**DAV Public School, NTPC Rihand Nagar, Sonebhadra(U.P)**

Summer Vacation Homeworks ( 2018-19 )

Class X

Subject**: English**

**COMPREHENSION**

1. Pick out 10 nouns from the lesson, 'Two Gentlemen of Verona' and supply adjectives to them.

NOUN ADJECTIVES

.2. We add 'tion' to a verb to make it a noun. Find out ten such verbs from the passage that can be changed in to a noun, e.g. Describe – Description

3. Pick out five difficult words from the passage and find out their meanings. Make sentences with the difficult words.

**HOME ASSIGNMENT**

4.Organise talk show in area, making the people aware about the reasons behind occurrence of natural disaster [earthquake].

STORY WRITING

5.Write a short story with the beginning: Once upon a time, there was a yogi. He used to live in a forest and teach yoga to young princes. One of his disciples ……

PROJECT

6.Make a list of all the food items which help you feel alert and upbeat during summer/all the time.

7. Explain the meaning of the following prepositional phrases and use them in sentences of your own.

a.Insist on …… b.Indulge in …… c.Inform of….. d.Prevail upon……. e.Needle with….

LITERATURE

TWO GENTLE MEN OF VERONA (Conversation)

8. Imagine the two boys while going back, told the author the story of their life. Develop an imaginary conversation between Nicola and Jacopo.

1. Who is Nicola? 2. Who is Jacopo? 3. Who is Lucia?
4. Who is Luigi? 5. Who is the narrator?
9. What did the narrator ask when he saw the two boys shining shoes the next day?
7. Why did Luigi advise the narrator not to buy fruits from the two boys?
8. Why did the narrator buy the biggest basket from the boys?
6. What caused immense suffering to the two boys?

THE FROG AND THE NIGHTINGALE

1.There must be people around you who are like the nightingale and the frog. Write ten characteristics of bot; frog & nightingale.

FROG NIGHTINGALE

…….. ……..

2. Where does the frog live?

3. Why does the frog envy the nightingale?
4. What does the creatures of the Bingle-bog do to stop the frog from croaking? Why?
5. Why the nightingale turns out to be a sensation?
6. How does the frog plan to eliminate the nightingale? Why?
7. Why does the nightingale consider the frog 'Mozart in disguise'?
8. Elaborate,"You still owe me sixty shillings".
9. Find the irony in the frog's statement," Your song must be your own".
10. Why did the frog counted heads with joy both sweet and bitter?

Dear Departed

1. Explain the following characters briefly:

Mrs. Slater Mr. Slater Mr. Jordon
Mr. Jordon Jimmie
Victoria Amelia Lizzie Abel Merry Weather

2. How does Mrs. Slater want to outshine Jordons?
3. Why have Jordons come to Slaters?
4. Is grandfather really dead? Why? Why not?
5. How did Slaters conclude that grandgather was dead?
6. Elaborate, "He was so loving and caring".
7. What is the issue of Bureau?
8. Why does Elizabeth say, " It's nothing less than a robbery?"

विषय – हिंदी

1- पत्र लिखिए-

(क) अपने क्षेत्र में वृक्षों की अनियंत्रित कटाई क□राक्रने के लिए जिलाधिकारी, साम्रभद्र क□पत्र लिखिए।

(ख) सत्संगति की शिक्षा देते हुए छात्रावास में रह रहे अपने अनुज क□पत्र लिखिए ।

2- निबंध लिखिए-

स्वच्छ भारत : स्वस्थ भारत (ख) बेटी बचाओ, बेटी पढाओ ।

Subject:- **Sanskrit**

1- प्रथमः , द्वितीयः तृतीयः च पाठानाम शब्दार्थाः प्रश्ननिर्माणं च लिखित्वा स्मरत ।

2- धातुं प्रत्ययं च पृथक कृत्वा लिखत - क्रीडन, विचित्रा, महत्वम, सरला, पठन, गच्छन, क्रूरता, मादमान:, मनहारिणी, रमणीयता

Subject:- **Mathematics**

1-What is the HCF of the smallest composite number and smallest prime number?

