



**DAV Public Schools, Bhagalpur**  
**Home Assignment for summer vacation (2019-20)**  
**Class : IX**

**Subject: English**

1. Write the summary of the poem 'The Road Not Taken'.
  2. A new revised volume of Issac Asimov's short stories has just been released. Order one set. Write a letter to the publisher, Mindfame Private Limited, 1632 Asaf Ali Road, New Delhi, requesting that a set be sent by Value Payable Post (VPP).
  3. You went to see the Taj Mahal on a trip organized by your school. You were spellbound to see the spectacular beauty of the monument but the lack of cleanliness around it, disappointed you. Write a diary entry in 100-150 words expressing your admiration and disappointment.
- Project: Write a report on use of technology in classrooms and drawing-rooms for learning.

**Subject: Hindi**

1. यातायात व्यवस्था को ठीक करने के लिए दो पहिया वाहनों पर तिन व्यक्तियों के बैठने पर नियंत्रण लगाने संबंधी पुलिस की असफलतापन थानाध्यक्ष को पत्र लिखें।
2. विद्यालय में नियमित रूप से उपस्थित रहने और परीक्षा की तैयारी भली-भांति करते रहने की सलाह देते हुए छोटे भाई को पत्र लिखें।

क) दिए गए विषय में किसी एक विषय पर २००-२५० शब्दों में निबंध लिखें-

ख) शिक्षक दिवस- \*प्रस्तावना\* शिक्षक दिवस से तात्पर्य \*शिक्षक दिवस की शुरुआत\* शिक्षक दिवस की प्रासंगिकता।

आतंकवाद की समस्या- \*प्रस्तावना\* आतंकवाद से तात्पर्य\* आतंकवाद के प्रसार का कारण\* मानवता को खतरा\* उपसंहार

क) प्रेमचंद और कबीरदास के पाठों के प्रश्नोत्तर को याद करें और अभ्यास करें।

क) समास की परिभाषा लिखें तथा इनको भेदों को सोदाहरण लिखें।

परियोजना कार्य:-

'बिहार में बाढ़ की विभिषिका'- (सचित्र) रिपोर्ट तैयार करें। (कारण, प्रभावित इलाके, आपदा प्रबंधन की भूमिका, आपदा से निपटने के लिए सुझाव)

निम्नलिखित उपसर्ग से चार-चार शब्दों का निर्माण करें:-

वद, ला, वि, परि, सम, अधि, अंतः, स्व

दिए गए प्रत्यय से शब्दों का निर्माण करें:-

अक्कड़, आवट, आऊ, ईन, अनीय, एरा, ईला, आस, आलू, ईन

मूल शब्द व प्रत्यय अलग करें:-

बुद्धिहीन	रहदारी	बीमारी
सिंहनी	उपभोक्ता	मानसिकता
चौकीदार	कीमती	संगीतमय
सहिष्णुता	दासता	यायावरी
दड़ियल	चमकीला	अंग्रेजी

आत्मीयता	खुशबू	अतिथिशाला
टोटीदार	आधुनिकता	पानवाला
जगीरदार	अंतहीन	आतंकित
		मुसहरी

**Subject: Math**

- Express the following decimals in the form  $\frac{p}{q}$ 
  - $0.3\bar{2}$
  - $0.12\bar{3}$
  - $4.3\bar{2}$
  - $15.71\bar{2}$
  - $0.4\bar{7}$
- Represent  $\sqrt{3.5}$ ,  $\sqrt{9.4}$ ,  $\sqrt{10.5}$ ,  $\sqrt{9.3}$  and  $\sqrt{7.4}$  on the real number line.
- Show that  $\left(\frac{x^a}{x^b}\right)^{a+b-c} \cdot \left(\frac{x^b}{x^c}\right)^{b+c-a} \cdot \left(\frac{x^c}{x^a}\right)^{c+a-b} = 1$
- If  $9^{x+2} = 720 + 9^x$ , Find the value of  $(4x)^{\frac{1}{x}}$ .
- Arrange the following number in ascending order :
  - $\sqrt[6]{6}$ ,  $\sqrt[3]{7}$ ,  $\sqrt[4]{8}$
  - $\sqrt[3]{12}$ ,  $\sqrt[4]{20}$ ,  $\sqrt[6]{25}$ ,  $\sqrt{80}$ ,  $\sqrt[12]{112}$ ,
- Rationalize the denominator and simplify  $\frac{3\sqrt{2}}{\sqrt{3}+\sqrt{6}} - \frac{4\sqrt{3}}{\sqrt{6}+\sqrt{2}} + \frac{\sqrt{6}}{\sqrt{2}+\sqrt{3}}$
- Rationalize the denominator of  $\frac{1}{\sqrt{2}+\sqrt{3}+\sqrt{10}}$
- Find the value of 'a' and 'b' if  $\frac{\sqrt{7}-1}{\sqrt{7}+1} - \frac{\sqrt{7}+1}{\sqrt{7}-1} = a + b\sqrt{7}$
- Rationalize the denominator of
  - $\frac{1}{\sqrt{3}-\sqrt{2}-1}$
  - $\frac{1}{3+\sqrt{5}-2\sqrt{2}}$
  - $\frac{1}{\sqrt{6}+\sqrt{5}-\sqrt{11}}$
  - $\frac{1}{\sqrt{3}+\sqrt{2}-\sqrt{5}}$
- Prove that:  $\frac{2^{30}+2^{29}+2^{28}}{2^{31}+2^{30}+2^{29}} = \frac{7}{10}$
- State and prove Remainder theorem.
- Find the remainder when  $x^3 - 4x^2 + 12x + 7$  is divided by  $x + \frac{1}{2}$
- Without division prove that  $2x^3 + 13x^2 + x - 70$  is divisible by  $(x-2)$
- If  $2x^3 + ax^2 + bx - 6$  has  $(x-1)$  as a factor and leaves remainder 2 when divided by  $(x-2)$  Find the value of 'a' and 'b'.
- If both  $(x-2)$  and  $(x-\frac{1}{2})$  are factors of  $px^2+5x+r$ , show that  $p=r$
- Factorise:
  - $16x^4-1$
  - $(x+1)^4-(x-1)^4$
  - $x^2+\frac{1}{x^2}-3$
  - $x^4+4x^2+3$
  - $x^8- y^8$
  - $x^4 + \frac{4}{x^4}$
  - $x^2+4\sqrt{2}x+6$
  - $x^4-3x^2+2$
  - $a^3+27$
  - $(a+b-c)^3+(a-b+c)^3 - 8a^3$
  - $x^3- 10x^2 - 53x -42$
  - $y^3-2y^2 -29y -42$
  - $x^3-x^2-14x +24$
  - $x^4-7x^3+9x^2+7x-10$
  - $x^3-6x^2+3x+10$
- Prove that  $(a+b+c)^3 - a^3-b^3-c^3 = 3(a+b)(b+c)(c+a)$
- If a, b, c are all non-zero and  $a+b+c=0$ , then prove that  $\frac{a^2}{bc} + \frac{b^2}{ca} + \frac{c^2}{ab} = 3$

