



# R.E.D. GROUP OF SCHOOLS

## Summer Holiday Home Work

Class : X (Session : 2018-19)

### ENGLISH

#### 1. VALE BASED QUESTIONS:-

When you live for strong purpose, then hard work isn't an option. It is the necessity. "Both Nicola and Jacopo were hard-working and uncomplaining. You too realized of hard- work after reading the story. Write an article in 120-150 words on the "Virtues of Hard-work. (On A4 sheet only.)

#### 2. Write a short story (150-200 words) with an opening line:-

One day I walked into my house and I was shocked to see.....  
(Write the story on A4 sheet)

#### 3. Write your experience of visiting a holiday destination during your vacation in the form of a DIARY-ENTRY (on A4 sheet)

#### 4. Write 10 inspirational thoughts with their explanation in your own words in single paragraph. (A4 sheet)

#### 5. Make a project/assignment on the life of Helen Keller. Paste pictures, incident related to her life, the things she likes, anything related to her. Make your work presentable in the best ways you can. Beautifully arrange the things on the A4 colored sheets only.

#### 6. How far is the story "Mrs. Packletide's Tiger" a satire on the upper class English society of the author's time?

#### 7. Questions based on the long-reading texts:-

- What filled Helen with joy before her teacher came?
- Comment on Ms. Sullivan's role as a friend and teacher in Helen's life.
- How did Ms. Sullivan teach Helen?
- Describe in your own words Helen's swimming experience in the ocean?
- Why does the writer call her "North Visit" as a treasure house of a new beautiful world.

### HINDI

#### 1. याद करने का कार्य-

क्षितिज पाठ - नेता जी का चश्मा, बालगोबिन भगत, लखनवी अंदाज, मानवीय करुणा की दिव्य चमक, सूरदास, देव, आत्मकथ्य।

कृतिका पाठ - माता का अँचल, जॉर्ज पंचम की नाक।

व्याकरण - वाक्य (रचना के आधार पर), रस।

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- कॉपी में कुछ विज्ञापनों के चित्र एवं उनसे जुड़ी विशेषताओं को किसी समाचार-पत्र या पत्रिका में से काटकर चिपकाएँ।
- 'माँ' शीर्षक को आधार बनाकर एक अनुच्छेद लिखो।
- अपने दादा-दादी जी से पूछें और लिखें कि उन्होंने आपके पिताजी के पालन-पोषण में किन-किन कठिनाइयों को सहा है?
- कोई ऐसी घटना लिखिए जब आपने अन्याय का विरोध किया हो।
- ऐसा वृत्तांत लिखें जब आपने परोपकार का कार्य किया हो।

### MATHS

#### Instructions:

- \* Construct the figures / diagrams using pencil and ruler/scale.
- \* Test will be held after holidays from the question given in holidays home work.

#### 1. Using Euclid's division algorithm, find HCF of (135, 225).

#### 2. Find the HCF of the polynomials:

$$150(6x^2 + x - 1)(x - 3)^3 \text{ and } 84(x - 3)^2(8x^2 + 14x + 5)$$

#### 3. Prove that $2 + \sqrt{2}$ is not a rational number.

#### 4. The length, breadth and height of a room are 8m 25 cm, 6m 75 cm and 4m 50 cm respectively. Determine the longest rod which can measure the three dimensions of the room exactly.

#### 5. Find the smallest number which leaves remainders 8 and 12 when divided by 28 and 32 respectively.

#### 6. If $\alpha, \beta$ be the zeroes of $ax^2 - bx + 5$ , find $a$ and $b$ if sum of zeroes is $\frac{4}{3}$

and product of zeroes is  $\frac{5}{3}$ .

#### 7. If $\alpha, \beta$ are the zeroes of polynomial $f(x) = x^2 - 5x + k$ , such that $\alpha - \beta = 1$ , find the value of $k$ .

#### 8. If $\alpha$ and $\beta$ are zeroes of $f(x) = x^2 - p(x+1) - c$ . Show that $(\alpha + 1)(\beta + 1) = 1 - c$

#### 9. If two zeroes of a polynomial $x^4 - 8x^3 + 19x^2 - 12x + 2$ and $2 \pm \sqrt{2}$ , find other zeroes.

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10. Verify that 1, 4, 7 are the zeroes of polynomial  $x^3 - 12x^2 + 39x - 28$ . Also verify the relationship between the zeroes and the coefficients.
11. Is the pair of linear equations  $2x + 3y - 11 = 0$  and  $4x + 6y + 7 = 0$  consistent?
12. Solve for  $x$  and  $y$ , if the given system of equations is:  