2-What is the LCM of $p$ and $q$ where $p = a^3b^2$ and $q = b^3a^2$ ?

3-What type of decimal expansion does $\frac{29}{2^2 \times 5 \times 7}$ have?

4-The decimal representation of $\frac{6}{1250}$ will terminate after how many places of decimal?

5-If p is a prime number then, what is the LCM of p, p2, p3?

6-If HCF of 144 and 180 is expressed in the form 13m-3, find the value of m.

7- Show that $9^n$ can not end with the digit 0 for any natural number n.

8-Determine the value of p and q so that the prime factorization of 2520 is expressible as:

$$2^3 \times 3^p \times q \times 7$$

9- Show that $2\sqrt{2}$ is an irrational number.

10- Find HCF of 378, 180 & 420 by prime factorization method. Is HCF x LCM of three numbers equal to the product of three numbers?

11-Show that reciprocal of $3 + 2\sqrt{2}$ is an irrational number.

12-Find HCF of 65 and 117and find integral value of m and n such that HCF=65m+117n.

13- Find the value of polynomial.

[i] f(x)=$2x^2 - 3x - 2$ at x=1 and x=$-2$.

14- Find the difference in the value of polynomial f(x)=$x^3 - 6x^2 + 11x - 6$ at x=2 and x=$-3$.

15- Find the value of λ so that the value of polynomial f(x)=$x^3 + Kx^2 + 11x - 6$ at of x=3 is 0.

16-Find the zeroes of the quadratic polynomial $x^2 + 7x + 10$ and verify the relationship between the zeroes and coefficients.

17- Find the zeroes of the polynomial $x^2 - 3$ and verify the relationship between the zeroes and the coefficients.

18- Verify the $3, -1, -\frac{1}{3}$ are the zeroes of the cubic polynomial p(x)=$3x^3 - 5x^2 - 11x - 3$.

19- If one zeroes of the quadratic polynomial p(x)=$x^2 + x - 2$ is $-2$ , find the other zero.

20- Find the other zero of the quadratic polynomial p(y)=$y^2 + 7y - 60$ , if one zero is $-12$.

21- If $\sqrt{3}$ is a zero of the polynomial p(x) =$x^3 + x^2 - 3x - 3$ , find its other zeroes.

22- Obtain all other zeroes of $2x^3 + x^2 - 6x - 3$ , if its zeroes are $\sqrt{2}$ and $-\sqrt{2}$ .

23- Using division show that $3y^2 + 5$ is a factor of $6y^5 + 15y^4 + 16y^3 + 4y^2 + 10y - 35$.

24- Divide $24x^3y + 20x^2y^2 - 4xy$ by $2xy$.

25- Divide $ax^2 + (b + ac)x + bc$ by $x + c$ .

26-If the polynomial $6x^4 + 8x^3 + 17x^2 + 21x + 7$ is divided by another polynomial $3x^2 + 4x + 1$, the remainder comes out to be $(ax + b)$, Find $a$ & $b$ .

27-Solve graphically the system of equations: $x + y = 3$ & $3x - 2y = 4$.

28-Solve by method of substitution-

(i) $2x - y = 5$ & $3x + 2y = 11$ (ii) $2x - 3y = 7$ & $x + y = 1$

29- Solve by method of substitution-

(i) $2x + 3y = 9$ & $4x + 6y = 18$ (ii) $x + 2y = 4$ & $2x + 4y = 12$

30- Solve by method of substitution-

(i) $\sqrt{2}x + \sqrt{3}y = 0$ & $\sqrt{3}x - \sqrt{8} = 0$ (ii) $\frac{3x}{2} - \frac{5y}{3} = -2$ & $\frac{x}{3} + \frac{y}{2} = \frac{13}{6}$

31-Solve by method of elimination ----------

(i) $3x + 4y = 25$ & $5x - 6y = -9$ (ii) $5x + 3y = 70$ & $3x - 7y = 60$

32- Solve by method of elimination ----------

(i) $3x + 5y = 2$ & $1\frac{1}{2}x + 2\frac{1}{2}y = 1$ (ii) $2x + 3y = 8$ & $4x + 6y = 7$

33- Solve by method of elimination ----------

(i) $x + 2y = -1$ & $2x - 3y = 12$ (ii) $\frac{x}{3} + \frac{y}{4} = 11$ & $\frac{5x}{6} - \frac{y}{3} = -7$

34-Show that every even positive integer is of the form 2q and every positive odd integer is of the form 2q+1, where q is any integer.

