

BHSK/T-II/GS/IX/23.

Term 2nd. Examination.

Class: 9th. Std.

Subject: G.Science

Max.Marks: 40

Time: 2½ Hours.

Roll No.: _____.

Date: _____.

Section (A) Physics

Q.No.1: Answer any two questions:

(2×3=6)

- i) State universal law of gravitation.
- ii) What is meant by denisity?
- iii) Define (a) Wavelength (b) Frequency

Q.No.2: Answer any two questions:

(2×2=4)

- i) In which of three media , air , water or iron sound travels faster in a particular temperature?
- ii) What is meant by free fall?
- iii) Write audible range of average human ear.

Section (B) Chemistry

Q.No.3: Answer any two questions:

(2×3=6)

- i) Write three postulates of Dalton atomic theory.
- ii) Differentiate between an atom and a molecule.

(2)

- iii) Write electronic configuration of Helium , Carbon and Nitrogen.

Q.No.4: Answer any two questions:

- i) Define isotopes. Give examples. **(2×2=4)**
- ii) What are Cations and Anions? Give examples.
- iii) Write chemical formula of Sulphuric Acid , Potassium Sulphate and Water.

Section (C) Biology

Q.No.5: Answer any two questions: **(2×3=6)**

- i) Differentiate between plants and animals.
- ii) What do we get from cereals , pulses , fruits and vegetables?
- iii) Write four symptoms of drug addiction.

Q.No.6: Answer any two questions: **(2×2=4)**

- i) Define drug.
- ii) Write the use of manures and fertilizers.
- iii) Write three characteristics of algae.

(3)

Section (D) Objective Type Questions:

Q.No.7: (A) Fill in the blanks:

(1×5=5)

- i) All animals and non-green plants are _____.
- ii) Plants need nutrients for _____ and _____.
- iii) Vital organ affected by smoking is _____.
- iv) Chemical formula of hydrochloric acid is _____.
- v) Proton is a _____ charged particle.

(B) Write True or False:

(1×5=5)

- i) An apple falls on ground due to gravity of earth.()
- ii) Weight of a body does not help to attract towards earth. ()
- iii) For every action there is no equal and opposite reaction. ()
- iv) Density = $\frac{\text{Mass}}{\text{Volume}}$ ()
- v) Electron and proton were discovered by J.J Thomson. ()

(4)

- vi) Saffron is cultivated in
a) Middle mountains b) Karewas of Kashmir c) Outer plains
d) plateaus
- vii) In India minimum voting age is
a) 15 b) 18 c) 18 d) 20
- viii) The total number of Rajya Sabha members are
a) 200 b) 250 c) 300 d) 350
- (ix) There are catagories of fundamental rights.
a) 5 b) 6 c) 7 d) 8
- (x) Leap year has..... days.
a) 365 b) 366 c) 367 d) 368

(10×1=10)

Total No. of Questions: 15

Roll No. _____
Total No. of Printed Pages : 4

Class 9th
Term 2nd 2019
Science

Series A

Time: 2:30 Hrs.

