



# ARMY PUBLIC SCHOOL BIRPUR

SESSION 2023 – 24

CLASS XI

HOLIDAY HOMEWORK

## **SUBJECT: ENGLISH**

1. Collect cuttings of different kinds of classified advertisements from newspaper.
2. Write speech on the following topics in 150-200 words:
  - a) Bioterrorism
  - b) Cybercrime and security
  - c) Mob Lynching
  - d) The development of AI will help humanity
3. Complete question and answer of chapter done in the class.

## **SUBJECT: MATHEMATICS**

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| 1. Do activity 1, 3 and 5 of NCERT lab manual  |
| 2. Solve all NCERT questions and examples and do practice questions from extra questions of chapter 1 and 2 of NCERT maths . |

## **SUBJECT: PHYSICS**

1. Name the quantity represented by dimensional formula  $M^1 L^2 T^{-2}$
2. Can a physical quantity have units, but still be dimensionless.
3. Draw a velocity time graph showing the motion of a body with constant velocity.
4. A body covered a distance of  $l$  metre along a semicircular path of radius  $r$  .  
Calculate the ratio of distance to displacement.
5. A force is given by  $F = at - bt^3$  where  $t$  is time. Find the dimension of  $a$  and  $b$ .
6. In a new system of units called star units,  $1 \text{ Kg}^* = 10 \text{ Kg}$ ,  $1 \text{ m}^* = 1 \text{ km}$ ,  $1 \text{ s}^* = 1 \text{ min}$ .  
What will be the value of  $1 \text{ J}$  of energy in the new system of units?
7. An athlete runs a distance of  $1500 \text{ m}$  in the following manner. Starting from rest he accelerates uniformly at  $2 \text{ m/S}^2$  till he covers a distance of  $900 \text{ m}$ . He then covers  $600 \text{ m}$  at uniform speed. Calculate the time taken to cover  $1500 \text{ m}$ .
8. Check whether the given formula  $E = ma$  is dimensionally correct or not. ( $E$  is kinetic energy of a body of mass  $m$  with acceleration  $a$ )
9. The displacement of particle along  $X$  axis is given by  $x = 3 + 8t + 7t^2$  Obtain its velocity and acceleration for  $t = 2 \text{ s}$ .
10. The heat produced in a wire carrying electric current depends on current, the resistance and time. Derive the formula for heat using dimensional analysis.
11. ACTIVITY : To prepare a scale of given least count eg  $0.2 \text{ cm}$ .

## **SUBJECT: CHEMISTRY**

COMPLETE THE CHEMISTRY NOTEBOOK OF CHAPTER 1 SOME BASIC CHEMISTRY.

- DO THE INVESTGATORY /RESEARCH FILE ON ANY ONE FOLLOWING TOPIC:
  1. AIR POLLUTION MEASUREMENT

2. OXYGEN DISCOVERY
3. NICOTINE AND CAFFEINE EFFECT
4. OIL INDUSTRY POLLUTION
5. INDUSTRIAL ACTIVITY AND ACID RAINS
6. IDENTIFY HAZARDOUS SUBSTANCE IN CHEESE.
7. USE OF RADIOACTIVE ELEMENTS
8. INNOVATIVE WAY TO AVOID PESTICIDES IN AGRICULTURE
9. WHAT EXACTLY IS ORGANIC FOOD AND IS IT SAFE TO EAT?
10. WHAT IMPACT DOES COLD DRINK ON HEALTH
11. HOW INTAKE OF FAST FOOD CHEMICAL IMPACTS THE HUMAN BRAIN

## **SUBJECT: BIOLOGY**

1. Make a Project File from the given topics (ANY ONE)
2. ANSWER THE FOLLOWING QUESTIONS:
  - A. What is diatomaceous earth? Why are diatoms referred to as 'pearls of the ocean'?
  - b. Why is Neurospora an important genetic tool?
  - c. Cyanobacteria and heterotrophic bacteria are very different from each other but fall under eubacteria of kingdom Monera. Is this type of grouping justified?
  - d. What are the characteristic features of euglenoids?
  - e. How many types of bacteria are there? Differentiate between Gram positive and Gram Negative Bacteria.
  - f. What happens to the DNA of the plastids and mitochondria during nuclear divisions such as mitosis?
  - g. Describe the different phases of meiotic prophase – I. Mention the chromosomal

events during each stage.

- h. State differences between the events of meiosis and mitosis.
- 3. Do Experiments in your Practical file done in the Bio Lab.
- 4. Do NCERT intext of Ch 1,2 and 10 in your Bio Copy.

## **SUBJECT: HISTORY**

Topic: Writing and City Life.

## **SUBJECT: GEOGRAPHY**

1. Complete all the chapter which done in class.
2. Do the given practical work. (**CHAPTER NO.-1 INTRODUCTION TO MAPS**)
3. Make a project ***On World Climate And Climatic Change***. Write down about changing pattern of world climate and its affects on humans. (make a project file of at least 15 A4 size pages. (Chapter 11 world climate and climate change)
4. Do the map practices of the following in a separate map copy :-

Map items for locating and labelling on outline political wold map.

