 1.Define power. Give its unit.

2.Define energy. Give its unit.

3.Define kinetic energy .Give example.Write the formula for kinetic energy.

4. Define potential energy.Give example. Write the formula for potential energy.

5.Derive the expression for kinetic energy.

6.Derive the expression for potential energy.

7.A body of mass 80 kg is at the height of 10m above the ground.Find the potential energy of the body.

8.A body of potential energy 150Joule is at the height of 20m above the ground.Find the mass of the body.

9.A body of mass 60kg on the top of the wall possesses the potential energy of 600J. Find the height of the wall.

10.A body of mass 30kg is moving with the velocity of 50 m/s.Find the kinetic energy of the body.

11.The kinetic energy of a body is 120J.If the body is moving with the velocity of 12m/s, what is the mass of the body?

12.If a body of kinetic energy 750J is moving with the velocity of 15m/s,find the mass of the body.

13.Find the power of the electrical appliance which consumes the electrical energy of 2kwh for 2hrs.

14.If a bulb of 100w is used for 8hrs,find the electrical energy consumed by the bulb.

15.If the electrical appliances of power 1000w and 60w are used for 8hrs daily. Find the total electrical energy consumed by both the electrical appliances in a month.

16.State work energy theorem.Prove the same for mechanical energy.

KENDRIYA VIDYALAYA, IIT CAMPUS, CHENNAI – 36

CLASS : IX   SCIENCE – FA3 – QUESTION BANK

PORTIONS :BIOLOGY   :   DIVERSITY IN LIVING ORGANISM

BIOLOGY :

I. VERY SHORT ANSWERS:
1. Define the term hermaphrodite. Give one example.
2. How do gymnosperms and angiosperms differ from each other.
3. What was the modification introduced by Woese in kingdom Monera ?
4. 'Homo sapiens' is the scientific name of human beings. What do these two terms imply ?
5. Which division among plants has the simplest organisms?
II. SHORT ANSWERS:
1. Why is it difficult to classify bacteria ?give two reasons.   2.Name any
four features of chordates
3. Write the body cavity and symmetry possessed by 'nematodes'.
4. To which group do the following organisms belong and give one reason for each
 a) cyanobacteria,   b) euglena,   c) sycon,   d) prawn.
5. Differentiate between Bryophyta and Pteridophyta . Give one example of each.
6. What is meant by warm – blooded and cold – blooded animals ? Explain.   7.Write the
conventions followed while writing the scientific name of an organism.

III. BRIEF ANSWERS :
1. Give three differences between Monocot and Dicot plant.
2. State any three characteristics of Mammalia. Name two egg laying mammals.   3. Give three
types of animals based on the coelomic and an example of each life.
4. Why do Bryophytes are called as 'amphibians of the plant kingdom' ?
5. How do pteridophytes and phanerogams differ from each other ?
6. Explain the basis for grouping organisms into five kingdoms.
IV. LONG ANSWERS:
1. How do annelid differ from arthropods ?
2. What are the major division in the plants ? What is the basis for these divisions ?
3.With the help of a flow chart shows the classification of animals.

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KV IIT CHENNAI 36

REVISION QUESTIONS

IX-SCIENCE

CHEMISTRY:

Short Answer Qs(I):   (2marks)

1. Write two bivalent cations and anions

2. What is the atomicity of Na, Hydrogen, phosphorus, ozone, oxygen,sulphur, copper

3. Give an example for poly atomic anions

4. Write the name of thecompound: H_2SO_4, $Al_2(SO_4)$, NH_3

5. State law of conservation os mass.

Short Answer Qs(II):   (3marks)

6. Define Avagadro's number and calculate the molar mass og 10 mole of carbon dioxide.

7. Calculate the molar mass of NO_2. Calculate the number of atoms in 200u of Ca.

8. A painter was engaged to white wash the house.Kapil was observing the activites of the painter.He poured some white powder into a drum of water, he found there was hissing sound and drum became hot.

    a) Name the compound the painter poured into water.

    b) Write the name