




# Alpine International School

## Session-2026-27



# Holiday Homework



*Dear Parents and students,*

*The most awaited vacation is about to begin!! As we step into the much-awaited summer vacation, I extend my warm wishes to each of you. This is a time to relax, rejuvenate, and spend quality moments with family, while also keeping the spark of learning alive. Summer vacation brings easy mornings, relaxing afternoons and playful evenings. It also brings a good time to plunge into the sea of imagination and creativity.*

*So let's get ready to learn something new every day.*

*To make your holidays both enjoyable and productive, our teachers have thoughtfully prepared Summer Vacation Homework.*

**IMPORTANT INSTRUCTIONS TO BE FOLLOWED:**

- 1. This holiday homework should be completed within the stipulated time i.e. latest by 20-06-2026.*
- 2. Try to complete the work by yourself with full creativity and enthusiasm.*
- 3. Do the entire homework in a copy with less pages or as instructed by your teachers.*
- 4. Your Handwriting should be neat and clean.*
- 5. Draw or paste pictures wherever asked or needed.*
- 6. You must design a front page subject wise containing all the details about you.*
- 7. This holiday homework is a part of your assessment and marks will be given on it.*

*These activities are designed to:*

*Strengthen concepts learned during the term*

*Encourage creativity and independent thinking*

*Foster healthy reading and writing habits*

*I encourage students to approach these tasks with curiosity and sincerity, without letting them overshadow the joy of the holidays. Parents are requested to guide and motivate their children, ensuring a balance between study, play, and rest.*

*Remember, learning is not confined to classrooms—it happens in conversations, in nature, in books, and in the little experiences of everyday life.*

*Let's be safe at home and enjoy with our parents and grandparents.*

*We look forward to seeing you refreshed and ready for the next educational journey.*

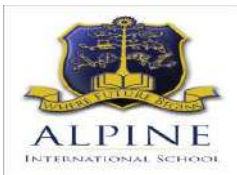
*For query contact at 7454900717, 7454900730*

*(Contact the class teachers or subject teachers for any confusion in Holiday Homework)*

*Warm regards,*

**NIRMALA MALIK**

**Principal**



# Alpine International School

Holiday Homework (2026-27)

**Class-XII(A+B)**

## Subject -Mathematics

1. Complete mathematics activity in Maths Lab Mannual (Which explain in class).
- 2 Solve MCQ ( ch- Vector , R.D.Sharma).

## Subject -Biology

### **Multiple choice type questions**

Question- 1 Remnants of nucellus are persistent during seed development in:

a) pea (b) groundnut (c) wheat (d) black pepper

Question-2 A genetic mechanism which prevents inbreeding depression in majority of angiospermic plants is

a)parthenogenesis (b) parthenocarp (c) mutation (d) self- incompatibility

Question-3 Which of the following seeds have remained alive for the longest period?

a) Phoenix dactylifera (b)striga asiatica (c)Mangifera indica (d) yucca gigantea

Question- 4 An undifferentiated sheath covering the root cap of a monocotyledons embryo is

a)scutellum (b) coleorhiza (c) coleoptile (d) epiblast

Question-5 After spermiogenesis, the sperm heads get embedded in which of the cells?

(a)Leydig cells (b)Germinal epithelium (c) Sertoli cell (d) Seminal vesicle

Question- 6 The source of gonadotropin LH and its corresponding function are

a) anterior pituitary, ovulation

b) anterior pituitary Graafian follicle formation

c) hypothalamus, ovulation

d) hypothalamus graafian follicle formation Question-7 Which one of the following options is not the function of human placenta.

a) supply of Oxygen and nutrient of the embryo

(b) Production of estrogen

(c)Removal of carbon dioxide and waste materials from the embryo

(d)Secretion of relaxin hormone

Question- 8 The specific site of fertilization in a human female is

(a) Infundibulum (b) uterus

(b) (c)Ampulla (d) Temporary isthmic Junction

Question 9- In the human sperm numerous mitochondria are present in the reason known as

(a)Head (b)Neck (c) Middle piece (d) Tail

Question- 10 Intense lactation in mothers acts as a natural contraceptive due to

(a) Suppression of gonadotropins

(b) Hypersecretion of gonadotropins

(c) Suppression of gamete transport.

(d) separation of fertilization

Question- 11 An IUD that is recommended to suppress sperm motility and the fertilizing capacity of sperm is

a)Lips of loop (b) LNG 20 (c) progestert

(d) multiload 375

Question- 12 The technique that would be used to implant the embryo in case the Oviducts of the women are blocked by an obstruction is

( a) GIFT ( b) IUD (c) IUI (d) ICSI

Instructions following questions consist of two statements assertion (a) and reason are answer these questions by selecting the appropriate option given below

a ) Both assertion and reason are true and reason is the correct explanation of assertion.

b) Both assertion and reason is not the correct explanation of assertion.

c) Assertion is true but reason is false.

d) Assertion is false but reason is true question-13 Assertion- Reproductive and Child Health Care RCH program was initiated in India in 1951 to attend total reproductive health as a social goal.