Max. Marks: 36

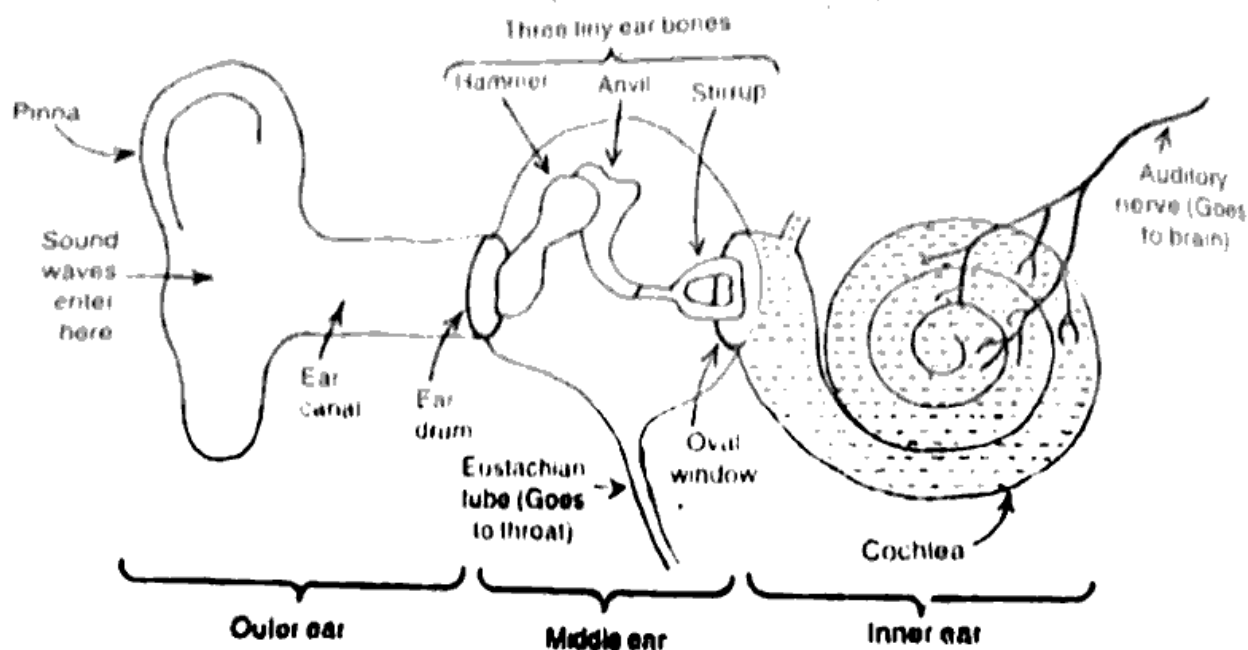
Physics

- Q1) State universal law of gravitation? What happens to the gravitational force between two objects, if
- the mass of one object is doubled?
 - the distance between the objects is doubled and tripled?
 - the masses of both objects are doubled?

Or

A stone is allowed to fall from the top of a tower 100 m high and at the same time another stone is projected vertically upwards from the ground with a velocity of 25 m/s. Calculate when and where the two stones will meet? (5)

- Q2) The structure of human ear is shown in the figure below. With the help of this figure, write the working of the human ear.



Q3) How does an object float or sink when placed on the surface of a liquid?

(2)

Q4) When a sound wave travels in air, the physical quantity which is transferred from one place to other is

- i) mass.
- ii) force.
- iii) momentum.
- iv) energy.

(1)

Q5) Sound waves of frequency less than 20 Hz are known as _____ waves.

(1)

Chemistry

Q1) Complete the following table.

Atomic Number	Mass Number	Number of Neutrons	Number of Protons	Number of Electrons	Name of the Atomic Species
9		10			-
16	32				Sulphur
	24		12		-
	2		1		-
	1	0	1	0	-

Or

The average atomic mass of sample of an element X is 16.2u. What are the percentages of isotopes $^{16}_8\text{X}$ and $^{18}_8\text{X}$ in the sample?

(5)

- Q2) i) Write down the formulae of:-
- a) sodium oxide
 - b) aluminium chloride
 - c) magnesium hydroxide
- ii) Write down the chemical name of compounds represented by the following formulae:- <https://www.jkboseonline.com>
- a) CaCl_2
 - b) K_2SO_4
 - c) CaCO_3
- Q3) Draw a sketch of Bohr's model of an atom with three shells? (2)
- Q4) The number of electrons in the valence shell of calcium is:-
- i) 6
 - ii) 8
 - iii) 2
 - iv) 4
- (1)
- Q5) Mass of one mole of carbon is _____ (1)

Biology

Q1) Explain the basis for grouping organisms into five kingdoms?

Or

What is binomial nomenclature? Explain it with the help of an example.

(5)

Q2) What are the reasons of drug abuse? Write the signs and symptoms of drug addiction? (3)

Q3) How do biotic and abiotic factors affect crop production? (2)

Q4) Spiders and scorpions are:-

- i) Insecta
- ii) Millipedes
- iii) Arachnids
- iv) Crustacea

(1)

Q5) Tobacco is _____ product.

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