



ଓଡ଼ିଶା ସରକାର

କାଳିଆ

ଚାଷୀ ସରକାରଙ୍କ ପାଇଁ ଓଡ଼ିଶାର ଅଗ୍ରଣୀ ଯୋଜନା

କାଳିଆ ର ପରିବ୍ୟାପ୍ତି

୫୦ ଲକ୍ଷରୁ ଉର୍ଦ୍ଦ୍ଵ ଚାଷୀ, ଭାଗଚାଷୀ ଓ
ଭୂମିହୀନ ପରିବାର ଏହି ଯୋଜନାରେ ଅନ୍ତର୍ଭୁକ୍ତ

କାଳିଆ ର ପାରଦର୍ଶିତା

ହିତାଧୁକାରୀଙ୍କ ବ୍ୟାଙ୍କ ଜମାଖାତାକୁ
ସିଧାସଳଖ ସହାୟତା ପ୍ରେରଣ

କାଳିଆ ର ପ୍ରତିବନ୍ଧିତା

ଆସନ୍ତା ନ ବର୍ଷ ପର୍ଯ୍ୟନ୍ତ ପ୍ରତି ରବି
ଓ ଖରିପ୍ ଫଂସଳ ପାଇଁ ଏକ
ଦୀଘମିଆଦି ଯୋଜନା



କାଳିଆ

କୃଷି କଲେ ଉନ୍ନତ ସକଳ ଉନ୍ନତି

ଏତିହାସିକ ପୁରୀ ଚାଷୀ ମହାସମାବେଶ ଅବସରରେ ମାନ୍ୟବର ମୁଖ୍ୟମନ୍ତ୍ରୀ
ଶ୍ରୀଯୁକ୍ତ ନବୀନ ପଞ୍ଜନାୟକ ପ୍ରଥମ ପର୍ଯ୍ୟାୟର ୧୨ ଲକ୍ଷ ଚାଷୀଙ୍କୁ
ସିଧାସଳଖ ସହାୟତା ପ୍ରେରଣର ଶୁଭାରମ୍ଭ କରିବେ।

ମାଳତୀପାଟ୍ଟପୁର, ପୁରୀ, ଜାନୁଆରୀ ୨୫



74.25 m³

$$\sqrt{r^2 + h^2} = \sqrt{\frac{81}{4}}$$

Exam Mate



Mock Test Paper for Std X, XII CBSE Board, IIT - JEE Main & Advanced.

FOR ANSWERS VISIT : www.dharitri.com

MOCK TEST PAPER # 9

CLASS-X (SCIENCE)

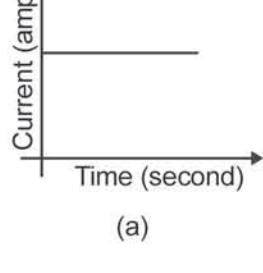
Time Allowed : 3 hours**Maximum Marks: 80**

GENERAL INSTRUCTIONS

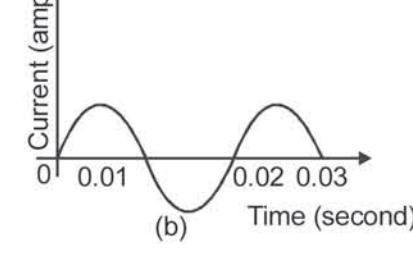
- The question paper comprises two sections, A and B. You are to attempt both the section.**
- All questions are compulsory. However, an internal choice will be provided in two questions of 3 marks each and one question of 5 marks.**
- Question numbers 1 to 2 in Section A are one-mark questions. These are to be answered in one word or in one sentence.**
- Question numbers 3 to 5 in Section A are two marks questions. These are to be answered in about 30 words each.**
- Question numbers 6 to 15 in Section A are three marks questions. These are to be answered in about 50 words each.**
- Questions number 16 to 21 in Section A are five marks questions. These are to be answered in about 70 words**
- Question numbers 22 to 27 in Section B are two marks questions based on practical skills. These are to be answered in brief.**

SECTION-A

- What is the cause of dispersion ?
- What type of image is formed : (a) in a plane mirror and (b) on a cinema screen ?
- Name the following :
 - a metal, which is preserved in kerosene.
 - a lustrous coloured non-metal
 - a metal, which can melt if you keep it on your palm.
 - a metal, which is a poor conductor of heat.
- What is a good fuel ?
- Why a food chain has only few trophic levels ?
- What focal length should the reading spectacles have for a person whose least distance of distinct vision is 75 cm ?
- The following current-time graph from two different sources are given



(a)



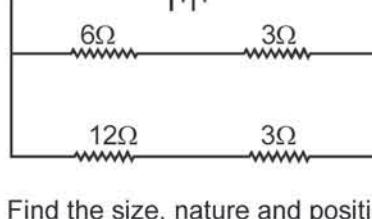
(b)

- Name the type of current in two figures.
- Identify any one source for each type of these currents.
- What is the frequency of current in figure (b) in India ?
- Use the above graphs to write two differences between the current in both the cases.

