| SC / 19-20 / I | SSPM's<br>Sri Sri Ravishankar Vidya Mandir<br>Periodic Assessment – 2 | Maximum Marks: 80<br>Time: 3 Hours |
|---|---|---|
| Science<br>Std.: X | | Date: 14.09.2019 |

**General Instructions:** a) All questions are compulsory.
b) Draw a neat and well labelled diagram, wherever necessary.
c) This question paper contains four printed pages.

Q.1) Give two characteristics of magnetic field lines. (1)

Q.2) Mention the main purpose of using a concave mirror in solar cookers. (1)

Q.3) The formula of ammonium phosphate is:

i) $NH_4PO_4$ ii) $(NH_4)_2PO_4$ iii) $(NH_4)_3PO_4$ iv) $(NH_4)_3(PO_4)_2$ (1)

Q.4) Name the mirror that can give an erect and enlarged image of an object. (1)

Q.5) No matter how far you stand from a mirror, your image appears erect. The mirror is: (1)

i) plane ii) concave iii) convex iv) plane and convex

Q.6) Give any two examples of amphoteric oxides. (1)

Q.7) What is the colour of phenolphthalein in NaOH? (1)

Q.8) In Rhizopus, which grows on bread tubular thread like structures bearing sporangia are called? (1)

a) Filament b) Rhizoids c) Hyphae d) Roots

Q.9) The main function of Abscissic Acid is _____. (1)

a) increases length of cells b) promotes cell division

c) inhibits growth d) promotes growth of stem

Q.10) Urea is removed from the blood through _____. (1)

a) lungs b) kidneys c) heart d) liver

Q.11) To a solution of copper sulphate in a beaker, some iron filings are dropped. After a few minutes it is observed that: (1)

a) a white precipitate is formed.

b) the color of the solution becomes darker.

c) a reddish brown coating starts appearing on the iron filings.

d) the solution becomes colourless.

Q.12) The correct method of finding pH of solution is to: (1)

a) heat the solution in the test tube and expose the pH paper to the vapours formed

b) pour solution from the test tube on pH paper

c) drop the pH paper into the solution

d) add a drop of solution on the pH paper using a dropper

Q.13) A small amount of quick lime is taken in a beaker. Water is added slowly to the beaker. Which of the following observations were noted? (1)

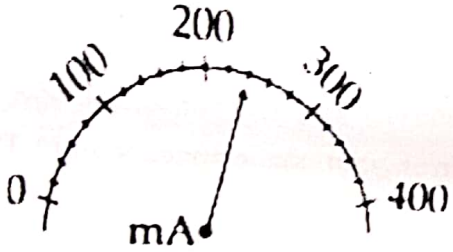
a) Hissing sound and the solution becomes hot

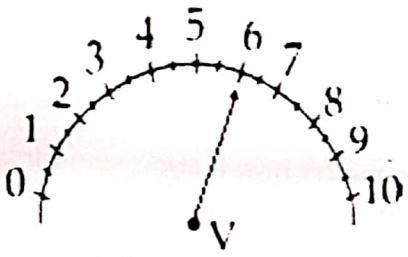
b) No characteristic sound and solution turns cold

c) Hissing sound and the solution becomes cold

d) No characteristic sound and the solution becomes hot.

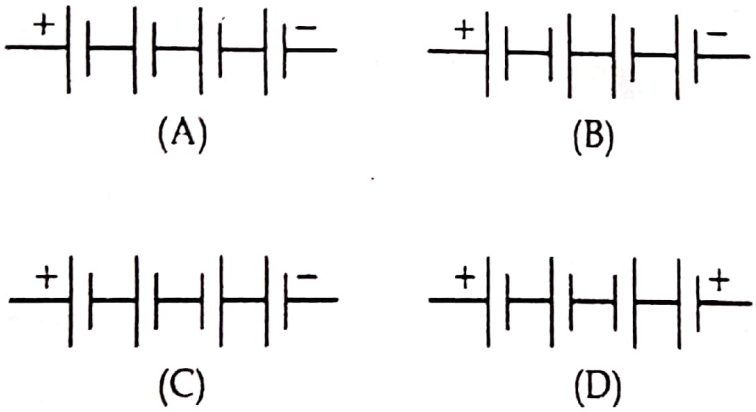
Q.14) The current flowing through a conductor and the potential difference across its two ends are as per the readings of the ammeter and the voltmeter shown below. The resistance of the conductor is: (1)



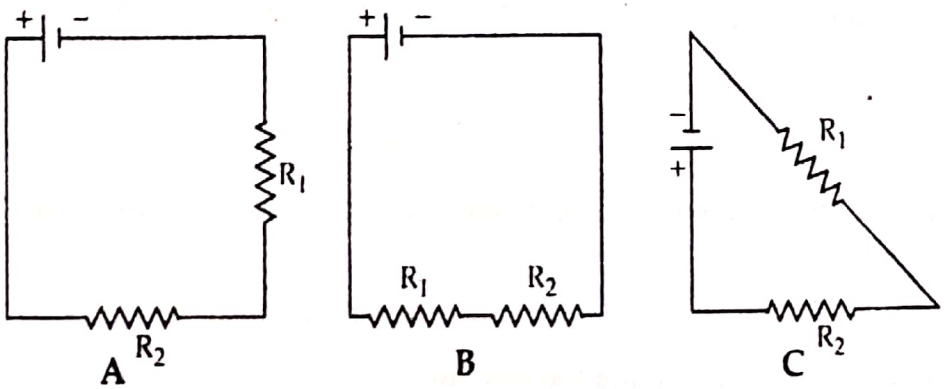

a) 0.025 Ω b) 0.25 Ω c) 25 Ω d) 250 Ω

Q.15) A student has to connect 4 cells of 1.5V each to form a battery of 6V. The correct way of connecting these cells is shown in figure: (1)