Reason- Audio visual and print media awareness was created among the people about reproduction related aspects under the program.

question- 14 Assertion- Sterilization methods are generally advised for male female partner as a terminal method to prevent any more pregnancies.

Reason- These techniques are less effective and have high reversibility.

Question-15 Assertion- Breast feeding is advised by the doctors as it is essential for the newborns.

Reason- Cholesterol secreted by the mother during the initial days of lactation has abundant antibodies containing IgE and IgG.

Question- 16Assertion- The perimetrium of uterus exhibits strong contractions during childbirth.

Reason- Oxytocin released from maternal pituitary causes strong utrine contractions.

Section- B 2 Marks

Very short answer type questions

Question- 17 Draw a labelled diagram of a matured human ovum ready for fertilization.

Question-18 Write any four steps that you recommend to improve human reproductive health standards in India.

Question-19 Differentiate between the following

a) syncarpous pistil and apocarpous pistil

b) Plumule and Radicle

Question-20 Draw a labelled diagram of human sperm.

Question-21 Why should a bisexual flower be emasculated and bagged prior to artificial pollination?

Question- 22 Draw a labelled diagram of mature embryo of a dicotyledonous.

Question-23 Draw a labelled diagram of L.S

Of an embryo of grass.

Question-24 Describe the lactational amenorrhea method of the birth control.

Section- C

Short answer type questions answers

( 3 marks )

Question-25 Name and explain the surgical method advised to human males and females as a means of birth control. Mention its one advantage and one disadvantage.

Question-26 Explain any two methods of Assisted Reproductive Technology (ART) that has helped childless couples to bear children.

Question-27 (1) Describe the endosperm development in coconut.

(2) Why is tender coconut considered as healthy source of nutrition.

(3) How are pea seeds different from castor seeds with respect to endosperm.

Question-28 Describe the structure of a mature microsporangium of an angiosperm.

Section- C (5 marks)

Long answer type question answer

Question-29 Describe the post zygotic events leading to implantation and placenta formation in humans. Mention any two function of placenta.

Question-30 (1) Draw a labelled diagram of the female Reproductive system

(2) Where is morula formed in human? Explain the process of its development from zygote.

**Project work has been discussed in the classroom.**

**Complete experiment in Biology lab manual.**

### **Subject - Physics**

1- Complete your lab manual according board syllabus.

A-Three experiment of section A

B-Three experiment of section B

C-Three Activity section A

D-Three activity section B

E-One Investigatory project

2-Prepare 25 meqs question each chapter (ch-1 &:ch-2)

3-Numerical Grid

A-NCERT Exemplars ( Solve at list 20 selected numericals from chapter 1 and ch 2)

B-Circuit Mastery (Solve 5 complex problem involving series and parallel combination)

C- Self-Assessment (Take a 45 minute timed mock test )

### **Subject – Chemistry**

1. Prepare a project file according to your given topic.

2. Revise the all units of Physical chemistry & learn

3- Solve the NCERT Questions (Intext, examples & Exercise) bated on the all units of Physical chemistry.

UNIT-I Solutions

UNIT- II→ Electrochemistry

UNIT-III Chemical Kinetics.

### **Subject – English**

1.Practice comprehension passage from BBC Compacta (Any Five)

2. Write formal letters on the following topics (Two of each Category)

i. Complaint

ii. Placing Orders

c. Enquiry

3. Prepare a speech on any two topics

4. Prepare a debate on any two topics.

### **Subject – Physical Education**

1. Explain the meaning, aims, and objectives of Physical Education in detail.

2. Describe the importance of planning in sports and explain the committees required for organizing a sports tournament.

3. Explain the procedure, advantages, and disadvantages of League Tournament and Knock-out Tournament.

4. Define yoga and explain the importance of yoga in modern life with suitable examples.

5. Describe any five asanas used for the prevention and management of obesity.

6. Explain the causes, symptoms, and corrective measures of knock knees and bow legs.

7. Define disability and explain the role of physical activities for children with special needs.

8. Explain the concept of women participation in sports and discuss the challenges faced by women athletes in India.
9. Describe the causes, prevention, and management of common sports injuries.
10. Explain the importance of balanced diet and nutrients for sportspersons.
11. Define training and explain the principles of sports training in detail.
12. Explain the methods of strength development and endurance development with examples.
13. Describe the effects of exercise on the muscular system, circulatory system, and respiratory system.
14. Explain the importance of psychology in sports and discuss different techniques for improving concentration.
15. Define stress and explain various stress management techniques used in sports.
16. Explain the meaning and importance of biomechanics and sports in improving performance.
17. Describe Newton's Laws of Motion and their application in games and sports.
18. Explain the functioning of the skeletal system and muscular system during physical activity.
19. Define test and measurement in sports and explain the administration of any five fitness tests.
20. Explain the career options available in Physical Education and discuss the qualifications required for these careers.

## HINDI

**Prepare practical files for the board on the given topics**

जयशंकर प्रसाद , सूर्यकांत त्रिपाठी निराला, रामचंद्र शुक्ल, पंडित चंद्रधर शर्मा गुलेरी, मलिक मोहम्मद जायसी !



• Happy •

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SUMMER

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- Holidays -