

ADARSH VIDYALAYA MOWA
HOLIDAY PRACTICE WORK / SKILL DEVELOPMENT ACTIVITIES (2023-24)
CLASS – XII SCIENCE

General Note:

- 1. All the assigned work will be assessed and graded.**
- 2. All vacation Practice work need to be done in class work copy.**
- 3. Assessment of reading will be done in every exam.**
- 4. Parents are requested to:**
 - **Spend time & have meals together with your ward.**
 - **Motivate your ward to inculcate the habit of “READING HINDI & ENGLISH Literature (Newspaper, Comics etc.)”**
 - **Allow them to be independent (age wise) in their daily tasks like:**
 - **Arrange shelves**
 - **Washing their own plates**
 - **Watering plants & weeding Garden**
 - **Hang/fold clean clothes**
 - **Dust furniture**
 - **Do simple mending (hems, buttons, etc.)**
 - **Shop for groceries with list**
 - **Iron clothes etc.**
 - **Include your ward while preparing monthly budget.**
 - **Share your family history & your childhood memories with them**

SUBJECT – ENGLISH

1. Read the chapters-

- (i) Lost Spring
- (ii) Journey to the end of the earth

Write the gist of both the chapters through picture presentation.

2. Draft a notice on each topic:

- (i) Sports Event
- (ii) Cultural Event
- (iii) Literary Competition
- (iv) Social Causes
- (v) For a meeting

3. What do you mean by Figure of Speech/poetic devices?

Explain each poetic device with examples.

SUBJECT – MATHEMATICS

1. Solve atleast 20 questions of Chapter -1(Relations and functions).

2. Draw mind mapping of the following chapters of class XI

- (a) Trigonometric Functions
- (b) Straight Lines
- (c) Conic Sections
- (d) Limits and Derivatives

3. Select any one topic from your Mathematics book and make PPT / Video /Mind map/Bulletin Board /Collage/ Poster and send it in the following mail id :- santhipillai295@gmail.com.

SUBJECT –PHYSICS

- 1. Solve NCERT questions of chapter 1.
- 2. Complete your Practical and activity notebooks.
- 3. Prepare a mind map on chapter Electric Charges and Fields.
- 4. Write all expressions and equations you have studied in your previous classes in practice notebook.
- 5. Select any one topic from your Physics book and make PPT / Video /Mind map/Bulletin Board /Concept map/ Poster and send it in the following mail id :- jalaja.pillai@adarshvidyalaya.org

SUBJECT -CHEMISTRY

- 1) Prepare a notes on Biomolecules, which regulates our body functioning.
- 2) Solve NCERT numerical questions of chapter 1 Solution.
- 3) Prepare a mind map of previous chapter S and P block elements on the basis of their physical and chemical properties.

4) To prepare INVESTIGATORY PROJECT on following topics:

- a) Study of oxalate ion content in guava fruit
- b) Comparative study of the rate of fermentation of various food materials.
- c) Study of adulterants in food - stuffs
- d) Preparation of an alum from scrap aluminium
- e) Study of the effect of metal coupling on the rusting of iron
- f) Preparation of rayon thread from filter paper
- g) Sterilization of water with bleaching powder
- h) Setting of cement
- i) Study of presence of insecticide and pesticides in fruits and vegetables
- j) Comparative study of commercial antacids

(Note- each student has to make an investigatory project)

SUBJECT -BIOLOGY

1. Prepare a mind map of different types of pollination.
2. Write the adaptation for different plants for different agents of pollination.
3. All reproductive tract diseases are STDs but all STDs are not RTIs. Justify with examples.
4. Draw a well Diagram of:
 - i. L.S of ovary
 - ii. Embryo sac (7 celled but 8 nucleated structure)
 - iii. Microsporogenesis in angiosperms
5. Suggest the aspects of reproductive health which need to be given special attention in the present scenario.
6. Each student has to make an investigatory project.

