

SRI RAM KRISHAN DAV PUBLIC SCHOOL,SURIYA

SUMMER VACATION HOMEWORK-(2024-25)

CLASS-XII(SCIENCE)

SUBJECT:-ENGLISH

Answer the following questions

- 1.What message does the author convey through the story 'The Last Lesson'
- 2.What did the French teacher tell his students in his last French Lesson ?What impact did it have on them ?Why?
- 3.'Lost Spring 'explains the grinding poverty and traditions that condemn thousands of people to a life of abject poverty. Do you agree?Why /Why not?
- 4.The chapter 'Lost Spring 'highlights the social stigma i.e.'Child Labour is an evil doing .'Explain
- 5.Write the summary of the poem entitled 'My Mother at Sixty Six and Keeping Quiet.

SUBJECT:-CHEMISTRY

Class -12 Chemistry HOMEWORK FOR SUMMER VACATION -Solve Numerical from NCERT BOOK Chapter -1 and 2.

SUBJECT:-PHYSICS

1. To write the experiments Under the heading Aim – To determine the resistivity of a wires by plotting a graph for potential difference versus current. Apparatus, required, Theory, procedure, diagram, precautions and Sources of Error.
2. Solve all the ncert exercise Questions and numerical of chapter Electric charges and field.
3. Prepare a mind map of chapter Electric charges and fields .
4. Learn and practice previous year PYQs Questions .

The current in the adjoining circuit will be [IIT 1983; CPMT 1991, 92; MH CET 2002; Pb. PMT 2001; Kerala PMT 2004]

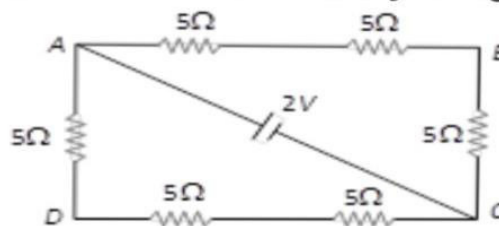


6.

The potential difference between points A and B of adjoining

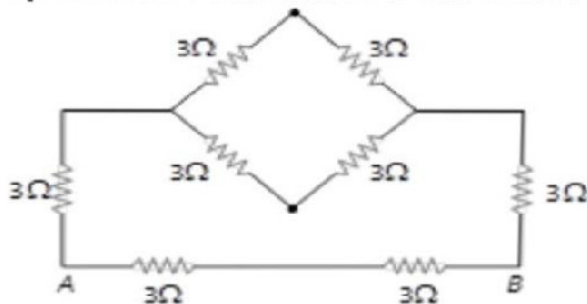
figure is

[CPMT 1991]



7.

Equivalent resistance between A and B will be [CPMT 1981]



SUBJECT :-BIOLOGY

1. Prepare a model of human male or female reproductive system.
2. Complete the NCERT exercise question of Chapter 2 (HUMAN REPRODUCTION) in biology notebook.
3. Practice all the diagrams related to chapter 1 and 2 in biology fair notebook.
4. Complete the project report of Biology. Topics can be taken from any chapter of Biology of class 12.

*Format (Points to be included): a. Front page: Title of the project, Name, Class, Section, Roll Number, Session b. Certificate c. Acknowledgement d. Introduction e. Body of the project f. Conclusion g. Bibliography

Questionnaire (Must be done in biology notebook): a. Name the part of the flower, which the tassels of the corn cob represent. Why do corn cobs have long tassels? b. Explain the process of pollination in *Vallisneria*. c. Describe the structure of a young anther as seen in a transverse section. d. Explain the monosporic development of embryo sac in the ovule of an angiosperm. e. With labelled diagram, depict the stages in embryo development in a dicotyledonous plant. f. Why are human testes located outside the abdominal cavity? Describe the structure of human sperm. g. Describe the process of spermatogenesis and oogenesis. Write the effect of high concentration of LH on a mature Graafian follicle. h. What happens to the corpus luteum if the ovum is (i) fertilised and (ii) not fertilized? i. Mention the relationship between pituitary and ovarian hormones during a menstrual cycle. j. Draw a diagram showing a developing foetus within the uterus and label six parts in it.

SUBJECT :-COMPUTER SCIENCE

1. How are keywords different from identifiers?
2. What are literals in Python? How many types of literals are allowed in Python?
3. What are tokens in Python? How many types of tokens are allowed in Python? Exemplify your answer.
4. Out of the following, find those identifiers, which cannot be used for naming Variables or Functions in a Python program:
 - Price*Qty
 - class
 - For
 - do
 - 4thCol
 - totally
 - Row31
 - Amount
5. What are operators ? What is their function? Give examples of some unary and binary operators.
6. Describe the concepts of block and body. What is indentation and how is it related to block and body?

SUBJECT :-PHYSICAL EDUCATION

1. Draw a fixture of 33 & 32 teams by staircase method ?
2. Draw fixture of 39 & 38 teams by elimination method ?
3. Draw a fixture of 32 & 33 teams by cyclic method ?
4. Draw a fixture of 19 & 18 teams by tabular method ?

SUBJECT:-MATHS

1. Let $f: \mathbb{R} \rightarrow \mathbb{R}$ given by $f(x)=[x]$. Show that f is neither one-one nor onto.
2. Let \mathbb{N} denote the set of all natural numbers and R be the relation on $\mathbb{N} \times \mathbb{N}$ defined by $(a,b)R(c,d)$ if $ad(b+c)=bc(a+d)$. Show that R is an equivalence relation.
3. Prove that : $\sin^{-1}\left(\frac{8}{17}\right) + \cos^{-1}\left(\frac{4}{5}\right) = \cot^{-1}\left(\frac{36}{77}\right)$.
4. Prove that $3\sin^{-1}x = \sin^{-1}(3x-4x^3)$, $x \in \left[-\frac{1}{2}, \frac{1}{2}\right]$.
5. If $A = \begin{bmatrix} 1 & 0 & 2 \\ 0 & 2 & 1 \\ 2 & 0 & 3 \end{bmatrix}$, Prove that $A^3 - 6A^2 + 7A + 2I = 0$.
6. Check whether the relation R defined on the set $A = \{1,2,3,4,5,6\}$ as $R = \{(a,b): b=a+1\}$ is reflexive, symmetric or transitive.
7. Find the value of $\sin^{-1}\left(\cos\left(\frac{43\pi}{5}\right)\right)$.
8. If $\begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix} \begin{bmatrix} 3 & 1 \\ 2 & 5 \end{bmatrix} = \begin{bmatrix} 7 & 11 \\ k & 23 \end{bmatrix}$, then find the value of k .
9. If A and B are symmetric matrices , such that AB and BA are both defined , Prove that $AB-BA$ is a skew – symmetric matrix.
10. Show that the function $f: \mathbb{R} \rightarrow \mathbb{R}$ given by $f(x) = x^3 + x$ is a bijection.