# PM SHRI KENDRIYA VIDYALAYA RAIPUR No.- 1 (shift-2)

#### **Session 2025-26**

## Summer Vacation Homework Class – 10<sup>th</sup>

## विषय - हिंदी

- 1. श्रवण कौशल \_प्रतिदिन समाचार सुनना
- 2. वाचन कौशल\_ सूर के पद कंठस्थ कर कक्षा में सुनाना
- 3 . पठन कौशल \_माता का आंचल पाठ और बाल गोविंद भगत पाठ पढ़कर सारांश लिखना
- 4. लेखन कौशल एक औपचारिक पत्र एक अनौपचारिक पत्र एक अनुच्छेद लेखन एक ईमेल लेखन।
- 5. परियोजना कार्य पोर्टफोलियो तैयार करना विद्यालय मैगजीन के लिए कार्य करना।

#### **SUBJECT - ENGLSH COMMUNICATIVE - 101**

#### A. READING:

- 1. Read LESSON. 2 & 3 of LITERATURE READER ('A SHADY PLOT& 'THE LETTER').
- 2. Read any ENGLISH GRAMMAR BOOK.
- 3. Recite and learn two poems- 'NOT MARBLE NOR GILDED MONUMENTS' and 'OZYMANDIAS' (from BOOK -1 ).
- 4. Read UNIT 1 & 2 of MAIN COURSE BOOK (HEALTH AND MEDICINE & 'EDUCATION').

# B. WRITING: (note: all the written work will be done in a separate file except no.4 & 7)

- 1. Prepare a note of 5 HEADLINES (only positive news) from any ENGLISH NEWSPAPER for 5 days and write the new words with their meanings and make 1 sentence from each word.
- 2. Prepare a TENSE CHART with proper sentence structure and examples.
- 3. **Project work on 'COMIC STRIP'**: Make a Comic Strip on the Poem-1 "The Frog and the Nightingale" as discussed and guided.
- 4. Practise and learn formal letters . (Write 2-2 in your class notebook and homework notebook. i. Complaint Letter ii. Letter to the Editor of a Newspaper.)
- 5. Write the theme, summary and character sketch /es of main character/s of LESSON 2 & 3 ('MRS.PACKLETIDE'S TIGER' & 'THE LETTER').
- 6. Write the central idea, summary and poetic devices of the poem 'NOT MARBLE NOR GILDED MONUMENTS' and 'OZYMANDIAS' (from BOOK -1).
- 7. **Important task**: Prepare an Article (Any story/ poem / essay / travelogue etc.)\*\* for School Magazine (soft copy, MS WORD FORM). Self composed will be preferred.

#### C. LISTENING:

1. Listen to the English news channels daily for preparing HEADLINES asked above.

#### D. SPEAKING: (\*\* This is only for whom, who is interested to do.)

- Prepare a Debate (in writing, word limit 300 words max. For both ) on "On the Morality f of Mrs. Packletide's actions in the story
  - (i) For the motion (150 words) (ii) Against the motion (150 words).

Note: KEEP YOUR ENGLISH NOTEBOOK READY FOR CORRECTION JUST AFTER SUMMER VACATION GETS OVER.

#### **SUBJECT-SOCIAL SCIENCE**

- 1. Make a project file report on any one of the following:
- a) Sustainable Development
- b) Social Issues
- c) Consumer awareness
- 2. What did you learn, what was interesting and what was challenging in the following chapters:
- a) The rise of nationalism in Europe (History)
- b) Nationalism in India (History)
- c) Resource and development (Geography)
- d) Development (Economics)
- e) Power sharing (Political Science)

It should be done in tabular format for all the chapters, as given below:

Name	of lesson	
1	What did I learn from the chapter?	
2	What was interesting in the chapter?	
3	What was challenging to learn?	

- 3. On the Political Map of India, locate the following:
  - a) Jallianwala Bagh
  - b) Chauri-Chaura
  - c) Champaran
  - d) Kheda
  - e) Ahmedabad
  - f) Dandi
  - g) Indian National Congress Session of September 1920
  - h) Indian National Congress Session of December 1920
  - i) Indian National Congress Session of 1927

## विषयः संस्कृतम्

- 1. पत्र लेखनम् औपचारिक 2 अनौपचारिक 2
- 2. अपठित गद्यांश प्रश्नोत्त राणि 2
- 3. कोई 4चित्र वर्णनम् 5 संस्कृत वाक्य
- 4. शब्दरूप बालक, कवि, साधु, भवत् (भवान्) लता नदी फलअस्मद् युष्मद् तत् किम् तीनों लिंगो मे
- 5. धातु रूप -5 लकारो में- भू, गम्, अस्, कृ, नी
- 6. विद्यालय पत्रिका के लिए निम्नलिखित में से कोई 2
  - संस्कृत संवाद
  - संस्कृत लघु कथा
  - सूक्ति संग्रह
  - संस्कृत निबंध
  - संस्कृत प्रहेलिकाः
  - संस्कृत हसिकाः (चुटकुले)

#### **SUBJECT - MATHEMATICS**

**Question 1** On Diwali, Megha decorated her balcony with colored bulbs. These bulbs are arranged in the pattern red, yellow and blue. The red bulb blinks after every 5 seconds, the yellow bulbs blink after every 8 seconds and the blue bulbs blink after every 10 seconds.

- (i) After how many seconds will all the bulbs blink together?
- (ii) How many times will they blink together in 1 hour?

**Question 2** -2 Bells toll together at 9.00 am. They toll after 8 and 12 minutes respectively. At what time will they toll together first time after 9:00 am?

