



**OXFORD PUBLIC SCHOOL, RANCHI**  
**SA-1 EXAMINATION**  
**SESSION 2016-2017**

**Class –VIII**

**Sub – Science**

**Name \_\_\_\_\_ Class &Sec \_\_\_\_\_**

**Time : 2.30 Hrs**

**F.M.: 90**

**Roll No \_\_\_\_\_**

General Instruction:-

All the questions are compulsory.

**PHYSICS - 30**

**Q1. Answer in one sentence:** (6x1=6)

- a. Calculate the time period of a pendulum which is vibrating with a frequency of 10Hz.
- b. How is pitch related to frequency?
- c. What is streamlined shape? Give an example.
- d. Why are treads made on the surface of tyres ?
- e. Define pressure. Write its S.I.unit.
- f. Write any one effect of force.

**Q2. Short answer type questions:** (4x2=8)

- a. Write two differences between musical sound and noise.
- b. i Two boys pull a rope from two ends with a force equal to 100N each. What is the resultant force ?  
ii How does pressure of a liquid depend on its depth ?
- c. Why does a match stick light when we strike it on a rough surface ?
- d. What is ultrasound? Write two uses of ultrasound.

**Q3. Long answer type questions:** (4x3=12)

- a. i Write two measures which can be taken to control noise pollution in our surroundings.  
ii One whale says something to its friend 75km away. How long will it be before the friend can hear it? The speed of sound in water is 1500m/s.
- b. Write three advantages of friction.
- c. Why our body not crushed by the large pressure exerted by the atmosphere? What is the cause of atmospheric pressure?
- d. What is the cause of friction ? What are the factors affecting friction ?

**Q4. Define:-** (4x1=4)

- a. Contact force
- b. Lubrication
- c. Audible range
- d. Atmospheric pressure

## CHEMISTRY - 30

### Q1. Very short answer type questions :-

1 x 6 = 6

- Name the man-made fibre which is regarded as artificial silk .
- Name one metal and one non-metal which exist in liquid state at room temperature .
- Write the isotopes of carbon .
- Give one use of melamine .
- How do metal oxides differ from non-metal oxides ?
- Where is iron present in our body ?

### Q2. Short answer type questions :-

2 x 4 = 8

- Write the full form of PVC .Give two uses of PVC .
- What would you observe when a strip of zinc is placed in copper sulphate solution ?Write a word equation of the reaction which takes place .
- Why are electric switches , plugs and sockets made of thermosetting plastics ?
- Give reasons for the following :
  - Sodium and potassium are stored in kerosene .
  - Copper cannot displace zinc from its salt solution (zinc sulphate solution) .

### Q3. Long answer type questions :-

3 x 4 = 12

- Explain why , thermoplastic become soft on heating but thermosetting plastics do not become soft on heating . Draw labelled diagrams to illustrate your answer .
- Give one uses of the following metals and non-metals :
  - Aluminium
  - Sulphur
  - Zinc
  - Chlorine
  - Mercury
  - Iodine
- Define the following :
  - Atomic number
  - Valence electron
  - Molecular mass
- What happens when sulphur dioxide is dissolved in water ? Write a word equation for the reaction which takes place .
  - What happens when an iron nail is placed in copper sulphate solution? Write a word equation of the reaction involved.

### Q4. A) Calculate the molecular mass of the following compounds: -

4 x 1 = 4

[Atomic mass C = 12, H = 1, O = 16, Na =23 ]

- $C_{12}H_{22}O_{11}$
- NaOH

B) Balance the following chemical equations :

- $AgNO_3 \rightarrow Ag + NO_2 + O_2$
- $Mg + HCl \rightarrow MgCl_2 + H_2$

## BIOLOGY - 30

### Q1. Very short answer type questions :-

1 x 6 = 6

- Name the insect which carries dengue virus .
- For what purpose are National Parks in our country established ?
- Name the scientist who observed a thin slice of cork through a microscope and coined the term 'cell' .
- What name is given to those species :

- i) that are on the verge of vanishing from earth ?
- ii) that have died out completely ?
- e) What are the units of inheritance in living organisms ?
- f) Name the practise used for cultivating paddy.

**Q2. Short answer type questions :-**

**2 x 4 = 8**

- a) Where do Rhizobium bacteria live ? What is their function ?
- b) What is global warming ? Name the gas which is responsible for causing global warming .
- c) State the difference between prokaryotes and eukaryotes .
- d) Describe the method of pasteurisation for the preservation of milk .

**Q3. Long answer type questions: -**

**3 x 4 = 12**

- A) i) What is irrigation ? Why is irrigation necessary ?  
ii) Name the various sources of irrigation in our country .
- B) i) What is meant by communicable diseases ? Name any two communicable diseases .  
ii) What are the various ways in which communicable diseases can spread ?
- C) What is a Biosphere Reserve ? Name any two Biosphere Reserves of India . Where are these Biosphere Reserves located?
- D) i) What is meant by rabi crops ? Give two examples of rabi crops .  
ii) What are the advantages of sowing seeds with a seed drill ?

**Q4. Draw the general diagram of a plant cell and label it . Write the function of nucleus and mitochondria. 4**