

# DEEPIKA PUBLIC SCHOOL MANESAR SESSION:- 2025-26



CLASS:- 10<sup>th</sup>



#### Dear Students

Summer vacations are synonymous with fun, frolic, getting up late in the morning, going for picnics, spending time with friends, exploring new places, and watching fun filled shows on television. But there is lot more you can do to make your vacations more meaningful, interesting, and fun while still doing your favourite activities. Here are some suggestions you may like:

- > Go out for morning walk and spend time to observe nature.
- > Watch your mom working in the kitchen and help her keep the house clean.
- > Visit your grandparents, spend time with them.
- > Teach them to operate some useful applications in mobile phones.
- > Plant a sapling and watch it grow.
- > Play any sport with your parents which they played during their school days.
- > Devote some time for reading during the summer break. Some suggested books:



Summer vacation is the time when you can be more candid and creative. The Holiday assignments are focused to let the creative and latent talents, skills and desires of the children come to the surface in a joyful and experiential manner. So dear children, Get... Set... Go... Enjoy doing the activities and ensure timely completion of the given assignments.

### Subject: English

### 1. Prepare a portfolio with following :

A. Share a happy picture of yourself and describe yourself briefly.

B. Who are you as a person?

C.What are your dreams or goals ?

D. What are your strengths or weaknesses ?

E. What are the little things that keep you happy in life ?

F. Your achievements

G. You need to improve in

H. You have participated in

I. The books you have read

J.The books you wish to read

K.Why do you love English?

L. What do you like the most about English language?

2. Collect the images of yours and your family members and make a collage. Finally group all the images.

3. Make a Project file on 'Glimpses of India' with acknowledgement card, index page, profile, colourful pictures and bibliography.

4. You are extremely disturbed about the attacks on the elderly people living alone . Make suggestions to the people living alone and the authorities through newspaper to ensure that such attacks do not take place.

5. Make a poster to spread awareness about personal hygiene and environment care.

6.Go through all the chapters and poems of 'First Flight 'and learn questions answers of all the poems and chapters alongwith stanzas. Also do practice of poetic devices.

7. If Tricki could speak , what do you think , he would say about your experience at Mrs. Pumphrey 's house and Vet's clinic?

8. Learn all the rules of Reported speech and do practice from any of the grammar book.

9. Write a story review of the chapter 'Two Stories about Flying ' in 200 words.

Begin with the pilot of old Dakota aeroplane.

Then write how did you like the story and why?

Explain which part of the story you liked the most and why?

And then conclusion.

10.Write a detailed character- sketch of Lencho.

11. What is the main idea that Robert Frost depicts through the poems ,'Dust of Snow '& 'Fire and Ice?

12. How is idea of freedom depicted in 'A Long Walk to Freedom ' and 'A Tiger in the Zoo '? 13. You encountered two strange people. They were different from normal human beings but they were quite interesting and exciting. As Manisha, using your own ideas, write a story in about 150 words narrating your experience with them.

### Note:

- ♦ Revise whole syllabus done till date.
- ♦ Do holidays Home -Work in A4 size ruled sheets.

2:- मान लीजिए कि आपने एक मशीन बनाई। जिसका आप प्रचार करना चाहते है. इसके लिए एक शानदार विज्ञापन बनाएं। 3:-रचना के आधार पर वाक्य के भेदों को परिभाषा और उदाहरण सहित लिखिए। 4:- विद्यार्थी जीवन में खेलों का क्या महत्व है, इस विषय पर एक अनुच्छेद लिखिए। 5-समस्त पठित पाठों के प्रश्न उत्तर याद करिए। 6-भक्ति कालीन कवियों में प्रसिद्ध कवि गोस्वामी तुलसीदास के जीवन पर आधारित पोर्टफोलियो तैयार करिए। नोट- पोर्टफोलियो ए-4 साईज शीट पर करना है तथा पृष्ठों को फाइल में लगाकर दें। अन्य कार्य उत्तर-पुस्तिका में करें।

### Mathematics

### Make a portfolio on topic Polynomials

**Topic:** Polynomials

Class: 10

Subject: Mathematics

Name: [Your Name]

Roll No.: [Your Roll Number]

School: [Your School Name]

Session: [Academic Year]

#### Introduction

Polynomials are algebraic expressions that involve variables and coefficients, combined using the operations of addition, subtraction, multiplication, and non-negative integer exponents. In Class 10, understanding polynomials forms the base for further algebraic studies.

#### Definition

Define polynomial with expression

#### हिंदी

1:- जल संरक्षण क्यों आवश्यक है? जल संरक्षण से संबंधित कुछ स्लोगन लिखिए।

### **Types of Polynomials**

- Linear
- Quadratic
- Polynomials

(define with examples)

### Key Concepts in Class 10

- Zeroes of a Polynomial: Values of x for which P(x) = 0.
- Relationship between zeroes and coefficients for quadratic polynomials:

If  $ax^2 + bx + c = 0$ , then:

- Sum of zeroes = -b/a
- Product of zeroes = c/a

### **Important Formulas**

- 1.  $(x + a)(x + b) = x^2 + (a + b)x + ab$
- 2. Zeroes of quadratic polynomial

### Sample Problems

Q1: Find the zeroes of the polynomial  $x^2$ - 5x + 6.

Solution: Factorizing:

 $x^{2} - 5x + 6 = (x - 2)(x - 3)$ 

So, zeroes are 2 and 3.

### **Graphical Representation**

Polynomials can be represented on a graph. For example, the graph of a quadratic polynomial is a parabola.

- If a > 0, it opens upwards.
- If a < 0, it opens downwards.

### Conclusion

Polynomials are an essential part of algebra and mathematics in general. Understanding their types, operations, and applications is critical for solving real-life and advanced math problems.