### **FUNDAMENTALS OF PHYSICAL GEOGRAPHY**

Chapter no. and name	Map work
Distribution of ocean and continents	Political map of all continents of the world. Major oceans of the world: Indian ocean, Pacific ocean, Atlantic ocean, Artic ocean, Southern ocean. Major lithospheric plates and Minor lithospheric plates, ring of fire (Pacific

	Ocean), Mid-Atlantic Ridge.
Atmospheric Circulation and Weather system	Major hot desert of the world:- Mojave Desert-Nevada, Us Patagonian Desert – Argentina Sahara –Africa Gobi Desert – Mongolia, Asia Thar desert- India Great Victoria desert – Australia
Water (Ocean)	Major seas Black sea, Baltic sea, Caspian sea, Mediterranean sea, North sea, Red sea, Bay of Fundy (Canada)- famous for the highest tides in the world.
Movements of Ocean water	Ocean currents- cold currents:- Humboldt, California, Falkland, Canaries, West Australian, Oyashio, Labrador. Cold Currents:- Alaska, Brazilian, Aughlas, Kuroshio, Gulf stream
Biodiversity and Conservation	Ecological hotspots Eastern Himalaya, India , Western Ghats, India, Indonesia, Asia Eastern Madagascar, Africa

	Upper Guinean forest, Africa Atlantic forest, Brazil Tropical Andes
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## **SUBJECT: POLITICAL SCIENCE**

1. Project file on any given topic from the book Constitution: why and how? And Introduction to Political theory.

## **SUBJECT: ACCOUNTS**

PREPARE A SMALL PROJECT HIGHLIGHTING THE

- 1 IMPORTANCE OF ACCOUNTS
- 2 LIMITATION OF ACCOUNTS
- 3 USERS OR STAKEHOLDERS OF ACCOUNTS
- 4 ACCOUNTING CYCLE
- 5 DIFFERENT BRANCHES OF ACCOUNTS
- 6 IN YOUR OPINION HOW ACCOUNTS HELPS IN RUNNING BUSINESS SUCCESSFULLY AND PROFITABLY.

## **SUBJECT: ECONOMICS**

- Solve the numerical questions of Mean, Mode and Median from Statistics textbook.
- Make a project file on any topic from your textbook.

## **SUBJECT: BUSINESS STUDIES**

Project Work : Project on starting small business after XII

To begin with, the students must choose a product/service. The chosen product/service should not be one whose consumption/use is discouraged by the society and government.

Now the students are required to make a project on the identified product/service keeping in mind the following:

- Why have they selected this product/service?
- Find out '5' competitive brands that exist in the market.
- What permission and licenses would be required to make the product?
- What are your competitors Unique Selling Proposition? [U.S.P.]
- Does your product have any range give details?
- What is the name of your product?
- Enlist its features.
- Draw the 'Label' of your product.
- Draw a logo for your product.
- Draft a tag line.
- What is the selling price of your competitor's product?
  - Selling price to consumer, retailer & wholesaler
  - What is the profit margin in percentage to the Manufacturer, Wholesaler, and Retailer?
  - How will your product be packaged?

- Which channel of distribution are you going to use? Give reasons for selection?
- Decisions related to warehousing, state reasons.
- What is going to be your selling price?
  - To consumer, To retailer & To wholesaler
  - List 5 ways of promoting your product.
  - Any schemes for
    - The wholesaler
    - The retailer
    - The consumer
    - What is going to be your 'U.S.P'?
    - What means of transport you will use and why?
    - Draft a social message for your label.
    - What cost effective techniques will you follow for your product.
    - What cost effective techniques will you follow for your promotion plan.

## **SUBJECT: PAINTING**

Make 5 paintings in your big Art file ( having good quality pages)

- 1) landscape
- 2) Alekhan ( design in any shape square, rectangular, circle , rombas
- 3) picture composition ( festival, mela ,market etc)
- 4) still life sketch ( object drawing)



- 5) folk art ( Folk art of any state, Aipan art , Kolam design , Madhubani art, Warli art

## **SUBJECT: INFORMATICS PRACTICES**

Question 1: Make a practical file and write 10 python programs.

Question 2: Complete question answer of ch 1 and ch 2

## **SUBJECT: PSHYCOLOGY**

1. Prepare minimum 18 slides presentation on “Life skills”.
2. Prepare a Case Profile using interview method based on “The effects of social media platforms on the mental well-being of children”.

## **SUBJECT: HINDUSTANI CLASSICAL VOCAL**

RESEARCH WORK ( Do it in practical file )

- Public thoughts on ‘ Music ’.
- How much Music they find useful ?
- Give conclusion about research work .
- Give your views on the topic of : Why music education is useful ?

THEORY WORK ( Do it in your class notebook )

- Life sketch and contribution of Tansen , V N Bhatkhande and V D Pulaskar .
- Give brief description about ‘ Tanpura ’ .

- Learn the definitions of Nada , Swara , Shruti ,Saptak and Tala .

## **SUBJECT: Physical EDUCATION**

1. Make chart in poster form elaborating career options in physical education.
2. Prepare a chart using mind map method for Khelo India Programme and FIT INDIA movement.

**NOTE:** 1. Work should be done in hand written form.

2. Separate file will be prepared for the above given work.

3. Homework is to be submitted within a week when the school reopens.

ENJOY YOUR HOLIDAYS UTMOST. TRY TO LEARN SOME NEW LIFESKILLS.

## **SUBJECT : HINDI**

- 1- विद्यालय पत्रिका हेतु अपनी रुचि के किसी विषय पर लेख/कविता/तथ्य/हास्य मौलिक लेख word या docs पर लिखिए।हार्ड कॉपी परियोजना में लगाएं।
- 2 - अपने प्रिय कवि/लेखक का जीवन परिचय project paper पर लिखिए,आपको उनकी जो रचना पसंद है उसका विवरण देते हुए चित्रों से सजाइए। (4 पृष्ठ)

नोट:यह समस्त कार्य परियोजना फाइल में करें।