



# Gulab Public School, Aurangabad

Affiliated to CBSE

Holiday Homework

Class- 9th (2019-20)

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## हिंदी

- 1 . अनुच्छेद लिखिए - मेरे जीवन का लक्ष्य ,मातृभाषा और उसका महत्व
2. आपकी छोटी बहिन / भाई छात्रावास में रहता है / रहती है उसकी पढाई के संबंध में पत्र लिखिए ।
- 3.मीरा के पद एक चार्ट पर लिखिए ।
4. समास के 10 - 10 उदाहरण लिखिए व उनका विग्रह करिए ।
5. अलंकार व अलंकार के भेद लिखिए ।
6. निबन्ध लिखे : 1. आतंकवाद , 2. आज कि सरकार का भ्रष्टाचार पर वार ।
- 7 मुंशी प्रेमचन्द की कोई अन्य कहानी पढ़िए व लिखिए ।

क्षितिज - काव्य खंड : पाठ -1, 2 याद करिये , गद्य खंड : पाठ -1से 4 याद करिये ।  
कृतिका : पाठ 1 याद करिये ।

## English

1. Write a letter to the editor of a newspaper suggesting the authorities concerned to watch the social media with caution and be not swayed by the negative visual material 150 words.
2. India is regaining its past glory and pride .The responsibility lies on the shoulders of its young force. Write an article on 'we the nation 'in 150 words as to what the young can do make Indian strong.
3. Based on the giving opening lines write a strong in a suitable manner in 200-250 words .A hot summer day. Everybody was sitting indoors.
4. Fill up these blanks with one word/phrase to make the meaning suitable.
  - a. News is important part \_\_\_\_\_ our routine life.
  - b. Sometimes news \_\_\_\_\_ be heartwarming.
  - c. \_\_\_\_\_ at times news may cause distress.
  - d. Among people news make \_\_\_\_\_ break images of people.
5. Underline the mistakes in each line and correct it.

Water has some healing property .As a thirst quencher it hydrates your bodies cells .It removes exertion and gave a cooling effect. Ice cold water is use to bring fever down a healthy body consist of 65 to 70 percent water.

## Science

1. Prepare a model to show modern periodic table and also mention reactively series.
2. What do you mean by distractive distillation of wood.  
Explain with experimental diagram.
3. What is an atom ?Write down the size of atoms of different materials like-four gas particles.
4. Make a model of showing modern periodic table.

# Mathematics

Name : \_\_\_\_\_ Score : \_\_\_\_\_

Teacher : \_\_\_\_\_ Date : \_\_\_\_\_

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## Powers of Products

**Simplify. Your answer should contain only positive exponents.**

1)  $(6w^6)^3$

8)  $(4c^2 \cdot c^3)^2$

2)  $(2h \cdot 3h^3)^2$

9)  $(g \cdot 2g^2)^3$

3)  $(4g \cdot 3g^3 \cdot g^2)^2$

10)  $(4n^2 \cdot n)^3$

4)  $(4hr^2)^2$

11)  $(s \cdot 3s^3 \cdot s^3)^2$

5)  $(4w^3 \cdot w^2 \cdot 3w)^2$

12)  $(3d^2 \cdot 4d)^3$

6)  $(4z^3 \cdot 3z \cdot z^2)^2$

13)  $(2z^2 \cdot 3z^3 \cdot z)^2$

7)  $(2d^2y)^2$

14)  $(3y^2 \cdot y \cdot 4)^3$



Write the correct answer in each of the following :

