SETH ANANDRAM JAIPURIA SCHOOL, GHAZIABAD
SAMPLE QUESTION PAPER
SESSION: 2015-16
CLASS VIII
SUBJECT: SCIENCE

Time: 3 hrs. Max. Marks: 100

General Instructions:
• Question paper is divided in two sections.
• Section A consists of question from Physics and Chemistry and Section B consists of questions from Biology.
• Marks are indicated against each question.
• There is no overall choice although internal choice is given in five marks questions.
• Write the serial number of the question before attempting
• Write the answers legibly and draw neat diagrams wherever required.

SECTION - A

1. What is Richter scale? (1)

2. Name two greenhouse gases. (1)

3. Should the ignition temperature of a fuel be above or below the room temperature? Give reason to support your answer. (1)

4. The calorific value of hydrogen gas is 14790 KJ/kg’. What do you understand by this statement? (1)

5. What happens when a positively charged glass rod is brought close to the metal disc of an electroscope? (1)

6. Mention any two changes that can occur in the electrolyte and the electrode during electrolysis. (2)

7. Define wavelength of a sound wave. What is its SI unit? (2)

8. 'Carbon dioxide gas is a very good fire extinguisher’. Which condition of combustion is not fulfilled if we use carbon dioxide gas as a fire extinguisher? (2)

9. What is light year? How many kilometers are there in a light year? (2)

10. 'The use of CNG instead of diesel is being encouraged these days’. Write any two reasons. (2)

11. Why is incomplete combustion more harmful to human beings? (2)

12. A vibrating object vibrates 100 times in 30 seconds. Find its frequency and time period. (2)

13. Explain any two methods that can be used to purify water at home (2)

14. Explain the three effects of electric current while passing through a liquid. (3)

15. A refill is rubbed with polythene and a balloon is rubbed with woolen cloth, then they are brought close to each other. Will they attract or repel? Justify your answer. (3)
16. Describe the different zones of a candle flame with a well labelled diagram. (3)

17. Define the following: (3)
   a. Pitch
   b. Frequency of vibration
   c. Time period

18. Afforestation leads to air, water as well as soil conservation’. Explain the above statement. (3)

19. What is constellation? Explain how will you locate the brightest star in the night sky (3)

20. Mayank took an iron spoon and made an attempt to electroplate it with copper metal. (3)
   a. What should be used as an electrolyte?
   b. What should be connected to the negative terminal of the battery?
   c. What would be observed after passing electric current for about 30-40 minutes.

21. Write any three features that can make your house quake safe. (3)

22. The increased level of nutrients in the water affects the survival of aquatic organism. How? (3)

23. What is lightning? Explain how lightning takes place between the earth and the cloud. (3)

24. Name the planet that exhibits the peculiar feature: (3)
   a. Rotates from east to west
   b. Density is less than water
   c. Can accommodate about 1300 earth
   d. Shows phases just like the moon
   e. Highly tilted rotational axis
   f. Has two moons only

25. Suppose you are playing in the playground and lightning occurs. Write three precautions that you will take to protect yourself from lightning. (3)

26. Describe the threat to Taj Mahal due to air pollution. Suggest any two remedial actions. (3+2=5)

   **OR**

   Write an activity to find whether a given liquid is a good conductor or a poor conductor of electricity. Draw a well labelled diagram also. (3+2=5)

27. (a) Describe an activity to explain the function of vocal chords. (3+2=5)
   (b) Differentiate between inaudible and audible sounds.

   **OR**

   (a) Describe an activity to show that sound cannot travel through vacuum. (3 + 2 = 5)
   (b) Distinguish between noise and musical sound.

28. Give one word for the following: (0.5x2=1)
   a. Site of fertilization in human females.
b. Multicellular structure formed as a result of divisions in zygote.

29. Few cells do not have any regular shape. Give an example of such a cell. (1)

30. Why is menstrual flow generally not observed in females who are 60 yr or older? (1)

31. Define the term ‘hormone’. (1)

32. Name the constituent of cell wall. (1)

33. State any two functions of cytoplasm. (2)

34. Differentiate between viviparous and oviparous animals. State any two differences. (2)

35. Why do fishes release many eggs for fertilization but only one egg is generally released from the human ovary. (2)

36. What advantage does nerve cell derive by its branched structure shape? Name another cell found in human body. (2)

37. What may happen to a plant cell if nucleus or plasma membrane gets damaged? (2)

38. If frog lays eggs in water deficient in iodine will the tadpoles be able to develop into adults? Why or why not? (2)

39. Name any two parts in the human female reproductive system and state their functions. (2)

40. What is the role of following hormones in human body- insulin, testosterone, and adrenalin? (3)

41. Compare the processes of sexual and asexual reproduction (2 points). Also give an example each of organisms which reproduce by these methods. (3)

42. Draw an outline sketch of human body and show any four major glands in it. (3)

43. a. Draw a neat and labeled diagram of metamorphosis in frog.

   b. Can cloning be considered as a method of sexual reproduction? Justify your answer giving any two reasons. (3+2=5)

   OR

   a. Draw a neat and well labeled diagram of binary fission in Amoeba.

   b. What are cell organelles and what is their significance? (3+2=5)