**Question 3** - A grill has to be fixed to a window of length 60cm and breadth 36cm.what should be the maximum width between the grill bars so that spacing between the bars are equal?

**Question 4-** Mrs. Latha teaches three dance classes. The first class has 24 students. The second class has 30 students. The third class has 18 students. Mrs. Latha wants to divide each class into groups so that every group in every class has the same number of students and there are no students left over.

- (i) What is the maximum number of students that she can put into each group?
- (ii) How many groups will second class have?

**Question 5**- There are 104 students in Class X and 96 students in Class IX in a school. In the periodic test examination, students are to be evenly seated in parallel rows such that no two adjacent rows are of the same class.

- (i) Find the maximum number of parallel rows of each class for the seating arrangement.
- (ii) Find the number of students of Class IX and also of Class X in a row.

**Question 6-**Megha has 143 stamps; she gives away 11 stamps and divides the remaining equally into groups. Abdul has 220 stamps; he gives away 11 stamps and divides the remaining equally into groups. They end up with the same number of groups.

- (i) What is the number of groups?
- (ii) What is the number of stamps in Megha and Abdul's groups?

### **Chapter - 2 Polynomials**

**Question 1**- Sketch the graph of a polynomial function that satisfies all of the following conditions:

- 1. Has four real roots (x-intercepts), two negative roots and one positive
- 2. Also Includes one root at the origin (x=0)

**Question 2**- The population of a certain species of fish in a lake can be modeled by a cubic polynomial:  $P(t) = -2t^3 + 15t^2 + 30t + 100$ . What is the population at year 5?

**Question 3**- Anju is designing a rectangular garden with a path around it. The area of the garden is given by the quadratic polynomial  $A(x) = x^2 + 10x + 24$  where x is the width of the path.

- (i) What is the area of the garden when the path is 3 meters wide?
- (ii) If the total area is 195 square meters, what are the possible widths of the path?

#### **Question 4-** *Projectile Motion Scenario:*

A soccer ball is kicked upward with an initial velocity of 20 m/s from a 25-meter hill. The height of the ball at any time t seconds is given by the equation:

 $h(t) = -5t^2 + 20t + 25$ 

where h(t) is the height in meters and t is the time in seconds.

- (i) Find the height of the ball after 3 seconds.
- (ii) Determine the time when the ball hits the ground.
- (iii) Calculate the maximum height reached by the ball and the time it takes to reach it.

**Question 5-** Height of Liquid Nitrogen in a Factory Tank Scenario: In a factory, the height of liquid nitrogen in a sealed tank (measured in meters) is being monitored during a controlled chemical reaction. The height follows a quadratic pattern over time. The height H(t), in meters, after t minutes is given by the equation:  $H(t) = t^2 - 6t + 9$  where: H(t)is the height of liquid nitrogen from the start of observation, and t is the time in minutes

- (i) What is the height after 2 minutes?
- (ii) When will the height be at its minimum?
- (iii) What is the minimum height recorded in the tank?

#### **SUBJECT-SCIENCE**

SUDJECT - SCIENCE						
<ol> <li>Barium chloride on reacting with ammonium sulphate forms barium sulphate and ammonium chloride. Which of the following correctly represents the type of the reaction involved?</li> <li>(i) Displacement reaction (ii) Precipitation reaction (iii) Combination reaction (iv) Double displacement reaction</li> </ol>						
(a) (i) only (b) (ii	i) only (c) (	iv) only	(d) (ii) and (iv)			
2. Which of the following statements about the given reaction are correct						

2. Which of the following statements about the given reaction are correct? 3Fe(s) + 4H2O(g) 22Fe3O4(s) + 4H2(g)

(i) Iron metal is getting oxidised

(ii) Water is getting reduced

(iii) Water is acting as reducing agent

(iv) Water is acting as oxidising agent

(a) (i), (ii) and (iii) (b) (iii) and (iv) (c) (i), (ii) and (iv) (d) (ii) and (iv)

**3.** Electrolysis of water is a decomposition reaction. The mole ratio of hydrogen and oxygen gases liberated during electrolysis of water is

(a) 1:1 (b) 2:1 (c) 4:1 (d)3:1

**4.** If salivary amylase is lacking in the saliva, which of the following events in the mouth cavity will be affected?

(a) Proteins breaking down into amino acids

(b) Starch breaking down into sugars

(c) Fats breaking down into fatty acids and glycerol

(d) Absorption of vitamins

**5**.

$$MnO_2 + 4HCl \rightarrow MnCl_2 + 2H_2O + Cl_2$$

The reaction given above is a redox reaction because in this case:

(a) MnO<sub>2</sub> is oxidised and HCl is reduced.

(b) HCl is oxidised.

(c)  $MnO_2$  is reduced.

(d) MnO<sub>2</sub> is reduced and HCl is oxidised.

- **6.** Write one equation each for decomposition reactions where energy supplied in the form of heat, light or electricity.
- **7.** A compound 'A' is used in the manufacture of cement. When dissolved in water, it evolves a large amount of heat and forms compound 'B'.
- (i) Identify A and B.
- (ii) Write chemical equation for the reaction of A with water.
- (iii) What does one mean by exothermic and endothermic reaction?
- **8**. Write the balanced equation for the following chemical reactions.
  - (i) Zinc +Silver Nitrate→Zinc Nitrate+Silver
  - (ii) Sodium + Water → Sodium hydroxide + Hydrogen
- **9**. Name the type of nutrition exhibited by Amoeba. Explain how food is taken in and digested by this organism.
- **10.** State the events occurring during the process of photosynthesis. Is it essential that these steps take place one after the other immediately?