

HOLIDAY'S HOME WORK

CLASS - IX

2018-19

1. Collect any five news items on "Environmental issues". Paste them in your English Register and comment on them in 120-150 words.

2. Frame a story based on the hints given below and write it in your English Register:

Hints: An illiterate boy- caught pick pocketing- sent to Juvenile prison-forced to do work-watches French comic movie on T.v. during recreation hour-fascinated with the language-requested French language classes- a French tourist guide today.

3. Have a conversation with your parents "How they manage stress levels during exams or in other unfavorable situations".

4. Read English newspaper daily and write two words with meanings in your English Register.

5. Suggested movies to be seen during summer vacations:

- **God Must be Crazy Part-1 & Part-2**
- **The Blue Umbrella**
- **The Boss Baby**
- **Toy Story**

6. Revise the syllabus for Pre- Mid Term exams.

ग्रीष्मावकाश गृहकार्य (2018–19)

विषय – हिन्दी

कक्षा नवीं

1. पाठ दुख का अधिकार, रैदास के पद व गिल्लू में से कोई 20 शब्द चुनकर उनका वर्ण विच्छेद A-3 शीट पर लिखिए।
2. 'दुख का अधिकार' कहानी का नाट्यरूपान्तरण A-3 शीट पर लिखिए।
3. गुरु पर आधारित कविता, श्लोक अथवा सूक्ति A-3 शीट पर चित्र सहित लिखिए।
4. हिन्दी समाचार पत्र या पत्रिका पढ़े तथा उसमें से कोई पाँच आकर्षक विज्ञापन काटकर A-3 शीट पर चिपकाएँ।
5. पूर्व मध्यावधि परीक्षा हेतु पाठ्यक्रम की पुनरावृत्ति करें—
पाठ्यक्रम—
पाठ— दुख का अधिकार
रैदास के पद
गिल्लू

व्याकरण— वर्ण विच्छेद, अनुस्वार, अनुनासिक, नुक्ता, स्वर संधि, विज्ञापन निर्माण, अपठित गद्यांश।

HOLIDAYS HOMEWORK

CLASS IX

Mathematics

1. Solve the questions of assignment of the following chapters in separate assignment register.
 - a) Ch- 1 (Number system)
 - b) Ch- 2 (Polynomial)
 - c) Ch- 3 (Coordinate geometry)

2. Prepare and revise thoroughly ch-1, ch-2, ch-3 for pre-midterm examination.

Assignment -1

Class – IX

Ch-1 Number Systems

Q1. Express 0.0032323232..... in the form of PQ.

Q2. Write the following in decimal form and what kind of decimal expansion each has?

(a) $\frac{2}{15}$

(b) $\frac{329}{500}$

Q3. Simplify $(\sqrt{3} - \sqrt{5})(\sqrt{5} + \sqrt{3}) / 7 - 2\sqrt{5}$

Q4. If $x = 1 + \sqrt{2}$, then find the value of $(x-1/x)^3$

Q5. If $x = \sqrt{3} + \sqrt{2} / \sqrt{3} - \sqrt{2}$ and $y = \sqrt{3} - \sqrt{2} / \sqrt{3} + \sqrt{2}$, find the value of $(x+y)^2$

Q6. If $3 + \sqrt{7} / 3 - \sqrt{7} = a + b\sqrt{7}$, find the value of a & b.

Q7. Find the value of $[(16)^{1/2}]^{1/2}$

Q8. Simplify $(81/16)^{-3/4} * [(9/25)^{3/2} \div (5/2)^{-3}]$

Q9. Find the value of X, if $(6/5)^x (5/6)^{2x} = 125/216$

Q10. Show that $(x^{a-b})^{a+b} \cdot (x^{b-c})^{b+c} \cdot (x^{c-a})^{c+a} = 1$

Q11. Simplify the expression $[(3/5)^{1/4}]^{-1/5}$

Q12. If $x = 3 + \sqrt{8}$, find the value of $(x^2 + 1/x^2)$

Q13. Find five rational numbers between $4/5$ and $5/6$

Q14. Express 32.1235 in the form of P/Q

Q15. Draw $\sqrt{3}$ on a number line

ASSIGNMENT – 2
CHAPTER -2 (POLYNOMIALS)

