution in rivers? a) Industrial waste b) Domestic sewage c) Water released out from waste water treatment plant d) Bathing and washing clothes	c
18	Domestic sewage is released to river pollutes the water. Choose the appropriate effect of this domestic sewage. a) It makes the water more basic. b) It may develop oil spills, floatable grease in water c) It promotes the growth of algae and bacteria which use up the dissolved oxygen in water. d) It makes the water more acidic .	c

19	Which of the following is not suitable to recognise the presence of pollutants in water? a) offensive odour from water bodies. b) Unchecked growth of weeds in water bodies. c) Decrease in number of fish in fresh water, river etc. d) The water is tasteless.	d
20	Which one of the following measures is taken for sterilising water and killing germsduring sewage treatment ? a) Adding alum to water b) Churning the sewage by machines c) Chlorination d) Passing the churned sewage into a tank with a gentle slope.	c
21	A cell “P” contains a cell wall, large central vacuole and a nucleus at the periphery. The cell “P” is _____. It also contains another organelle “Q”which is absent in animal cell .Name the organelle “Q” and write down its most important function.	2
22	Comment on any two shapes of cells with an example for each shape answered by you .	2
23	Explain the reason or cause of an earthquake in brief.	2
24	State the position and size of image formed by a convex lens when a.the object is placed at its “ 2F” point. b.the object is placed between its “F” and “2F” points.	2
25	Name the organelles labelled as 1, 2, 3 in the given picture of animal cell and write down one function of the named organelles 1, 2 and 3.  	3
26	a. State the rules for refraction of light. b. Give any two examples, from daily life, based on the phenomenon of refraction of light.	3
27	a. What is reactivity series? b. Arrange the following metals in increasing order of their reactivity. Au, Cu, Pt, Na	3
28	A magnesium ribbon is dipped in a solution of copper sulphate taken in a beaker. The colour of the solution changes after keeping for sometime. a. Write down all the observations in this reaction. b. What is the name of this reaction ? c. Why is the reaction called so?	3