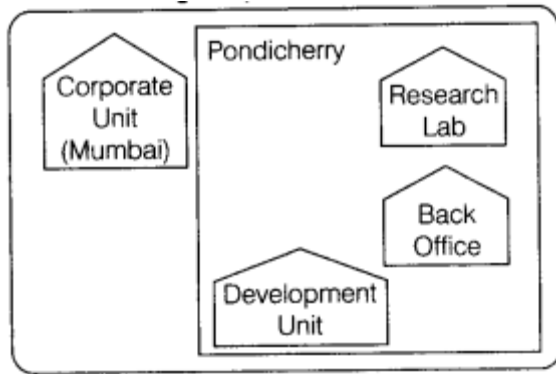
SUBJECT – PHYSICAL EDUCATION

1. What do you mean by Amenorrhoea?
2. Draw a fixture of 19 teams using league Tournament (Staircase).
3. Describe the Postural Deformities of spine.
4. Explain any two postural deformities of legs.

SUBJECT – INFORMATICS PRACTICES (IP)

1. Define the following terms:
a) Network topology b) Repeater c) Router d) Gateway
e) Bridge f) Hub g) Switch h) Modem
2. Explain various mostly used topologies with their advantages and disadvantages.
3. Differentiate between:
a) LAN, MAN and WAN.
b) Cc and Bcc
c) Spam and Junk Mail
d) Static and Dynamic web pages
e) Server and Web Server
4. Expand the following terms:
a) IMAP b) POP3 c) SMTP d) HTTP
e) IM f) ICQ g) IRC h) VoIP
5. Explain the term URL with example.
6. What is E-mail? List some advantages and limitations of e-mail.
7. Case study-based questions:

1. Bias Methodologies is planning to expand their network in India starting with three cities in India to build infrastructure for research and development of their chemical products. The company has planned to setup their main office in Pondicherry at three different locations and have named their offices as Back Office, Research Lab and Development Unit. The company has one more research office namely Corporate Unit in Mumbai. A rough layout of the same is as follows:



Approximate distance between these offices is as follows:

From	To	Distance
Research Lab	Back Office	110 m
Research Lab	Development Unit	16 km
Research Lab	Corporate Unit	1800 km
Back Office	Development Unit	13 km

In continuation of the above, the company experts have planned to install the following number of computers in each of these offices.

Research Lab	158
Development Unit	90
Back Office	79
Corporate Unit	51

(i) Suggest the kind of network required (out of LAN, MAN, WAN) for connection each of the following office unit

- Research Lab and Back Office
- Research Lab and Development Unit

(ii) Which of the following devices will you suggest for connecting all the computers with each of their office units?

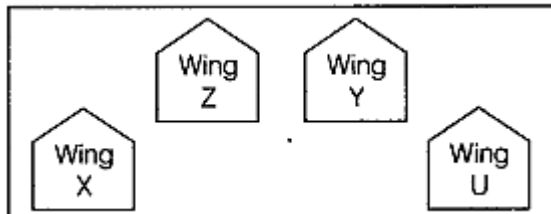
- Switch/Hub
- Modem
- Telephone

(iii) Which of the following communication media, will you suggest to be procured by the company for connecting their local office units in Pondicherry for very effective (high speed) communications?

- Telephone cable
- Optical fiber
- Ethernet cable

(iv) Suggest a cable/wiring layout for connecting the company's local office units located in Pondicherry. Also, suggest an effective method/technology for connecting the company's office located in Mumbai.

2. The Cyber Mind Organization has setup its new branch at Mizoram for its office and web based activities. It has four wings of buildings as shown in the diagram.



Centre to centre distances between various blocks:

Wing X to Wing Z	40 m
Wing Y to Wing X	135 m
Wing X to Wing U	165 m
Wing Z to Wing Y	60 m
Wing Y to Wing U	70 m
Wing Z to Wing U	80 m

Number of computers:

Wing X	50	Wing Z	130
Wing Y	40	Wing U	15

(i) Suggest the most suitable cable layout of connections between the wings and topology.

(ii) Suggest the most suitable place (i.e. wing) to house the server of this organization with a suitable reason, with justification,

(iii) Suggest the placement of the following devices with justification:

- (a) Repeater
- (b) Hub/Switch

(iv) The organization is planning to link its head office situated in New Delhi with the offices at Mizoram. Suggest an economic way to connect it; the company is ready to compromise on the speed of connectivity. Justify your answer.