

FINAL EXAMINATION (2023 - 2024)

CLASS : VIII

SUBJECT : SCIENCE

Date of Exam : 26/02/2024

Time Allotted : 3 hrs.

Max. Marks : 80

No. of Pages : 06

Name: _____ Scholar No. _____ Roll No. _____ Class/Sec. _____

General Instructions:

1. All questions are compulsory.
2. Read the questions carefully.
3. Neat and labelled diagrams to be drawn with pencil only.
4. Colouring of the diagrams is not compulsory.

Q.1. Choose the correct answer

(1×14=14)

- (a) It is difficult to walk on ice because _____.
- | | |
|--------------------------|--------------------------|
| (i) the pressure is high | (ii) the pressure is low |
| (iii) friction is low | (iv) friction is high |
- (b) The _____ is the only non-metal which is a good conductor of heat and electricity.
- | | |
|----------------|---------------|
| (i) Oxygen | (ii) Graphite |
| (iii) Nitrogen | (iv) Zinc |
- (c) Complete the following sentence. Friction always _____.
- | | |
|------------------------------------|---------------------------|
| (i) helps the motion | (ii) opposes the motion |
| (iii) helps and opposes the motion | (iv) increases the motion |
- (d) In which of the following is fertilization external?
- | | |
|-------------------------|---------------------------|
| (i) Birds and fish | (ii) Amphibians and birds |
| (iii) Reptiles and fish | (iv) Fish and amphibians. |
- (e) Which of the following is an unpaired structure in the human reproductive system?
- | | |
|----------------------|-------------|
| (i) Ovary | (ii) Testis |
| (iii) Fallopian tube | (iv) Uterus |
- (f) _____ is the mode of reproduction in sponges.
- | | |
|--------------------|--------------------|
| (i) Gemmules | (ii) Fragmentation |
| (iii) Regeneration | (iv) Budding |

- (g) The menstrual cycle stops in a woman at about 40-50 years of age. The woman is said to have reached _____.
- (i) menopause (ii) puberty
(iii) menarche (iv) adolescence
- (h) Which of the following hormones initiates metamorphosis in insects?
- (i) Thyroxine (ii) Adrenaline
(iii) Insulin (iv) Prolactin
- (i) The smaller the length of the string in a guitar the _____ is the note.
- (i) lower (ii) higher
(iii) no change (iv) same
- (j) Which of the following is not capable of hearing the sound having frequencies beyond the range of 20 Hz to 20,000 Hz?
- (i) Dogs (ii) Humans
(iii) Bats (iv) Elephants
- (k) The longer lead of LED is always connected to the _____ terminal of the battery.
- (i) positive (ii) neutral
(iii) negative (iv) both positive and neutral
- (l) Where is the lightning conductor located? <https://www.cbseboardonline.com>
- (i) In the bottom of the building. (ii) In the middle of the building.
(iii) On the top of the building. (iv) Can be installed anywhere.
- (m) Which of the following is not likely to be the cause of a Tsunami?
- (i) Nuclear explosion under the sea (ii) Lightning
(iii) Earthquake (iv) Volcanic eruption
- (n) The epicenter of an earthquake is _____.
- (i) in the core of earth (ii) on the surface of the earth
(iii) in the middle of the earth (iv) underneath the oceans.

Q.2. Read the passage and answer the following questions

(1×4=4)

When a violin and piano are played at the same time and their sounds travel an equal distance through the same medium to reach our ears, such sounds produce different wave patterns. This is because these two sounds have different characteristics. The characteristics of a sound that makes us perceive it as different from other sounds are Pitch, Loudness and Quality.

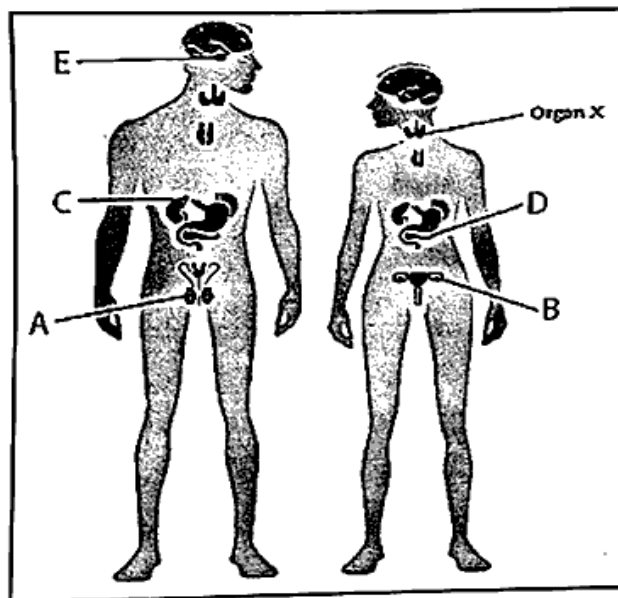
- (a) The loudness of sound depends on
- (i) its amplitude (ii) its time period
(iii) its frequency (iv) its speed

- (b) The string of the guitar is vibrating at 50 vibrations per sec. What is its time period?
- (i) 0.02 s (ii) 2 s
(iii) 0.2 s (iv) 20 s
- (c) The loudness of sound is measured in units of
- (i) metre/second(m/s) (ii) hertz (Hz)
(iii) metre (m) (iv) decibel (dB)
- (d) The pitch of sound is determined by its _____
- (i) speed (ii) frequency
(iii) amplitude (iv) loudness

Q.3. Choose the correct answer based on the picture shown below

(5×2=10)

A.