CLASS – IX

- Q1. Find the value of the polynomial $5x - 4x^2 + 3$ at $x = 2$ (ans. -3)
- Q2. Verify whether 0 is a zero of the polynomial $x^2 + 2x$. (ans. Yes)
- Q3. Find remainder when $x^4 + x^3 - 2x^2 + x + 1$ is divided by $x - 1$. (ans. 2)
- Q4. Check whether the polynomial $p(y) = 4y^3 + 4y^2 - y - 1$ is a multiple of $2y + 1$. (ans. Yes)
- Q5. Find the value of k , if $y - 1$ is a factor of $4y^3 + 3y^2 - 4y + k$. (ans. $k = -3$)
- Q6. Factorise the following polynomials:
- a.) $12x^2 - 7x + 1$ (ans. $(4x-1)(3x-1)$)
- b.) $3x^2 - x - 4$ (ans. $(3x-4)(x+1)$)
- Q7. Find the value of $x^2 + y^2$, if
- a.) $x + y = 4$, $xy = 3$, (ans. 10)
- b.) $x - y = 2$, $xy = 3$ (ans. 10)
- Q8. a.) If $x + \frac{1}{x} = 5$, find the value of $x^2 + \frac{1}{x^2}$ (ans. 23)
- c.) If $x - \frac{1}{x} = 7$, find the value of $x^2 + \frac{1}{x^2}$. (ans. 51)
- Q9. Find the value of k , if $x - 1$ is a factor of $p(x) = x^2 + x + k$. (ans. $k = -2$)
- Q10. Evaluate 102^3 using suitable identity. (ans. 1061208)
- Q11. Evaluate 104×96 without multiplying directly. (ans. 9984)
- Q12. Factorise $4x^2 - \frac{9y^2}{100}$ using appropriate identity. (ans. $\left(2x + \frac{3y}{10}\right)\left(2x - \frac{3y}{10}\right)$)
- Q13. Factorise : $27x^3 + y^3 + z^3 - 9xyz$.
- Q14. Without actually calculating the cubes, find the value of $(28)^3 + (-15)^3 + (-13)^3$.
(ans. 16380)

Q15. If $(x-3)$ and $(x-\frac{1}{3})$ are both factors of $ax^2 + 5x + b$, show that $a = b$.

Q16. Find value of a for which $(x-1)$ is a factor of the polynomial $a^2x^3 - 4ax + 4a - 1$. (ans. $a = \pm 1$)

Q17. For what value of k is the polynomial $2x^4 + 3x^3 + 2kx^2 + 3x + 6$ exactly divisible by $(x+2)$? (ans. $k = -1$)

Q18. Factorise : $x^3 + 13x^2 + 32x + 20$ (ans. $(x+1)(x+2)(x+10)$)

Q19. Expand $(4a - 2b - 3c)^2$.

Q20. Factorise $4x^2 + y^2 + z^2 - 4xy - 2yz + 4xz$. (ans. $(2x - y + z)(2x - y + z)$)

Assignment – 3

Class –IX

Chapter 3 – “Coordinate Geometry”

1. Name the quadrant in which the following point lie:
(-3,2), (4,-3), (-5,-4) and (3,2)
2. A point P is on the x-axis and 2 units on the right from the origin. State its abscissa and ordinate.
3. Which of these two points (0,-5) and (-5,0) lies on x-axis?
4. Plot the following points on the graph paper.
(-2, 0) (-5,-1) (3, -2) (0,5)
5. Plot the points S(0,4), T(-3,0), A(0,-4) and R(3,0) to draw a rhombus STAR. Also find its area.
6. Draw a quadrilateral whose vertices are (3,-2), (-3,-2), (-3, 4) and (3,4).
7. What is the perpendicular distance of the points (5,-2) from the y-axis and from x-axis?
8. (i) Plot the points A(1,-1) and B(4,5). Draw a line segment joining these points. Write the co-ordinate of any one point lie on this line segment between the points A and B.
(ii) Extend this line segment and write the coordinate of any one point on this line which lie outside the line segment \overline{AB} .
9. (i) Plot the points M (5,-3) and N (-3,-3).
(ii) What is the length of MN?
(iii) Find the coordinates of the points A, B and C lying on MN such that $MA=AB=BC=CN$

10. Plot the points whose vertices are the points $(-1, 1)$, $(-3, 2)$ and $(-1, 2)$ in a Cartesian plane. Name the figure so formed.