### **Social Science**

### Pride

\*Prepare a project on the topic

"Consumer Rights"

\*Complete your N/B of ch. 1.,2 geography, ch. 1,2 Civics , ch. 1 Economics, ch. 1 History \*Learn ch. 1.,2 geography, ch. 1,2 Civics , ch. 1 Economics, ch. 1 History Question/Answer

\*Locate the different soil types on the map of India.

### Honor

- 1. Learn all the chapters completed so far.
- 2. Write 30 MCQs or one-word answer type questions from each completed chapter in a separate notebook.
- 3. Prepare a project on the topic: Consumer Rights or Sustainable Development

### SCIENCE

### **Biology:-**

- Solve the MCQs and short question answer of ch-1 and ch-2 in your notebook from NCERT exemplar.
- Make a portfolio on "Smoking effect on Human Respiratory System" from Roll no- 1 to 12.
- Learn chapter- 1 & 2.

### **Physics:**

- Solve Questions Of Physics Chapter-1,2 of NCERT in your notebook.
- Make a portfolio on "Image formation by the Mirror and Lens" from roll no. 13 to 24.
- Learn chapter-1 and 2.

### Chemistry

1. Make a project on topic- Acids and bases / Types of chemical reaction (Rollno. 25 to 37).

- 2. Do Assignment questions in a rough notebook.
- 3. Learn chapter 1 and 2.

### Assignment

### Very Short Answer Type Questions [1 Mark]

Q.1. Complete the reaction :

Fe2O3 + Al =

Q.2. What happens chemically when quicklime is added to water?

Q.3. Name the products formed when zinc granules are treated with dilute sulphuric acid.

Q.4. Which one is a chemical change – fermentation of fruit juice or diluting fruit juice?

Q.5 What change in colour is observed when white silver chloride is left exposed to sunlight? What type of chemical reaction is this?

Q.6. Balance the given chemical equation:

AI(s) + CuCl2(aq) = AICl3(aq) + Cu(s)

Q.7. Balance the following chemical equation.

NaOH + H2SO4 = Na2SO4 + H2O

Q.8. Balance the chemical equation :

MnO2 + HCl (aq) MnCl2 (aq) + 2H2O (l) + Cl2 (g)

Q.9. What do you observe when a matchstick flame is brought near a tube containing hydrogen gas?

Short Answer Type Questions –

Q.1. Distinguish between an exothermic and an endothermic reaction. Amongst the following reactions, identify the exothermic reaction and the endothermic reaction.

(i) Heating coal in air to form carbon dioxide.

(ii) Heating limestone in a lime kiln to form quicklime.

Q.2. When the powder of a common metal is heated in an open china dish, its colour turns black. However, when hydrogen is passed over the hot black substance so formed, it regains its original colour. Based on the above information answer the following questions:

(i) What type of chemical reaction takes place in each of the two given steps?

(ii) Name the metal initially taken in the powder form. Write balanced chemical equations for both reactions.

### Q.3. Write balanced equations for the reaction of :

(i) Iron with steam

(ii) Calcium with water

Q.4. Crystals of copper sulphate are heated in a test tube for some time. What is the colour of copper sulphate crystals

(i) before heating

(ii) after heating?

Q.5. State any two observations in an activity which may suggest that a chemical reaction has taken place. Give examples to support your answer.

Q.6. Write fully balanced chemical equation and state the physical condition and physical state of the reactants in the following reaction-

Aluminium metal dissolves in aqueous copper sulphate solution with the formation of aluminium sulphate and copper.

(i) What do you understand by the following terms used in a chemical equation : (a) reactants(b) products?

(ii) What does symbol () represent in a chemical equation?

Q.7. A substance X, which is an oxide of a group 2 element, is used intensively in the cement industry. This element is present in bones also. On treatment with water it forms a solution which turns red litmus blue. Identify X and also write the chemical reactions involved. Q.8. Grapes hanging on the plant do not ferment but after being plucked from the plant can be fermented. Under what conditions do these grapes ferment? Is it a chemical change?

Q.9. Balance the following chemical equations-

(a) Mg + N2 = Mg3N2 (b)Al + Cl2 = AlCl3

### Q.10. Name the products formed in each case when :

(a) hydrochloric acid reacts with caustic soda.

(b) granulated zinc reacts with caustic soda.

(c) carbon dioxide is passed into limewater.

### Q.11. Write chemical equations for the reactions taking place when.

a)Magnesium reacts with dilute HNO3

(b) Sodium reacts with water

(c) Zinc reacts with dilute hydrochloric acid

### Q.12. Complete the following chemical equations :

(i) C2H5OH + O2 =

(ii) C2H5OH + Conc. H2SO4 =

(iii) CH3COOH + NaHCO3 =

### Q.13. Complete the following chemical equations :

(i) CH3COOH + Na2CO3 =

(ii) CH4 + O2 =

(iii) C2H5OH + Na =

### Q.14. (a) Write the essential condition for the following reaction to take place.

2AgBr 2Ag + Br2

Write application of this reaction.

(b) Complete the following chemical equation of a chemical reaction :

2FeSO4 (Heat) → Fe2O3 + ..... + .....

(c) What happens when water is added to quicklime? Write chemical equations.

## Q.15. On adding a drop of barium chloride solution to an aqueous solution of sodium sulphite, a white precipitate is obtained.

(a) Write a balanced chemical equation of the reaction involved.

(b) What other name can be given to this precipitation reaction?

(c) On adding dilute hydrochloric acid to the reaction mixture the white precipitate disappears.

### Note: Complete the assignment in your fair notebook.

### **Phyisical Activity Trainer**

### Write and learn topics of chapter :-

Chapter - 1: Communication

chapter- 2: Self Management.

Chapter- 4: Entrepreneurship