SCIENCE IX

 TERM-II (SA2)

TIME:-3 hours Max.Marks-90

GENERAL INSTRUCTIONS:-

1. The question paper comprises of three sections A, B and C You are to attempt all the sections.
2. All questions are compulsory.
3. All sections of Section-A, Section-B and Section-C are to be attempted separately.
4. Question numbers 1 to 3 in Section –A are one mark questions.These are to be answered in one word or in one sentence.
5. Question number 4 to 5 in Section-A are two marks questions.These are to be answered in about 30 words each.
6. Question numbers 6 to 16 in Section-A are three marks questions .These are to be answered in about 50 words each.
7. Question numbers 17 to 21 in Section-A are five marks questions .These are to be answered in about 70 words each
8. Section B has 3 OTBA questions. Question number 22 is two marks,Question number 23 is three marks and Question number 24 is five marks question.
9. Question numbers 25 to 33 in Section-C are three multiple choice questions based on practicle skills.Each question is a one mark question. You are to select one most appropriate response out of the four provided to you.
10. Question numbers 34 to 36 in Section-C are two marks questions based on practical skills .These are to be answered in about 30 words each.

 SECTION-A

1. Which form of energy will a body possess placed at the top of hill?
2. Name two natural resources available on the earth?
3. If Z=3,What would be the valency of element? Write the name of element.
4. Calculate the mass of 1 molecule of Nitrogen gas.
5. Prawn,housefly and spider belong to one group?

 (i) Name the group. (ii) Justify the name given to this group.

1. State two causes and two effects of depletion of ozone layer.
2. Relative density of silver is 10.8 ,The density of water is 10³ kg/m³. What is density of silver in S.I. Unit?
3. Give reasons-

a. Which divison among plants have the simplest organisms?

b. How do Gymnosperms and Angiosperms differ from each other?

1. a. Why a person suffering once from small pox cannot suffer from it again?

 b. Why prevention is better than cure?

1. A child hears an echo from a cliff in 10 sec after the sound from an animal is produced. Calculate the distance between the cliff and the child. ( take velocity of sound as 340 m/s)
2. a. Write the full form of SONAR.

 b. Write two applications of SONAR.

1. a. Define vaccine.

 b.What type of diseases can be prevented through vaccination?

1. a. Write 2 differences between acute and chronic diseases.

 b.Give example of Infectious diseases. .

1. Identify the phylum of the following 2 organisms and write 2 characteristic feature of each-

 (a) (b)



1. Write the rules followed for filling the electrons in various energy shells of any atom,as proposed by bohr?
2. a. Calculate the molar mass of CH3COOH. ( Atomic mass of C= 12 u, H=1 u,

 O=16 u )

 b. Write molecular formula for:- (i) Ammonium sulphate (ii) Sodium

 carbonate

1. a. Define Power.

 b. A body of mass 45 Kg climbs up 20 steps in 20 sec if each step is 25 cm high,

 calculate the power used in climbing. Take g = 10m/s2.

1. Identify the energy transformation in the following- Hydroelectric power, explosion of cracker, And oscillating pendulum.
2. a. What are polyatomic ions.Give examples?

 b.Write atomicity of the following:-Sulphur and phosphorus

1. Explain an activity with labeled diagram that sound needs material medium for propagation.

OR

 Explain working of human ear with the help of well labelled diagram.

1. Draw nitrogen cycle. OR Carbon cycle?

**SECTION -B**

1. List the impact of consuming fish with high mercury levels on human health?
2. List any three priority problem areas,based on the evidence of the linkages between poor environmental quality and health?
3. Discuss the impact of chemicals on human health through a case-study other than those mentioned in the text?

 **SECTION-C**

**Multiple choice questions ( 1 MARK EACH)**

1. Jointed appandages are characteristic feature of :

a. Cockroach

b. Earthworm c. Bonyfish

d. Pigeon

1. level of water in measuring cylinder before and after immersing a solid of mass 1.5 g has risen from point A to B as shown below. The density of the solid object would be:

a. 1g/ cc b. 1.5 g/cc c. 2g/cc d. 0.75g/cc

1. If the reflected and incident sound are at an angle of 90 degrees with each other, the incident angle should be:

a. 60 degrees b. 30 degrees c. 45 degrees d. 180 degrees

1. 2 specimens A and B were observed by a child for spotting as shown below. After identifying the given specimens, in which of the following groups should he place them:



FIGURE - A FIGURE – B

|  |  |  |
| --- | --- | --- |
| s.no | A | B |
| A | Bryophyta | Pteridophyta |
| B | Pteridophyta | Gymnosperms |
| C | Algae | Gymnosperms |
| D | Gymnosperms  | Algae |

1. A spring balance is used to calculate the mass of the body as shown below. A student calculated the least count of the spring balance and found it to be:



 a. 1.5 gwt/division b. 2 gwt/division c. 2.5 gwt/division d. 1 gwt/division

1. For doing experiment on verification of laws of reflection of sound successfully, the reflecting surface should be

a. A foam padded board.

b. A sheet of pure white cloth

c. A wooden board with many holes in it

d. A wooden board without holes

1. The speed of sound in air is about

 a. 3 x 108 m/s b. 340 m/s c. 340 cm/s d. 340 km/s

1. Ribbon shaped and spiral chloroplast is present in which of the following organism:

a. Ulothrix b. Agaricus c. pirogyra

d. Chlamydomonas

1. Seeds are naked in:

a. Angiosperms b. Gymnosperms c. Both of these d none of these

1. A student observed that a block of mass 100g displaced 50 ml of water when dipped in measuring cylinder.calculate the density of the block?
2. In a spring balance the space between 0 to 25 g wt is divided into 5 equal parts.Find its least count.
3. Which feature of the body design helps a fish to swim in water?