11. Plot the following points and check whether they are collinear or not :

- (i) $(1, 3)$, $(-1, -1)$, $(-2, -3)$ (ii) $(1, 1)$, $(2, -3)$, $(-1, -2)$ (iii) $(0, 0)$, $(2, 2)$, $(5, 5)$

12. Without plotting the points indicate the quadrant in which they will lie, if

- (i) ordinate is 5 and abscissa is -3
(ii) abscissa is -5 and ordinate is -3
(iii) abscissa is -5 and ordinate is 3
(iv) ordinate is 5 and abscissa is 3

13. Which of the following points lie on y-axis?

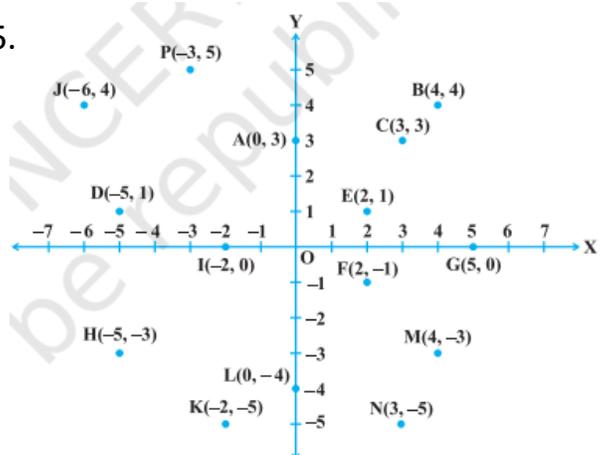
A $(1, 1)$, B $(1, 0)$, C $(0, 1)$, D $(0, 0)$, E $(0, -1)$, F $(-1, 0)$, G $(0, 5)$, H $(-7, 0)$, I $(3, 3)$.

14. Find the coordinates of the point

- (i) which lies on x and y axes both.
(ii) whose ordinate is -4 and which lies on y-axis.
(iii) whose abscissa is 5 and which lies on x-axis

15. From the Fig., answer the following :

- (i) Write the points whose abscissa is 0.
(ii) Write the points whose ordinate is 0.
(iii) Write the points whose abscissa is -5 .



PHYSICS
CLASS IX
HOLIDAY HOMEWORK

1. Revise chapter- MOTION for the Pre-mid term examination.
2. Make a list of S.I unit of the following physical quantities on A-4 size sheet.
(Make it colorful)
 - a. Mass
 - b. Length
 - c. Time
 - d. Speed
 - e. Velocity
 - f. Acceleration
 - g. Distance
 - h. Displacement
 - i. Force
 - j. Pressure
3. Complete the numericals of chapter-MOTION and Revise them from Textbook.

HOLIDAY HOMEWORK
SCIENCE PROJECT
CLASS IX

Prepare a questionnaire and conduct a survey of ten families in your surrounding for the diseases occurring in their families.

Make a record of the diseases its history in the family (if any) causes, duration and treatment taken for the disease. Record your observations and summarize your observation in project.

ASSIGNMENT -1

CLASS IX

BIO-CHEMISTRY

Q1. Explain why:

- a) **Air is used to inflate tiers.**
- b) **Steel is used to make railway lines.**
- c) **Diffusion occurs more quickly in a gas than in a liquid.**

Q2. a) When an incense stick is lighted in one corner of a room, its fragrance quickly spread in the entire room. Name the process involved in this.

b) A girl is cooking some food in the kitchen. The smell of food being cooked soon reaches her brothers room. Explain how the smell could have reached her brothers room

Q3. Would you cool a bucket of water more quickly by placing it on ice or by placing ice in it? Give reason for your answer.

Q4. How would you demonstrate that water vapour is present in air?

Q5. When water is cooled to a temperature X it gets converted into ice at temperature X by the process called P. and when ice at temperature X is

warmed, it gets reconverted into water at same temperature X in a process called Q.

- a) What is the value of temperature X in kelvin?
- b) What is the process P known as?
- c) What is the name of energy released during process P?
- d) What is the process Q known as?
- e) What is the name of energy absorbed during process Q?

Q6. When water is heated to a temperature X it gets converted into steam at temperature X by the process called P. and when steam at temperature X is cooled, it gets reconverted into water at same temperature X in a process called Q.

- f) What is the value of temperature X in kelvin?
- g) What is the process P known as?
- h) What is the name of energy absorbed during process P?
- i) What is the process Q known as?
- j) What is the name of energy released during process Q?

Q7. Which property of gases makes them used as a convenient domestic fuel?

Q8. Convert the following temperature to kelvin

- a) 79°C
- b) 45°C
- c) 110°C

Q9. Convert the following temperature to degree Celsius.