$$\frac{x+1}{2} + \frac{y-1}{3} = 8 \text{ and } \frac{x-1}{3} + \frac{y+1}{2} = 9$$
13. Draw the graph of equations  $2y - x = 8$ ,  $5y - x = 14$  and  $y - 2x = 1$ . Also, obtain the vertices of the triangle so formed.
14. Find the values of  $a$  and  $b$  for which the following system of equations has infinite many solutions.  
 $3x + 4y = 12$  and  $(a + b)x + 2(a - b)y = 5a - 1$
15. Is the following equation having repeated roots  $3y^2 + 15y + 3 = 0$ .
16. Find the value of  $k$  for which the given equation  
 $(k + 1)x^2 - 2(3k + 1)x + 8k + 1 = 0$  has real and equal roots.
17. Solve: 
$$\frac{1}{p+q+x} = \frac{1}{p} + \frac{1}{q} + \frac{1}{x}$$
18. Find the roots of the equation  $2x^2 + x - 4 = 0$  (if they exist) by the method of completing the square.
19. Rs. 6500 were divided equally among a certain number of persons. Had there been 15 more persons each would have got Rs. 30 less. Find the original number of persons.
20. The sum of 14 terms of an AP is 1050 and its first term is 10, find its 20th term.
21. Determine  $k$ , so that  $k+2$ ,  $4k-6$ ,  $3k-2$  are three consecutive terms of AP.
22. If in an A. P., the sum of  $p$  terms is  $q$  and sum of  $q$  terms is  $p$ , then find sum of  $(p+q)$  terms.
23. Find the sum of all natural numbers between 100 and 1000 which are multiples of 5.

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24. Ramkali required Rs. 2500 after 12 week to send her daughter to school. She saved Rs. 100 in the first week and increased her weekly saving by Rs. 20 every week. Find whether she will be able to send her daughter to school after 12 weeks.
25. If the points (1, x), (5, 2) and (9, 5) are collinear then find the value of x.
26. If the distance of P(x, y) from A(5, 1) and B(-1, 5) are equal, prove that  $3x = 2y$ .
27. If A(-5, 7), B(-4, -5), C(-1, -6) and D(4, 5) are vertices of a quadrilateral, find the area of the quadrilateral ABCD.
28. A(3, 2) and B(-2, 1) are two vertices of a triangle ABC whose centroid G has co-ordinates  $\left(\frac{5}{3}, -\frac{1}{3}\right)$ . Find the coordinates of the third vertex of the triangle.
29. Find the point on x-axis which is equidistant from (-2, 5) and (2, 3).
30. L and M are respectively the point on the sides DE and DF of a triangle DEF such that  $DL = 4$ ,  $LE = \frac{4}{3}$ ,  $DM = 6$  and  $DF = 8$ . Is  $LM \parallel EF$ ?  
 Give reason.
31. Make a project on "Careers in Maths" and do the following:
- List the educational courses related to Mathematics field add educational criteria and other requirements also for these courses.
  - List top 5 colleges and universities related to the course of your interest.

**SCIENCE**

- Pre-Reading of Ch - 8 to 10 (Write difficult word meaning)
- Learn Ch-14 for fortnight test (02.07.2018)
- Make any one working model on any topic.
- Make a project on "Careers in Science" and do the following:
  - List the educational courses related to Science field add educational criteria and other requirements also for these courses.
  - List top 5 colleges and universities related to the course of your interest.

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### ***SOCIAL SCI.***

1. Prepare a collage on 'Water Scarcity'.
2. To prepare a flow chart for the classification of resources.
3. Find out the 20 international news and paste them in the scrap book.
4. Grow 5 sapling plants and observe them 'prepare a report and come with photographs.
5. Find out the 10 internal questions of one-mark form Geography. (Ch 1 to 3)
6. Make a project on "Careers in Social Science" and do the following:
  - a) List the educational courses related to Social Science field add educational criteria and other requirements also for these courses.
  - b) List top 5 colleges and universities related to the course of your interest.

### ***COMPUTER***

**Note: The holiday homework is to be done on A4 size paper.**

1. Solve revision assignment.
2. Learn Question answer of chapter 1 to 4
3. Make a project on "Careers in IT" and do the following:
  - a) List the educational courses related to IT field for example BCA, B. TECH(CS) etc. Add educational criteria and other requirements also for these courses.
  - b) List top 5 colleges and universities.
4. Create a website on the topics and submit the code with output in printed form:  
Topics:
  - (a) My School
  - (b) My Family
  - (c) School Website - Infrastructure, Facilities, Uniform, Motto, School Pictures, Extra-Curricular Activities, Subject and Language Options
  - (d) Travel and Tourism
  - (e) Statistics on India - State wise Area, Population, Literacy (Enrolment in Primary, Middle, Secondary, Senior Secondary), Gender Ratio
  - (f) Environment (Save Energy) and Pollution (Global Warming)

### **Instructions for Website Designing:**

- \* Adding a title to webpage
- \* Formatting Text
- \* Adding Ordered/Unordered Lists
- \* Writing Text in Paragraphs
- \* Inserting Image
- \* Adding content in Tabular Form
- \* Adding Internal / External links.