1. Which one of the following is a polynomial?

(A)  $\frac{x^2}{2} - \frac{2}{x^2}$  (B)  $\sqrt{2x} - 1$

(C)  $x^2 + \frac{3x^{\frac{3}{2}}}{\sqrt{x}}$  (D)  $\frac{x-1}{x+1}$

2.  $\sqrt{2}$  is a polynomial of degree

(A) 2 (B) 0 (C) 1 (D)  $\frac{1}{2}$

3. Degree of the polynomial  $4x^4 + 0x^3 + 0x^5 + 5x + 7$  is

(A) 4 (B) 5 (C) 3 (D) 7

4. Degree of the zero polynomial is

(A) 0 (B) 1 (C) Any natural number  
(D) Not defined

5. If  $p(x) = x^2 - 2\sqrt{2}x + 1$ , then  $p(2\sqrt{2})$  is equal to

(A) 0 (B) 1 (C)  $4\sqrt{2}$  (D)  $8\sqrt{2} + 1$

6. The value of the polynomial  $5x - 4x^2 + 3$ , when  $x = -1$  is

(A) -6 (B) 6 (C) 2 (D) -2

7. If  $p(x) = x + 3$ , then  $p(x) + p(-x)$  is equal to

(A) 3 (B)  $2x$  (C) 0 (D) 6

8. Zero of the zero polynomial is

(A) 0 (B) 1  
(C) Any real number (D) Not defined

9. Zero of the polynomial  $p(x) = 2x + 5$  is

(A)  $-\frac{2}{5}$  (B)  $-\frac{5}{2}$  (C)  $\frac{2}{5}$  (D)  $\frac{5}{2}$

10. One of the zeroes of the polynomial  $2x^2 + 7x - 4$  is

(A) 2 (B)  $\frac{1}{2}$  (C)  $-\frac{1}{2}$  (D) -2

11. If  $x^{51} + 51$  is divided by  $x + 1$ , the remainder is

(A) 0 (B) 1 (C) 49 (D) 50

12. If  $x + 1$  is a factor of the polynomial  $2x^2 + kx$ , then the value of  $k$  is

(A) -3 (B) 4 (C) 2 (D) -2

13.  $x + 1$  is a factor of the polynomial

(A)  $x^3 + x^2 - x + 1$  (B)  $x^3 + x^2 + x + 1$   
(C)  $x^4 + x^3 + x^2 + 1$  (D)  $x^4 + 3x^3 + 3x^2 + x + 1$

14. One of the factors of  $(25x^2 - 1) + (1 + 5x)^2$  is

(A)  $5 + x$  (B)  $5 - x$  (C)  $5x - 1$  (D)  $10x$

15. The value of  $249^2 - 248^2$  is

(A)  $1^2$  (B) 477 (C) 487 (D) 497

1. If the polynomials  $az^3 + 4z^2 + 3z - 4$  and  $z^3 - 4z + a$  leave the same remainder when divided by  $z - 3$ , find the value of  $a$ .
2. The polynomial  $p(x) = x^4 - 2x^3 + 3x^2 - ax + 3a - 7$  when divided by  $x + 1$  leaves the remainder 19. Find the values of  $a$ . Also find the remainder when  $p(x)$  is divided by  $x + 2$ .
3. If both  $x - 2$  and  $x - \frac{1}{2}$  are factors of  $px^2 + 5x + r$ , show that  $p = r$ .
4. Without actual division, prove that  $2x^4 - 5x^3 + 2x^2 - x + 2$  is divisible by  $x^2 - 3x + 2$ .  
[Hint: Factorise  $x^2 - 3x + 2$ ]
5. Simplify  $(2x - 5y)^3 - (2x + 5y)^3$ .
6. Multiply  $x^2 + 4y^2 + z^2 + 2xy + xz - 2yz$  by  $(-z + x - 2y)$ .
7. If  $a, b, c$  are all non-zero and  $a + b + c = 0$ , prove that  $\frac{a^2}{bc} + \frac{b^2}{ca} + \frac{c^2}{ab} = 3$ .
8. If  $a + b + c = 5$  and  $ab + bc + ca = 10$ , then prove that  $a^3 + b^3 + c^3 - 3abc = -25$ .
9. Prove that  $(a + b + c)^3 - a^3 - b^3 - c^3 = 3(a + b)(b + c)(c + a)$ .

## **Social science**

- 1. Explain Summary definition of Democracy.**
- 2. Why Pakistan under General Musharraf should not be called a democracy?**
- 3. Should we consider the elections held in China and Mexico are democratic elections? Give reasons.**
- 4. Which are the countries deny equal right to vote? How?**
- 5. How is Zimbabwe government undemocratic and autocratic? Give reasons.**
- 6. What are the arguments put forward against democracy?**
- 7. What are the arguments put forward for democracy?**
- 8. Explain the broader meaning of democracy**