- a) 446K
- b) 273K
- c) 840K

Q10. State the difference between solid, liquid and gas.

Q11. Explain giving example the various factor on which rate of evaporation depends.

Q12. Distinguish between evaporation and boiling.

Q13. Give the temperature at which water exist attwo different states.

Q14. Give reasons for the following observations:

- a) Liquids and gases can be compressed but it is difficult to compress solids**
- b) A balloon when kept in sun, burst after some time.**
- c) The temperature remains constant during the change of state.**
- d) Steam produces more severe burns than boiling water.**
- e) Water vaporizes at 100°C but how is it possible for water to evaporate at room temperature.**

Q15. What is dry ice? How is it obtained?

Q16. Define sublimation. Name any three sublime substances.

ASSIGNMENT -2

CLASS IX

BIO-CHEMISTRY

Q1. What happens to an animal cell when placed in the following solutions?

- a) Hypotonic solution.**
- b) Hypertonic solution.**
- c) Isotonic solution.**

Q2. Explain the role of ER in membrane biogenesis?

Q3. How do substances like carbon dioxide and water move in and out of the cell?

Q4. Explain the structure and function of Golgi bodies.

Q5. Define the following-

- a) Endocytosis**
- b) Plasmolysis.**
- c) Phagocytosis.**

Q6. Differentiate between the following:

- a) RER and SER.**
- b) Plant cell and Animal cell**
- c) Nucleoid and Nucleus.**

- d) Prokaryotic and Eukaryotic cell.**
- e) Chromosomes and chromatin**
- f) Mitosis and Meiosis.**

Q7. Draw a labelled diagram of a plant cell and an animal cell.

Q8. What are plastids? Name the three different kinds of plastids found in plant cell along with their functions.

Q9 what is the full form of ATP and DNA?

Q10 Name the cell organelle for the following:

- a) Present only in plant cell, provides strength and rigidity to the cell.**
- b) It is the site for lipids synthesis and helps in detoxification of drugs.**
- c) It helps in the formation of lysosomes.**
- d) Its inner membrane is folded and has its own DNA and protein.**
- e) It imparts colour to the fruits and flowers.**
- f) Kitchen of the cell.**
- g) Cleaning agent of cell.**
- h) Power house of cell.**

Q11. Draw a well label diagram of typical prokaryotic cell?

Q12. Lysosomes are also called digestive bags. Why?

Q13. Why does dry apricot placed in salt solution do not swell while they do so when kept in water?

What would happen if shelled raw egg and deshelled boiled egg are placed in water?

Q14. Why is endocytosis found in animal only?

Q15. A person takes concentrated solution of salt. After sometime he starts vomiting. what is the phenomenon responsible for such a situation? Explain.

Q16. Name any cell organelles which is non membranes.

Q17. Define cell division and its importance.

Q18. How does a cell show division of labour?

SOCIAL SCIENCE (SESSION 2018-19)

HOLIDAY HOMEWORK

CLASS-IX

1. Prepare project on disaster management

- Students will prepare project on any two natural calamity.
- Project should contain proper heading & pictures of different calamities. mention one case study of each.

2. Prepare an atlas of different maps (political and physical map of India and countries from the following chapters:

- chapter-1 The French revolution (Bordeaux, Nantes, Paris and marseilles)
- chapter 2 Socialism in Europe and the Russian Revolution (Major countries of First World war) central power-Germany, Austria-Hungary, Turkey. Allied powers- France, England, Russia and America.
- Chapter-1 India- size and location (States and capitals, tropic of cancer, standard meridian.
- Chapter-2 Physical features of India (mountain ranges-Karakoram, the zaskar, the Shivaliks, the Aravali, the Vindhya, the Satpura, western and eastern ghats. mountain peaks- K2, Kanchan junga and Annai mudi. Platueau- Deccan, Chotta Nagpur plateau and Malwa. Coastal plains- Konkan, Malabar. Coromandal and New circar). mark them on different maps.
- chapter-3 Drainage (Himalayan rivers, peninsular rivers and lakes.)

3. Read the newspaper daily

4. Prepare for Pre- Mid term Exam

HOLIDAY HOMEWORK

SESSION: 2018-2019

Subject: Computer

Marks: 5

Class: IX

Make a collage on following topics:

	Roll No
1. Multimedia	1 – 15
2. Photoshop	16 – 30
3. Computer Network	31 – 45
4. HTML	46 - 60