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

Q.16) In which of the following circuits are resistors R1 and R2 connected in series? (1)




a) A and B b) B and C c) A and C d) A, B and C

Q.17) In Ohm's law experiment, the physical quantity/quantities which is/are to kept constant while doing experiment is / are: (1)

a) potential difference b) current

c) temperature d) potential difference, current, temperature

Q.18) In the experiment to prove that light is necessary for photosynthesis, which of the following is not required? (1)

a) Alcohol b) KOH c) Iodine d) Water

Q.19) Which of the following endocrine gland is unpaired? (1)

a) Adrenal b) Testes c) Pituitary d) ovary

Q.20) Binary fission in Amoeba when observed we can conclude that: (1)

a) Cytoplasm and nucleus divide at same time

b) The nucleus first divides and then cytoplasm

c) The cytoplasm first divides then nucleus

d) The nucleus and cytoplasm do not divide

Q.21) Define a solenoid. With the help of a suitable diagram show the pattern of magnetic field lines around a current carrying solenoid. State the region where field is uniform. (3)

Q.22) Explain the following chemical properties of acids with the help of balanced chemical equations. (3)

a) when an acid reacts with a base.

b) when an acid reacts with a metal bicarbonate.

c) when an acid reacts with a metal oxide.

Q.23) a) Show the formation of NaCl from sodium (At No. 11) and chlorine (At No. 17) atoms by the transfer of electrons. (3)

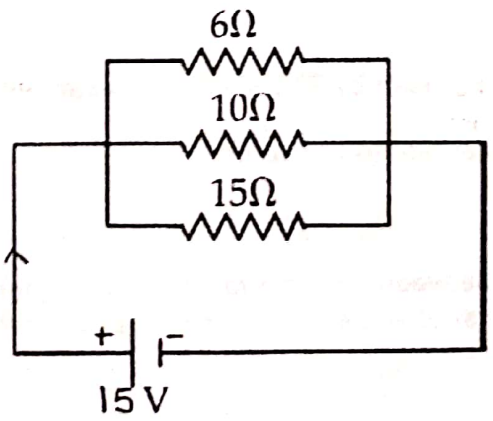
b) Why does sodium chloride have a high melting point?

Q.24) What will be the characteristics of the image in a concave mirror, if an object is kept: (3)

a) Between P and F b) At C

*Show it with the help of a ray diagram.*

Q.25) Find the equivalent resistance of the following circuit. (3)



Q.26) An object 5 cm high is placed at a distance of 10 cm from a convex mirror of radius of curvature 30 cm. Find the nature, position and size of the image. (3)

Q.27) State the differences between: Asexual Reproduction & Sexual Reproduction considering following parameters: (3)

a) Cells Involved b) Genetic Variations c) Number of parents involved

Q.28) Draw neat labelled diagram of longitudinal section of flower. (3)

Q.29) State the three types of Neurons with their functions (3)

Q.30) Define Tropism and explain any 2 types. (3)

Q.31) a) Differentiate between roasting and calcination. (5)

b) How is zinc extracted from its carbonate ore?

c) Name a metal that can be used to reduce metal oxides to metals.

Q.32) a) Write the name and chemical formula of the calcium compound used for disinfecting water. How is this compound manufactured? Write chemical equation for the reaction involved. (5)

b) Give any two uses of this calcium compound .

Q.33) The values of current (I) flowing in a given resistor for the corresponding values of potential difference (V) across the resistor are given below: (5)

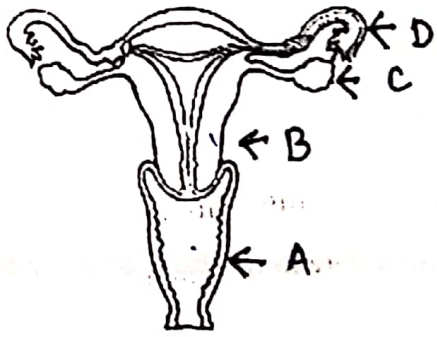
| | | | | |
|---|---|---|---|---|
| I (Ampere) | 0.5 | 1.0 | 2.0 | 3.0 |
| V (Volts) | 1.5 | 3.0 | 6.0 | 9.0 |

a) Plot a graph between V and I

b) Calculate the resistance of the resistor from the graph

c) What does the graph represent? Name and state the law.

Q.34) Label the parts of Female reproductive System and answer the following: (5)




a) Production and release of egg

b) Site of fertilization

c) Site of Implantation

d) Name two female hormones

Q.35 a) State what do you mean by STD's with two examples. (5)

b) Explain the barrier method of contraception.

Q.36.Differentiate between strong and weak acids. Identify the strong and weak acids from the following list of acids - Hydrochloric acid, acetic acid, formic acid, nitric acid, Lactic acid. (5)