

ARMY PUBLIC SCHOOL SHILLONG

ANNUAL EXAMINATION – 2022-23

CLASS VIII – SCIENCE

Time : 3 Hours

Maximum Marks : 80

General Instructions:

- i) The question paper comprises four sections A, B, C, D, E and F. There are 38 questions in the question paper. All questions are compulsory
- ii) Section - A – question no. 1 to 20 – all questions are of one mark each. These questions contain multiple choice questions (MCQs), true or false, fill in the blanks and one word answer type questions.
- iii) Section - B – question no. 21 to 26 are short answer type questions, carrying 2 marks each. Answers to these questions should be in the range of 30 to 50 words.
- iv) Section - C – question no. 27 to 32 are short answer type questions, carrying 3 marks of each. Answers to these questions should be in the range of 50 to 80 words.
- v) Section - D – question no. 33 and 35 are long answer type questions carrying 4 marks each. Answer to these questions should be in the range of 80 to 100 words.
- vi) Section - E – question no. 36 and 37 are long answer type questions carrying 5 marks each. Answer to these questions should be in the range of 80 to 120 words.
- vii) Section - F – question no. 38 and 39 are competency case -based questions/sources based integrated questions carrying 4 marks each.

SECTION – A

- I
- Q1 Select and write one most appropriate option out of the four options. 1
- Q1 Which of the following is the standard unit of force?
- a) pascal
  - b) newton
  - c) metre
  - d) ampere
- Q2 Which gland secretes hormones which maintain the correct salt balance in the blood? 1
- a) thyroid
  - b) adrenal
  - c) pancreas
  - d) testis
- Q3 What determines the loudness of sound? 1
- a) frequency
  - b) loudness
  - c) amplitude
  - d) time period

Q4 Which among the following traditional methods of irrigation is 'Rahat'?

1



(A)

(B)



(C)

(D)

- a) (A)
- b) (B)
- c) (C)
- d) (D)

Q5 Four children are asked to arrange forces due to rolling, static and sliding friction in increasing order. Which among the following is the correct arrangement?

1

- a) rolling, static, sliding
- b) static, sliding, rolling
- c) static, rolling, sliding
- d) rolling, sliding, static

**II Write TRUE or FALSE**

Q6 Dried neem leaves are used to store food grains at home.

1

Q7 The size of the pupil becomes small when you see in dim light.

1

Q8 Orion is a member of the solar system.

1

Q9 Sound waves can travel in vacuum.

1

Q10 Stoppage of menstruation is called menopause.

1

**III Fill in the blanks with correct answer.**

Q11 It is important to eat \_\_\_\_\_ and maintain personal hygiene during adolescence.

1

Q12 Friction opposes the \_\_\_\_\_ between the surfaces in contact with each other.

1

Q13 The basic structural unit of living organism is known as \_\_\_\_\_.

1

Q14 The type of force responsible for a change in the state of motion of an arrow is an example of a \_\_\_\_\_ force.

1

Q15 The large number of small objects occupied the gap between the orbit of Mars and Jupiter are called \_\_\_\_\_.

1

**IV Answer the following in one word.**

Q16 Name the gas evolved when magnesium reacts with dilute hydrochloric acid.

1

Q17 Name the force responsible for wearing out of bicycle rim.

1

- Q18 What is the most popular resource for visually challenged people? 1
- Q19 Which is the farthest planet of the solar system? 1
- Q20 When you release a coin from your hand it begins to move downwards. Which force is responsible for this? 1

#### SECTION - B

##### V Answer the following questions in 30 to 50 words

- Q21 How can you separate unhealthy seeds from healthy seeds before sowing? 2
- Q22 State any four physical properties of metals. 2
- Q23 Write a short note on nucleus of a cell. 2
- Q24 Explain in what ways noise pollution is harmful to human. 2
- Q25 What are audible and inaudible sounds? 2
- Q26 Write any two differences between fertilizers and manure. 2

#### SECTION - C

##### VI Answer the following questions in 50 to 80 words .

- Q27 What is displacement reaction? Explain it with the help of an example. 3
- Q28 Draw the structure of a plant cell and label the following parts. 3  
i) cell membrane ii) nucleus iii) vacuole iv) cell wall
- Q29 What is atmospheric pressure? Write an activity to show that liquids exert equal pressure at the same depth. 3
- Q30 Enlist any four methods of reducing friction. Give an example where friction is useful to us. 3
- Q31 What are conductors of electricity? Write an activity to show that lemon juice is a conductor of electricity. 3
- Q32 Draw the structure of the earth. Explain the causes of an earthquake. 3

#### SECTION - D

##### VII Answer the following questions in 80 to 100 words .

- Q33 What are secondary sexual characters? Explain the sex determination in an unborn child. 4
- Q34 What is electroplating? Explain the electroplating of copper on an iron ring. 4
- Q35 What are the causes of water pollution? Why does the increased level of nutrients in the water affect the survival of aquatic organisms? 4

#### SECTION - E

##### VII Answer the following questions in 80 to 120 words .

- Q36 What is lightning? Explain the construction and working of a lightning rod. Suggest two measures to protect ourselves from lightning. 5
- Q37 a) Draw the structure of the human eye and label the following parts. 5  
i) cornea ii) retina iii) iris iv) eye lens  
b) Explain how you can take care of your eyes. ( any two points)

VIII

SECTION – F  
( Case study based questions )

Read the paragraph and answer the following questions given below.

- Q38 You must have heard that there are a number of artificial satellites launched by our country and they are orbiting around the Earth. Artificial satellites are man made objects. They are launched from the earth. They revolve around the Earth much closer than Earth's natural satellite, the moon. Artificial satellites have many practical applications.



- i) Write one difference between natural satellites and artificial satellites. 1
- ii) Name any two satellites of India. 1
- iii) Write two uses of artificial satellites. 1
- iv) Why natural satellites are not used for communication? 1
- Q39 The substances which contaminate the air are called air pollutants. Sometimes such substances may come from natural sources like smoke and dust arising from forest fires and volcanic eruptions. Pollutants are added to air by certain human activities. The sources of air pollutants are factories, power plants, automobile exhausts etc. Vehicles produce high levels of pollutants like carbon monoxide, carbon dioxide, nitrogen dioxide, smoke, CFCs etc. Carbon monoxide is a poisonous gas. Air pollutants are always a big threat to human and nature including the ozone layer.
- i) Which gas reduces the oxygen carrying capacity of the blood? 1
- ii) Which air pollutant damage the ozone layer? 1
- iii) What is the main cause of air pollution? 1
- iv) What is smog? 1