- (a) Which organ is the adrenal gland?
- (i) A (ii) B
(iii) C (iv) D
- (b) Name the organ labelled as "X"
- (i) The pancreas (ii) The thyroid gland
(iii) The ovary (iv) The pituitary gland
- (c) Name the hormone produced by the endocrine gland D.
- (i) Growth hormone (ii) Insulin
(iii) Adrenaline (iv) Thyroxine
- (d) Fight or flight hormone is produced by:
- (i) E (ii) X
(iii) C (iv) D

•(e) _____ controls secondary sexual characteristics.

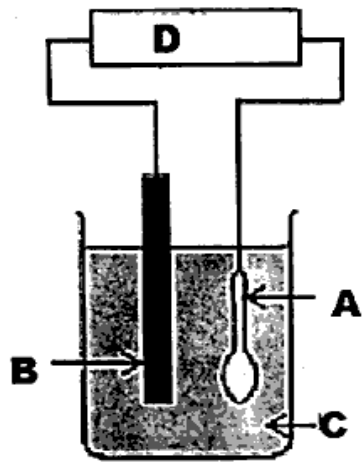
(i) E

(ii) X

(iii) D

(iv) Both E and X

(B)



(a) Identify the process taking place in the above figure

(i) Ionization

(ii) Purification

(iii) Both ionization and purification

(iv) Electroplating

(b) Which of these might be silver nitrate?

(i) A

(ii) B

(iii) C

(iv) D

(c) Identify Anode.

(i) A

(ii) B

(iii) C

(iv) D

(d) Identify Cathode.

(i) A

(ii) B

(iii) C

(iv) D

(e) Considering dissociation of silver nitrate, ions formed in the process are:

(i) Ag^+ and NO_2^-

(ii) Ag_2^+ and NO_3^-

(iii) Ag^+ and NO_3^-

(iv) Ag_2^+ and NO_2^-

Q.4. Select the correct answer

(1×4=4)

(a) Both A and R are correct and R is the true explanation of A

(b) Both A and R are correct but R is not the true explanation of A

(c) A is correct and R is wrong

(d) A is wrong and R is correct

- (a) **Assertion (A)** : After binary fission has taken place, each daughter cell has a nucleus of its own.
Reason (R) : The nucleus of the parent cell divides into two during binary fission.
- (b) **Assertion (A)**: The speed of sound is the slowest in air and fastest in solids.
Reason (R) : The molecules of liquids and gases are quite loosely packed and can carry sound fast.
- (c) **Assertion (A)**: An atom is electrically neutral.
Reason (R) : The electrons revolve around the nucleus.
- (d) **Assertion (A)**: In the earthquake prone areas, heavy weight construction material should be used.
Reason (R): The use of lightweight construction material for construction in the earthquake prone areas is likely to reduce the damage due to collapse of the buildings.

Q.5. Answer the following in short

(2×9 =18)

- (a) Aluminium is above iron in the reactivity series. However its reactions with oxygen and water seem to indicate that it is less reactive than iron. Explain.
- (b) What do you mean by in vitro fertilization?
- (c) Why is the pituitary gland referred to as the 'master gland'?
- (d) What are the different stages of menstrual cycle?
- (e) Mention one use of any two noble metals.
- (f) Give reason why women have shriller voices than men.
- (g) Why is zinc electroplated on iron?
- (h) A child staying in a coastal region tests the drinking water and also the seawater with his tester. He finds that the compass needle deflects more in the case of seawater. Explain the reason for the same.
- (i) What are seismic waves? How are these waves recorded?

Q.6. Answer in detail

(3×5=15)

- (a) Write the balanced chemical equation for the following.
- (i) Rusting of iron
- (ii) Reaction of Magnesium with dilute Hydrochloric acid
- (iii) Reaction of Zinc with boiling water
- (b) Differentiate between Viviparous and oviparous. (Write 3 points)
- (c) Explain sex determination of a baby with the help of a flow chart.
- (d) Explain the electrolysis of copper sulphate solution.
- (e) Write any three measures we should adopt to protect ourselves during an earthquake.

Q.7. Answer the following:

(5×3=15)

- (a) I. Draw a diagram of the male reproductive system. Name and label the following parts in the diagram
- (i) Testes are located here
 - (ii) Sperms are produced by it
 - (iii) This carries sperms from testes
 - (iv) It helps in the transfer of semen for fertilization to vagina
- II. What is the significance of the thick muscular walls of the uterus in females?
- (b) Explain with the help of a diagram how our ear works and label all the parts of it.
- (c) I. How does lightning occur?
- II. Mention three methods of protection from lightning.

* * *