

**SST:-**

History- Revision of Russian revolution

Civics - Revision of the whole syllabus

Geography- Revision till Natural Vegetation and Read Population

**Physics**

1. Do the following worksheet in your physics notebook.

2. Complete the NCERT Questions (till ques no. 18) of Ch- Gravitation

**Chemistry**

Q1) Calculate the molecular mass( $\text{NH}_2\text{CONH}_2$ ).

Q2) Law of conservation of mass was discovered by

(a) Dalton (b) Proust (c) Lavoisier (d) Richter

Q3) Two elements X&Y combine in a gaseous state to form XY in the ratio of 1:35.5 by mass. The mass of Y which combines with 2gram of X will be

(a) 7.1 gram (b) 3.55 gram (c) 35.5 gram (d) 71 gram

Q4) Match the following:-

Column I	Column II
1 . Sodium	a. Yellow in colour
2 . Helium	b. Diatomic
3. Sulphur	c . Soft metal
4. Hydrogen	d. Noble gas

Q 5 ) Give one word for the following:-

(a) Metal present in haemoglobin.

(b) Reddish brown metal used in making electrical wires.

Q 6) Write correct formulae using given ions.

anions	$\text{SO}_4^{2-}$	$\text{Cl}^-$	$\text{PO}_4^{3-}$	$\text{O}^{2-}$	$\text{CO}_3^{2-}$	$\text{OH}^-$	$\text{S}^{2-}$
cations							
$\text{Na}^+$							
$\text{Cu}^{++}$							
$\text{Al}^{3+}$							

Q 7) What happens when : --

(a) Solution of sodium chloride and silver nitrate are mixed together.

(b) Solution of barium chloride and sodium sulphate react together.

Q8) Calculate the molecular mass of  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$

[ Cu=63.5 u, S=32 u, O=16 u, H=1u]

Q9) The % of three elements calcium, carbon & oxygen in a sample of calcium

carbonate is given as:--

Ca=40.0%, C=12.0%, O=48.0%

If the law of constant proportion is true, what weights of these elements will be present in 1.5 gram of another sample of calcium carbonate?

Q10) What are the features of the Dalton's Atomic theory? Also mention the limitations of the theory.

### **Biology**

1. Why Euglena is called plant-animal? Why whales are not grouped under fishes?
2. How many chambers are present in the heart of a) fish      b) frog?
3. What is metameric segmentation? In which group of animals it is reported?
4. What are the advantages of scientific names?
5. Why bryophytes are called amphibians of plant kingdom?
6. a) State two characteristics features of nematode.  
b) Identify the phylum with the following features:
  - i) spiny skinned, radial symmetrical and have tube feet.
  - ii) triploblastic, worm like, having segmented body.
7. Write appropriate terms for the following:
  - a) Animal that is able to maintain a certain body temperature over a wide range of temperature in this environment.
  - b) Plant which bear naked seeds
  - c) Animals which have pseudocoelom.
8. What is binomial nomenclature? Who proposed it? State the conventions followed while writing the scientific name of organisms.
9. One day Rama who is studying in Class IX went to mother diary's vegetable shop where she found some umbrella like structure being sold. She could immediately identify them.
  - a) What is that structure?
  - b) To which kingdom does that belong?
  - c) Write two characteristics feature of organism belonging to this kingdom.
10. Explain the meaning of the terms and give an example of each of the following:
  - a) Symbiotic relationship    b) Cotyledon    c) Cryptogams    d) Saprophytic
  - e) Notochord                  f) Prokaryotic cell    g) Bilateral & Radial symmetry

11. Binny saw a house lizard crawling on the wall and asked his mother who is a biology teacher. Summarize her mother's statement.
  - a) Is body temperature related to surroundings temperature in reptiles? How can we define this feature of reptiles?
  - b) What is their breathing organ? Is there any reptile with four chambered heart?
12. How are Phanerogams divided into sub-divisions?
13. Why do we keep snake and turtle in same class?
14. Name the largest group of animals. Write the salient features of this group. Give two examples.
15.
  - a) What is the scientific name of humans?
  - b) To which class of vertebrates does it belong?
  - c) Write five characteristic features of this group. Also mention the exceptions, if any.
16. Write the characteristic features of phylum Echinodermata.

17. Draw a flow chart to show different divisions of kingdom plantae and answer the following:
  - a) Which division has the simplest plants?
  - b) To which division Pines and Cycas belong?
  - c) What is the other name given to the flowering plants? Classify them on the basis of cotyledons present in the seed?

## **Math's**

INSTRUCTIONS: 1. Solve the Questions on the ruled A4 size sheets.

2. Do neat work.

1. If the radii of two circular cylinders are in the ratio 2:3 and their heights are in the ratio 5:4 then find the ratio of their curved surface area.
2. The total surface area of a cube is 96 cm<sup>2</sup>. Find the volume of cube.
3. Three solid spheres of iron whose diameters are 2 cm, 12 cm and 16 cm respectively are melted into a single solid sphere. Find the radius of the solid sphere.
4. If the circumference of the base of a cone is 44 cm and its height is 25 cm, then find the volume of the cone.
5. The sum of the radius of the base and height of a cylinder is 37 m. If the total surface area of the solid cylinder is 1628 m<sup>2</sup>. Find the volume of cylinder.
6. A classroom is 10 m long, 6.4 m wide and 5 m high. If each student be given 1.6m<sup>2</sup> of the floor area, how many students can be accommodated in the room? How many cubic metres of air would each student get?

7. A shopkeeper has one spherical laddoo of radius 5 cm. With the same amount of material, how many laddoos of radius 2.5 cm can be made?
8. A cylindrical tube opened at both the ends, is made of iron sheet, which is 2 cm thick. If the outer diameter is 16 cm and its length is 100 m, then find how many cubic centimeters of iron has been used in making the tube?
9. Along highway 50 conical pillars are constructed. Each pillar has base diameter 28 cm and vertical height 18cm. Find the total cost of painting these pillars at the rate of Rs. 120 per m<sup>2</sup> . (Take  $\pi = 22/7$  )
10. A wooden toy is in the form of a cone. The diameter of the base of the cone is 6 cm and the height of the cone is 4 cm. Find the cost of painting the toy at the rate of Rs. 5 per 100 cm<sup>2</sup> .
11. A circus tent is cylindrical to a height of 3 m and conical above it, if its diameter is 105 m and the slant height of the conical portion is 53 m, calculate the length of the canvas 5 m wide required to make the tent.
12. The volume of a cone is 18480 cm<sup>3</sup> . If the height of the cone is 40 cm. Find the radius of the base.
13. A solid cube of side 7 cm is melted to make a cone of height 5 cm, find the radius of the base of the cone.
14. The radius of a solid hemisphere is 2r, then find its total surface area.
15. The total cost of making a spherical ball is Rs.33957 at the rate of Rs.7 per cubic meter. What will be radius of the ball.
16. The volumes of the two spheres are in the ratio 64:27. Find the ratio of their surface areas.
17. The circumference of the base of the cone is  $220/7$  cm and its slant height is 13cm. Find the volume of the cone.
18. Find the length of the longest pole that can be put in a room of dimensions 6m x 6m x 3m.
19. The radius and height of a cylinder are in the ratio 2:3. If the volume of a cylinder is 1617cm<sup>3</sup>. Find its radius and height .
20. A conical tent is made of tarpaulin 1.5m wide. Vertical height of the conical tent is 4m and base diameter is 6m. Find the length of the tarpaulin used, assuming that 10% extra material is required for stitching margins and wastage in cutting. (Take  $\pi = 3.14$ )

English

Worksheet attached