OR

For the circuit shown in figure what is the value of

- current through 6Ω resistor ?
- potential difference across 12Ω resistor ?
- current in the circuit ?

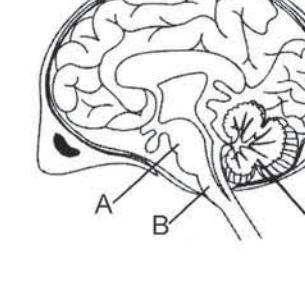


- Find the size, nature and position of image formed when an object of size 1 cm is placed at a distance of 15 cm from a concave mirror of focal length 10 cm.
- What is tooth enamel chemically ? State the condition when it starts corroding. What happens when food particles left in the mouth after eating degrade ? Why do doctors suggest use of tooth powder/toothpaste to prevent tooth decay ?
- (a) What is meant by periodicity in properties of elements with reference to the periodic table ?
(b) Why do all the elements of the same group have similar properties ?
(c) How will the tendency to gain electrons change as we go from left to right across a period ?
Why ?

- Seema likes sugar apple which is a multipurpose, all rounder fruit. It can be used by athletes. The powder of its seeds is an effective pesticide in agriculture and horticulture and also used to remove head lice. Its leaves have antidiabetic properties. The alcoholic extract of its leaves and stems can treat tumours. This extract is an antidepressant. Fruits are sweet and increase the haemoglobin, cooling and act as sedative. Seeds are insecticides. Its roots are powerful purgatives and used in dysentry.
(a) Why is sugar apple used by athletes ?
(b) Why should we use it as a pesticide and insecticides instead of chemicals ?
(c) What values are possessed by Seema who uses this multipurpose fruit instead of junk food ?
- Dams are constructed on the river for multipurpose use. Give its advantages and disadvantages.
- What changes are noticed on sexual maturity of human beings ?
- All "Homo sapiens" have originated from a common ancestor and yet they show tremendous variation in size, colour and appearance. Explain in brief.
- i. Which hormone is released into the blood when its sugar level rises ?
ii. Name the organ which produces this hormone.
iii. What is its effect on blood sugar level ?
iv. Name one digestive enzyme that this organ secretes.
v. Give the function of this enzyme.

OR

- What are plant hormones ? Give one example of a plant hormone that promotes growth.
- Name the parts labelled A, B and C in the given diagram. Write one function of each part.



- Explain the meaning of the word electromagnetic and induction in the term electromagnetic induction. On what factors does the value of induced current produced in a circuit depend ? Name and state the rule used for determination of direction of induced current. State on practical application of this phenomenon in everyday life.
- What is short sightedness or myopia ? What causes myopia ? How is myopia corrected ?
- (a) Write one equation each for decomposition reaction when energy is supplied in the form of
 - heat
 - light
 (b) Account for the following :
 - Paint is applied on iron articles.
 - Oil and fat containing food items are flushed with nitrogen.
 - When an iron nail is kept in copper sulphate solution, blue colour of the solution fades and iron nail becomes brownish.

ORWhat happens when zinc granules are treated with dilute solutions of H_2SO_4 , HCl , $CuSO_4$, $NaCl$ and $NaOH$. Also write the chemical equations, if reaction occurs.

- (a) What is homologous series of compounds ? List any two characteristics of homologous series.
(b) (i) What would be observed on adding 5% solution of alkaline potassium permanganate drop by drop to some warm ethanol taken in a test tube ? (ii) Write the name of the compound formed during the chemical reaction.
- How would you distinguish experimentally between an alcohol and a carboxylic acid on the basis of a chemical property ?

20. Describe transport of the following materials in plants:

- water
- minerals
- food

- What is pollination ? Mention in brief its two types.

- List in tabular form differences between self pollination and cross pollination.

SECTION-B

- A student performs an experiment to study the magnetic effect of current around a current carrying straight conductor. If he interchanges the terminals of the battery, then the direction of magnetic field will change or not ? If yes, then justify your answer.
- Three students measured the focal length of a convex lens using parallel rays from distant object. All of them measured the distance between the lens and the inverted image on the screen. Students A saw a sharp image on the screen and labelled the distance as f_1 , Student B saw a slightly larger blurred image on the screen and labelled the distance as f_2 , Student C saw a slightly smaller blurred image on the screen and labelled the distance as f_3 . What is the relation between the three measurements ?
- When a strip of zinc metal is put in iron sulphate solution, the green colour of iron sulphate fades gradually. Why ?
- Hydrochloric acid is a strong acid while acetic acid is a weak acid. Why ?
- During respiration experiment, why is potassium hydroxide placed in a small test tube with flask containing germinating seeds ?
- Mention different steps in germination of seed in correct order.

For Answers visit: www.dharitri.com

