



DELHI PUBLIC SCHOOL, GWALIOR

(Under the Aegis of DPS Society, New Delhi)

MODEL TEST PAPER

CLASS – VIII

SUBJECT – SCIENCE

Time: 3 hrs.

M.M.: 80

General Instructions:

1. The question paper comprises three sections – A, B and C. Attempt all the sections.
2. All questions are compulsory.
3. Internal choice is given in each section.
4. All questions in Section A are one-mark questions comprising MCQ, VSA type and assertion-reason type questions. They are to be answered in one word or in one sentence.
5. All questions in Section B are three-mark, short-answer type questions. These are to be answered in about 50-60 words each.
6. All questions in Section C are five-mark, long-answer type questions. These are to be answered in about 80-90 words each.
7. This question paper consists of a total of 30 questions.

Section – A

[1x10=10]

Q.1 Define polymer. [1]

Q.2 Magnesium + Hydrochloric acid \rightarrow Magnesium chloride + _____ [1]
a) O₂ b) CO₂ c) N₂ d) H₂

Q.3 Answer the question numbers 3(a) – 3(d) on the basis of your understanding of the following paragraph and the related studied concepts.

When we push a box lying on the floor with a small amount of force, it does not move at all. It means the surface of the floor, on which box is resting, exerts some force on the box which act in a direction opposite to the force of our push. Let us take another example. A ball moving on the ground slows down gradually and stops after covering some distance. This means ground exert force on the moving ball to oppose its motion. This force occurs between the two surfaces which are in contact with each other.

(a) Name the force which always opposes the motion of one object over another object. [1]

(b) Is it contact or non contact force? [1]

(c) How can we reduce the effect of such force on the motion of an object? Mention any one way. [1]

(d) On what factors does this force depend on? [1]

Q.4 Question number 4(a) – 4(d) are based on figure shown below. Observe the picture and answer the questions asked.

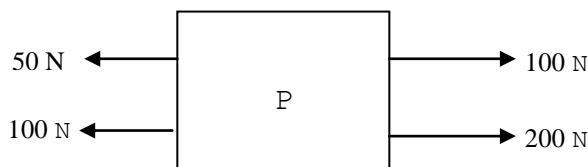


- (a) Is child suffering from polio disease or is it a preventive measure? [1]
 (b) Name the causative agent of polio disease? [1]
 (c) What is a special kind of preparation or medicine that provides immunity or protection against a particular disease called? [1]
 (d) A number of diseases can be prevented by the process of giving a vaccine orally or by injection. Name any two diseases which cannot be prevented by such process. [1]

Q.5 The tyres of heavy vehicles are kept broad to [1]
 a) Decrease the mass of the vehicle. b) increase pressure on the ground
 c) Decrease friction on the ground d) Decrease pressure on the ground

OR

Look at the figure and say what the net force on P is



- a) 300N towards your right b) 300N towards your left
 c) 150N towards your right d) 150N towards your left

Q.6 Which of these metals deposited on iron objects to give them a shiny look and to protect them from corrosion. [1]
 a) Gold b) Silver c) Chromium d) Magnesium

Q.7 Electrolytes conduct electricity due to the movement of – [1]
 a) Electrodes b) Atoms c) Electrons d) Ions

Q.8 Which of the following crops would enrich the soil with nitrogen - [1]
 a) Apple b) Pea c) Paddy d) Potato

OR

	Steps involving in N ₂ fixation		Helpful Bacteria
A)	Biological N ₂ fixation	a)	Pseudomonas
B)	Nitrification	b)	Rhizobium
C)	Denitrification	c)	Nitrobacter

Choose the correct pairing

- i) A – c, B – b, C – a ii) A – b, B – c, C – a
 iii) A – a, B – c, C – b iv) A – b, B – a, C – c

Q.9 Apiculture : Honey bee :: Pisciculture : _____ [1]

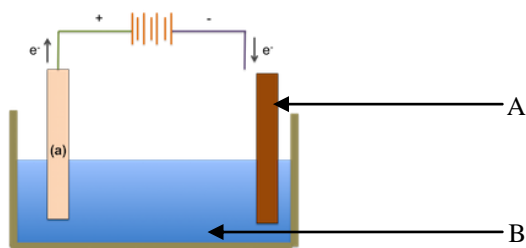
Choose the correct option for the blank

- a) Fruits b) Silkworm c) Fish d) cattle

Q.10 Which plastic is used [1]

- a) for making fire resistant uniform of firemen?
b) for giving non-stick coating on frying pans?

Q.11 Observe the electrolytic cell/ voltmeter and label the parts A and B. [1]



Q.12 Consider the following elements- sodium, sulphur, carbon, magnesium [1]

Which of these elements will form

- a) Acidic oxides b) Basic oxides

OR

Which one of the following four metals would be displaced from the solution of its salt by the other three metals?