35- Show that every positive integer is in the form either3q, 3q+1, or 3q+2.

36-Show that every even positive integer is of the either 4q or 4q+2 while every odd positive integer is of the form 4q+1 or 4q+3 for any integer q.
37- Show that every positive odd integer is of the form 6q+1, 6q+3 or 6q+5 for any integer q.
38- Show that the product of any two positive consecutive integers is divisible by2. [is even]
39- Show that the product any three consecutive positive integers are divisible by 3.
40- Show that the product of any three consecutive positive integers is divisible by 6.
41- Prove that there is no natural number for which $4^n$ end with digit 0.
42- Show that $12^n$ can not end with digit 0 or 5 for any natural number n.
43- Check whether $6^n$ can end with digit '0' for any natural number n?
44- Show that $15^n$ can not end with the digit 'o'.
45- Explain why 7x11x13+13 and 7x6x5x4x3x2x1+5 are composite numbers
46- Prove that $\sqrt{2}$ is an irrational. 47- Prove that$\sqrt{3}$ is an irrational 48-Prove that$\sqrt{5}$ is an irrational.
49- Prove that$\sqrt{7}$ is an irrational 50-Prove that for any positive prime integer p,$\sqrt{p}$ is an irrationalnumber

Subject:- **Biology**

Describe the structure and functioning of nephrons.
What are the methods used by plants to get rid of excretory products?
How is the amount of urine produced regulated?
How are fats digested in our bodies? Where does this process takes place.
What is the role of saliva in the digestion of food?

Subject:- **Physics**

What is lateral shift ? Dispersion does not take place through glass slab,Why?
R.I. of kerosene is more, but it does not sink in water,Why?
What is cause of refraction? Why convex lens is called converging lens ? .
Why do we prefer a concave mirror in headlights of car ? What is spherical aberation?
What is use of concave mirror ,convex mirror and plane mirror?
Define one dioptre .Find the focal length of a lens of power 1D.What type of lens is this?
Draw the diagram of human eye.Explain its working
A concave lens of focal length 16 cm forms an image 12cm from the lens. How far is the object placed from the lens? Draw the diagram.
What is cataract? How can it remove it ?.

Subject:- **Chemistry**

Explain an activity to show the electrolysis of water ( with diagram) for decomposition reaction.
A shiny brown coloured element "X" on heating in air becomes black. Name the element "X" and black coloured compound formed.
Write one chemical equation each for decomposition reactions where energy is supplied in the form of heat, light and electricity.
Write short notes with chemical reactions (a) Combination reaction (b) Double displacement reaction (c) Redox reaction (d) Single displacement reaction.
Write short notes on Rancidity and Corrosion.

Subject:- **Social Science**

To make project on different types of soil

1. Write and learn questions and answers of chapter no. 1(History) " The rise of nationalism in Europe".
2. Write questions and answers of chapter no.1 (Geography) "Resources and Development".
3. Make 20 new questions with answers from Civics chapter no. 1 , Economics chapter no.1, History chapter no. 1, Geography chapter no. 1 and learn.

Subject:- **Foundation of IT**

1. Prepare project on the following topic ( on a char paper ) Email / Cyber crime / Social networking Sites / Info centre / Wired Media / Wireless Media
2. Prepare a Animation on Scratch
3. Find & List different Learning Apps from the Internet.
4. Prepare a presentation on the following topic - Web Protocol / Cyber crime / Social networking Sites / IP Address / Wired Media / Wireless Media
5. Solve the Q & A of the Chapter II & III