19. Solve all questions of Exercise 2.4 from your NCERT book.
20. Solve all questions of Exercise 2.5 from your NCERT book.

**Project Work:**

Make a Square Root Spiral up to  $\sqrt{29}$

**Physics**

1. write two point of difference between the following
  - (a) Scalar and vector quantity
  - (b) Uniform and non-uniform motion
2. A motorboat starting from rest on a lake accelerates along straight line at a constant rate of  $3\text{m/s}^2$  for 8 s. How far does the boat travel during this time?
3. A racing car has a uniform acceleration of  $4\text{m/s}^2$ . What distance will it cover in 10s after the start?
4. Using following data, draw displacement- time Graph for a moving object:

Time (s)	0	2	4	6	8	10	12	14	16
Displacement (m)	0	2	4	4	4	6	4	2	0

5. Derive all three equations of motion graphically. (use graph paper for derivation)

**Subject: Chemistry**

1. Write the difference between evaporation and boiling?
2. Define the term latent heat of vaporization and latent heat of fusion ?
3. Give reasons
  - a. Water store in earthen pot become cool.
  - b. You feel cool when you touch a piece of ice.
4. What is sublimation? Give three example of substance which sublime on heating.

**Subject: Biology**

**Project**

1. Write down the contribution of Dr. M.S. Swaminathan in “Green Revolution” in India. Decorate your work with appropriate diagrams and photographs. (Stick file)

**Homework**

1. Learn chapter “Improvement in food resources”
2. Write down the differences between Manures and Fertilizers.
3. Write a short note on Organic Farming.

**SUBJECT: S.St.**

**HISTORY**

1. Explain the term: Taille, Tithes,
2. Write short notes on: Jacobin club, Reign of Terror.
3. Write the efforts of philosophers in French revolution.
4. Write about the three estates of French society.
5. What were the main causes of French revolution.

**CIVICS**

1. What is democracy?
2. Name one democratic and one non-democratic country.

3. Write any five features of democracy.
4. What are the demerits of democracy.

### **ECONOMICS**

1. What are the factor of production?
2. What are the non-farming activities in the village Palampur?
3. Write the role of electricity in the development of village Palampur.
4. What is labour competition?

### **GEOGRAPHY**

1. Write summary on the topic- "INDIA: SIZE AND LOCATION".
2. What is Tectonics Plates?
3. Explain the movement of Plate Boundries.
4. Explain the major physical division of India.
5. Describe the three parallel ranges of the Himalayas.
6. **Map Work:** (location and labelling)
  - Tropic of cancer, Standard Meridian of India
  - The Karakoram, The Aravali, K2
  - Konkan and Malabar coastal plains.

### **PROJECT WORK**

1. What is disaster?
2. What are the components of disaster?
3. What is disaster preparedness?
4. What is disaster responses? Give examples.
5. Explain disaster recovery.
6. Example of disaster recovery.

विषय:-संस्कृतम्

1. 'स्वर्णकाकः' 'कल्पतरुः' इति पाठाभ्यां स्वरसन्धियुक्तपदानि चित्वा सन्धिविच्छेदं कुरुत।
2. बालक, साधु, लता शब्दरूपाणि लिखत। तेषां सहायतया दशवाक्यानि रचयत।
3. अस, कृ, पठ् धातुरूपाणि लिखत स्मरत च। तेषां सहायतया दशवाक्यानि रचयत।
4. संस्कृते अनुवादं कुरुत-

(क) वह सदा सच बोलता है।	(ख) मैं कल गाँव जाऊँगा।
(ग) तुम कहाँ रहते हो?	(घ) हमलोग पत्र लिखेंगे।
(ङ) तुमलोग यहाँ आओ।	(च) राम पिता के साथ घर जाता है।
(छ) उसने आम खाया।	(ज) वह घर से विद्यालय जाएगा।
(झ) मेरा भाई यहाँ पढ़ता है।	(ञ) उसे पढ़ना चाहिए।

परियोजनाकार्यम्

5. पञ्चदिवसानां मुख्यसमाचारान् संस्कृतेन लिखत।

### **Computer**

Solve all the Multiple Choice Question of Chapter 1 in Computer Notebook from book "Employability Skills- Part A"