



Gulab Public School, Aurangabad

Affiliated to CBSE

Holiday Homework

Class- 10th (2019-20)

Contact Number:-7027656526

Website:www.gulabpublicschool.com

Gmail: -gulabpublicschool@gmail.com

Mathematics

Arithmetic Progression

1. The n th term of an A.P is $7-4n$. Find its common difference
2. If $k=1$, $3k$ and $4k+2$ be any three consecutive terms of an A.P , find the value of k
3. For what values of p are $2p+1$, 13 , $5p-3$ three consecutive terms of an A.P
4. Find the middle terms in the A.P. $20, 16, 12, \dots, (-176)$
5. How many three digit numbers are such that when divided by 7 , leave a remainder 3 , in each case
6. Which term of the arithmetic progression $8, 14, 20, 26, \dots$ will be 72 more than its 41^{st} term
7. The sum of the 2^{nd} and the 7^{th} terms of an A.P is 30 . If its 15^{th} term is 1 less than twice its 8^{th} term, find the A.P
8. If p th term of an AP is q and q th term is p , then show that its n th term is $(p+q-n)$

9. Find the number of odd integers between 2 and 100 divisible by 3
10. Which term of an AP 45,41,37,33,.....is the first negative term
11. Determine the AP, whose 3rd terms is 5 and the 7th term is 9
12. Find the middle term of the A.P. 10, 7, 4,(--62)
13. Which term of the A.P 5, 15,25.... Will be 130 more than its 31st
14. If the 10th term of an AP. is 52 and 17th is more than 13th term, find the AP

Co-ordinate

1. Show that three points (a, a) , $(-a,-a)$ and $(-\sqrt{3a}, \sqrt{3a})$ are the vertices of an equilateral triangle . Also find its area
2. Find the coordinate of points which divides the line segment joining $(1,-2)$ and $(-3,4)$
3. Find the ratio in which the point $(-3,p)$ divides the line segment joining the points $(-5, -4)$ and $(-2,3)$. Hence , find the value of p.
4. If the points $A(x,y)$, $B(3,6)$ and $C(-3,4)$ are collinear , show that $x-3y+15=0$
5. Find the area of the quadrilateral whose vertices taken in order , are $A(-4,-2)$, $B(-3,-5)$, $C(3,-2)$ and $D(4,2)$
6. Find the value of k if points are collinear (i) $(7,-2)$, $(5,1)$, $(3,k)$ (ii) $(8,1)$, $(k,-4)$, $(2,-5)$

1. Prove that the points $(a,0)$, $(0,b)$ and $(1,1)$ lie on the same straight line if $\frac{1}{a} + \frac{1}{b} = 1$
2. Find the coordinates of a point P on the line segment joining A(1,2) and B (6,7) such that $AP = \frac{2}{5} AB$
3. Find the ratio in which the point P(x,2) divides the line segment joining the points A(12,5) and B(4,-3) .Also ,find the value of x
4. The line joining the points (2,-1) and (5,-6) is bisected at P .If P lies on the line $2x+4y+k=0$, find the value of k
5. Find the value of p for which the points $(-5,1)$, $(1,p)$ and are collinear
6. If the midpoint of the line segment joining the points P(6, b-2) and Q(-2,4) is (2,-3) , find the value of b Determine the ratio
7. Find a point on the x-axis which is equidistant from the points (7,6)and (-3,4)
8. The length of a line –segment is $\sqrt{10}$ units. If one end is at (2,-3) and abscissa of the second end is 5 show that ordinate of the second end is either -2 or -4
9. If the point P(x,y) is equidistant from the points A(5,1) and B(-1,5) , prove that $3x=2y$
10. Show that the points A(-1,1) B(5,7) and C(8,10) are collinear
11. If P (2,6) is the mid-point of line segment joining A(6,5) and B(4,y) , find y.
12. Find the distance of a point P(x,y) from the origin.

Linear equation in two variable and Quadratic equation

1. For what value of k the following system of equation have a unique solution

$$2x+k=1, 3x-5y=7$$

2. Solve $\frac{10}{x+y} + \frac{2}{x-y} = 4$

$$\frac{15}{x+y} - \frac{5}{x-y} = -2$$

3. The sum of the digits of a two digit number is 12 .The number obtained by interchanging the two digits exceeds the given number by 18 . Find the number
4. A man travels 600 km partly by train and partly by car. if the covers 400 km by train and the rest by car it takes him six hours and 30 min . But if he travels 200 km by train and the rest by car, he takes half an hour longer. Find the speed of the train and that of the car.
5. The hypotenuse of a right angled triangle is 6cm less than the twice the shortest side. If the side is 2cm less than the hypotenuse, find the sides of the triangle.
6. A dealer sells a toy for 24rs and gains as much percent as the cost of the toy. Find the cost price of the toy.
7. Solve :

$$\frac{14}{x+3} - 1 = \frac{5}{x+1}$$

8. Using quadratic formula solve the following quadratic equations

$$12abx^2 - (9a^2 - 8b^2) - 6ab = 0$$

9. The denominator of a fraction is one more than twice the numerator. If the sum of the fraction and its reciprocal is $2\frac{16}{21}$ find the fraction.