- a) Zinc b) Silver c) Copper d) Magnesium

For questions number 13 and 14, two statements are given – one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these question from the codes (i) , (ii) , (iii) and (iv) as given below:

- (i) Both A and R are true and R is correct explanation of the assertion.
(ii) Both A and R are true but R is not the correct explanation of the assertion.
(iii) A is true but R is false.
(iv) A is false but R is true.

Q.13 **Assertion** – Chemical fertilizers increase the crop yield, therefore to be used in excessive amount.

Reason – The water pollution caused by fertilizers decreases the amount of dissolve oxygen in water leading to death of aquatic life. [1]

Q.14 **Assertion** – Deforestation leads to reduce rainfall.

Reason – The lesser number of trees will use up less carbon dioxide increasing the amount of CO₂ in the atmosphere. [1]

Section – B

Q.15 The synthetic fibre A is chemically a polyamide whereas the synthetic fibre B contains a large amount of ester groups. Another synthetic fibre C is made of a polymer D which consist of a large number of glucose units joined one after another (cellulose). [3]

- a) Which fibre (A,B or C)is prepared from natural raw material?
- b) Name the polymer D.
- c) Which fibre could be - i) Nylon ii) Terylene?
- d) Which among these is first true synthetic fibre?
- e) Which fibre among these is known as blended fibre?

Q.16 Observe the picture shown [3]



“Avoid plastics as far as possible”. Do you agree with the statement? Comment on this advice.

OR

Observe the picture shown



It is one of the harmful effects of acid rain. Explain acid rain formation and its other harmful effects.

Q.17 List a) Any three causes of water pollution. [3]
b) Any three effects of air pollution.

Q.18 ‘Microbes are our friends and foe both’. Justify the statement. [3]

OR

Draw a web chart depicting any 6 ways to preserve food. (3 physical and 3 chemical methods)

Q.19 Differentiate between [3]
a) Flora & Fauna
b) Zoo & Wild life sanctuary

Q.20 A student lists the following agricultural practices for crop production [3]
Irrigation, Removal of weeds, Preparation of soil, Storage of food grains, Sowing, Adding manure & fertilizers.

- a) Which agricultural practice is missing from the list?
- b) Arrange these practices in the correct order as they are performed.

Q.21 a) After consuming a dish of mutton, a person complained of nausea, vomiting, diarrhoea and pain in abdomen. [3]
i) Which disease is he suffering from?
ii) What causes the disease?
b) To which category of microorganisms do the following belong - Amoeba, Penicillium, HIV, Spirogyra

Q.22 State the reason for the following [3]
a) Sliding friction is less than the static friction.
b) Some people experience nasal bleeding at high altitudes.

Q.23 Mention three noncontact force with one example of each.

Q.24 a) A force of 100N is applied to an object of area 2m^2 . Calculate the pressure. [3]
b) Calculate the force applied on an object of 50 kg to accelerate at $5\text{m}/\text{sec}^2$.

OR

- a) When a force of 5N acts on a surface, it produces a pressure of 500pa. Calculate the area of surface.
- b) Calculate the current flowing through a conducting wire if the charge of 10 coulomb is passing through it for 2 seconds.

Section – C

Q.25 a) Write about disadvantages of friction. (any three) [5]
b) What are the effects of force? Mention any 4 with examples.

OR

Define – Anion, Streamlining, Manometer, viscous drag, Electrolysis

Q.26 Explain the chemical effects of electric current with the help of diagrams. [5]

Q.27 a) Why do we prefer to use manures instead of fertilizers? [5]
b) What are weeds? How can we control them?

Q.28 a) What are the causes of deforestation? (any 6) [5]
b) Why should paper be saved? Mention ways to save it.

OR

- a) What is red data book?

- b) What do you understand by term migration?
- c) Protected forest are not completely safe for wild animals. Why?
- d) Why is it necessary to remove the excess moisture from the grains before storage?
- e) Why is virus known as controversial organism?

Q.29 a) Give reason

- i) Rayon is known as regenerated fibre and artificial silk.
- ii) Sodium & potassium are stored in kerosene.

b) Differentiate thermosetting plastic and thermoplastic.

[5]

OR

a) Give reason

- i) Immersion rods for heating liquids are made up of metallic substances.
- ii) Nylon is used to make swim suits.

b) Distinguish between metals and non-metals on the basis of these properties -

- Appearance
- Hardness
- Malleability
- Ductility
- Sonority
- Reaction with acids

Q.30 a) What is corrosion? List the methods to prevent it.

b) What is biological magnification?

c) What are the various techniques to purify water?

[5]

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