

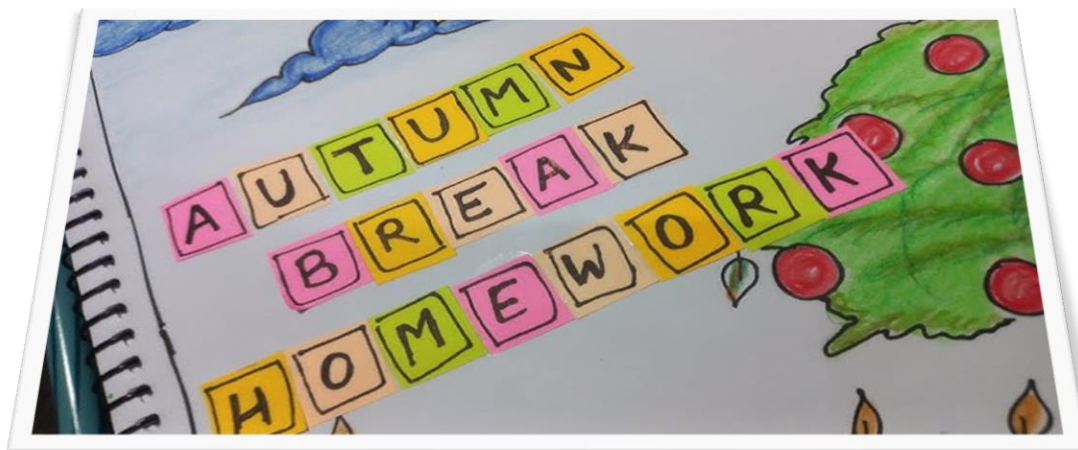


**ARMY PUBLIC SCHOOL**  
**FATEHGARH CANTT**

**AUTUMN BREAK**

**HOLIDAY HOME WORK**

**2024-25**



**ARMY PUBLIC SCHOOL, FATEHGARH**  
**AUTUMN BREAK HOLIDAY HOMEWORK**

**CLASS – XI SCIENCE**

**Session - (2024-25)**

**ENGLISH**

1. Design 2 poster to highlight the importance of sports and games and Annual Sports Day at APS FATEHGARH.
2. Save Environment Write and design a travelogue in about 150 to 200 words.

**Do this work on file papers. It will be carry 10 marks**

**PHYSICS**

Complete the NCERT exercise of Chapters :-

- ❖ Work
- ❖ Energy & Power
- ❖ Motion in a plane.

**CHEMISTRY**

Qus1 Solve all the numerical problems of all the chapters

Qus2 Define hybridization with all the examples

Qus3 Define molecular orbital theory

Qus4 Chapter 1 and 2 all the Intex question

Qus5 Define chemical bonding

**MATHEMATICS**

CLASS: XI		SUBJECT: MATHEMATICS	
	QUESTIONS:		
1	How many 3-digit numbers can be formed from the digits 1, 2, 3, 4 and 5 assuming that		
	(i)	Repetition of the digits is allowed?	
	(ii)	Repetition of the digits is not allowed?	
2	In how many ways can the letters of the word PERMUTATIONS be arranged if		
	(i)	Words start with P and end with S.	

	(ii) Vowels are all together. (iii) There are always 4 letters between P and S.
	ACTIVITIES:
1	To prepare a model to illustrate the values of sine function and cosine function for different angles which are multiples of $\frac{\pi}{2}$ and $\pi$ .
2	To interpret geometrically the meaning of $i = \sqrt{-1}$ and its integral powers.
3	To construct a Pascal's Triangle and to write binomial expansion for a given positive integral exponent.

## **BIOLOGY**

- 1- Complete your Practical work in file which are performed in the laboratory.
- 2-Students are encouraged to prepare a brief write up on selected topic for project work.
- 3-Complete the notes of chapter- Cell Division with diagrams.

## **ARTIFICIAL INTELLIGENCE**

**Learn and write in your fair copy.**

### **Questions:**

1. What is Regression?
2. Why do we use Neural Networks?
3. Explain:
  - Supervised Learning
  - Unsupervised Learning
  - Reinforcement Learning

## **COMPUTER SCIENCE(PRACTICAL FILE)**

1. Write a program to accept the radius of a sphere from the user and display its area and volume.  
Area= $\pi r^2$  and volume= $4\pi r^3$
- 2 Write a program to accept a number from the user and display its factorial.
- 3 Write a program to accept a number from the user and display whether it is a palindrome number or not.
- 4 Write a program to accept a number from the user and display whether it is a prime number or not.
- 5 Write a program to display the following pattern :

1 2  
1 2 3  
1 2 3 4  
1 2 3 4 5

**6** Write a program to display the following pattern :

```
*  
* *  
* * *  
* * * *  
* * * * *
```

**7** Write a program that reads a string and print its statistics like: Number of Uppercase letters, Number of lowercase letters, Number of alphabets, Number of digits, Number of symbols.

**8** Write a program that asks the user for a string s and character c and then it prints the location of the character c in the string s.

## **FINEART**

### **(Theory)**

1. Revise the chapters

- A) Pre- historic rock paintings
- B) Indus valley civilization
- C) Gandhara school of arts

### **(Practical)**

1. Draw 5 Still life paintings

Note:- ( Realistic with pencil shading) on A3 sheet.

## **PHYSICAL EDUCATION**

**Write down these questions answers in your notebook.**

A. Multiple-Choice Questions

1. Which is not a traditional sport of India?

a. Kabaddi. b. Kho-kho c. Mallakhamba. d. Swimming.

2. National Games of India is commonly known as

a. Indian Sports. b. Indian Oscar. c. Indian Olympics. d. Khelo-India.

3. When was the first recorded Olympics held?  
a. 786 BCE b. 776 BCE c. 706 BCE d. 756 BCE
4. Which medals were awarded in the ancient Olympic Games?  
a. Gold medals b. Silver medals c. Bronze medals d. No medals
5. When were the Olympic Games abolished?  
a. 394 CE b. 767 CE c. 596 CE d. 678 CE
6. Which is not the motto of Olympic Games inscribed on its emblem?  
a. Faster b. Greater c. Higher d. Stronger
7. Which is not a component of wellness?  
a. Physical wellness b. Social wellness c. Spiritual wellness d. Individual wellness
8. The ability of the muscle to act against resistance offered by an immovable object is called  
a. Static strength. b. Maximum strength.  
c. Explosive strength. d. Strength endurance.
9. How many limbs are there in Yoga?  
a. 6 b. 9 c. 8 d. 11
10. Which asana is also referred to as palm tree pose?  
a. Tadasana b. Sukhasana c. Padmasana d. Naukasana
11. Which of the following is not one of the categories of asanas?  
a. Meditative asanas b. Relaxative asanas c. Energetic asanas d. Cultural asanas

Note-: Complete revision work of following Units.

1. Changing Trends and Career in Physical Education( Unit-1).
2. Olympic value Education (Unit-2).
3. Yoga ( Unit- 3).
4. Physical Education and Sports for Children With Special Needs( Unit- 4).
5. Physical Fitness, Wellness and Lifestyle( Unit-5).