10. Two years ago a man's age was three times the squares of his son age. Three years hence his age will be four times his son age. Find their present ages
11. Rs 6500 were divided equally among a certain number of persons. Had there been 20 more persons each would have for Rs30 less. Find the original number.
12. Determine the positive values of k for which the equation $x^2+kx+64=0$ and $x^2-8x+k=0$ will both have real roots.
13. Find the value of k which the quadratic equation $(k+4)x^2+(k+1)x+1=0$ has equal roots.
14. Find two consecutive numbers whose squares have the sum 85.
15. The sum of the squares of two consecutive odd positive integer is 394. Find them
16. The sum of the squares of two consecutive multiples of 7 is 637. Find the multiples.
16. Solve:
- $$\frac{7x+1}{7x+5} = \frac{3x+1}{5x+1}$$
17. Find the value of k so that the quadratic equations $kx(x-2)+5=0$ has two equal roots.
18. A motor boat whose speed in still water is 18 km/h, takes 1 hour more to go 24 km upstream than to return downstream to the same spot. Find of the stream.

Social science

1. Which two countries are leading the procession in Sorrier painting and why?

Or

2. What is meant by absolutist?

3. What is a Nation-State

4. What measures were taken by the revolutionary govt. in France to create a collective identity amongst the French people

5. What measures were taken by the revolutionary govt. (Napoleon) to spread Nationalism in Europe? What were the reactions of the local people?

6. What did Liberalism mean in political and economic field?

7. What was Zollverein? What was its significance?

8. What were the provisions of the Vienna congress?

9. Who were conservatives?

10. Who were Revolutionaries? Who was their leader? Which societies did he form?

11. Who said "When France sneezes, the rest of Europe catches cold" prove this with two examples.

12. How did Romantic Imagination help in the formation of Nation state?

13. What was the significance of the revolt of Silesian weavers?

14. What is meant by the Revolution of the Liberals or significance of Frankfurt parliament?

15. Describe the stages of German unification.

16. Describe the stages of Italian Unification.

17. How was Britain made into a nation State?

18. How allegories were used for visualizing a nation?

19. How did nationalist tension in the Balkans create condition of the First World War?

20. How the growth nationalism in India was tied with anti-colonial movement?

21. What was the effect of I world war on national movement?

22. What was the idea of Satyagraha?
23. What were the early experiments of Mahatma Gandhi in India?
24. What was Rowlett Act? Why was Rowlett Satyagraha called off.
25. What was Khilafat movement? Who started it?
26. Describe non-cooperation movement? Why did it decline?
27. How was the idea of Swaraj different for different community? Explain with two examples ?
28. Why was Simon commission sent? Why was it boycotted?
29. What was the significance of Lahore congress?
30. Describe the Civil Disobedience movement?
31. How did culture help to shape nationalism in India?
32. What were the provisions of Gandhi Irwin Pact?
33. What is meant by proto-industrialization? How was production organized in this period?
34. What were guilds? How did they control production?
35. What were the features of industrialization or pace of industrial change in England?
36. Why could steam power (machines) not displace hand labour in England?
37. How did British East India Company secure goods for export in India?
38. Who were early entrepreneurs in India? How did they earn capital?
39. What were the peculiarities of Industrialization in India?
40. How did manufactures create market for their goods?
41. What was the role of jobbers?
42. Which historical processes have shaped the growth of modern city? How did ancient cities develop?

43. How did London grow as a big city?
 44. Which were the marginal groups in London?
 45. What was the condition of housing in London? Why some people were worried about poor living condition?
 46. What measures were taken for cleaning London and making it more hygiene?
 47. How was the problem of transport solved in London? What were its positive and negative aspects?
 48. What was the condition of women in 19 century in London? How did people pass their leisure time in London?
 49. How was Houssmanisation of Paris both a bane and a boon?
 50. How did Bombay grow as a prime city?
 51. What was the condition of housing in Bombay?
 52. What were the reclamation projects undertaken in Bombay?
 53. How were the cities challenge for environment?
-
54. What was the earliest print technology? Where did it develop?
 55. Who introduced printing in Japan? Which was the first book to be printed?
 56. What was the calligraphy?
 57. What was Ukiyo?
 58. When and by whom was printing brought to Europe?
 59. Two measures taken by the book sellers /publishers to increase the sale of books?
 60. When and where Gutenberg develop his printing press? What were its specialties?
 61. How did printing create a new culture of reading?
 62. Why were some people afraid (apprehensive) of printing?
 63. What was the implication of printing in religion? Why did Roman Catholic Church began to maintain an Index of prohibited books ?
 64. What was the role of print culture in French Revolution?
 65. What were the subject matter of women writers in England? Mention two women writers?
 66. What were Penny Magazine and Shilling Series?
 67. Who improved Gutenberg's printing press? What were its

specialties’?

68. What were the merits of offset press? When was it developed?

69. Who brought printing press in India? Which books were printed first?

70. How did print influence reform movement in India?

71. Who were Ulema? What is Fatwa?

72. Which new forms of Literature and art become popular due to print?

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 an assignment on previous (2016 to 2018) years Questions in your fair notebook

Revise pt-1 syllabus

हिंदी

- 1 . अनुच्छेद लिखिए -इन्टरनेट की दुनिया ,मातृभाषा और उसका महत्व
 2. किसी बस कंडक्टर के व्यवहार की प्रशंसा करते हुए प्रबंधक परिवहन विभाग को एक पत्र लिखिए।
 - 3.पद परिचय दीजिए ।
 4. रचना के आधार पर वाक्य भेद करिये ।
 5. रस व रस के भेद का परिचय दीजिए ।
 6. निबन्ध लिखे :
 1. आतंकवाद ,2. आज कि सरकार का भ्रष्टाचार पर वार
- क्षितिज -पाठ -10 ,11 याद करिये काव्य खंड :सूरदास ,तुलसीदास ,देव जयशंकर प्रसाद याद करिये

