

CHARAN'S PUBLIC SCHOOL

CAMBRIDGE LAYOUT , BANGALORE - 560008

CHRISTMAS HOLIDAY HOME WORK

IX STD

Christmas Holidays commences from 24th December,2020.School reopens on 4th January 2021.Please return the HOLIDAY HOMEWORK notebook duly completed to the class teacher on 04.01.2021

Name of the student : _____

New year, New beginnings

- A bad habit I am going to break:
- A new skill I would like to learn:
- A person I would hope to be more like;
- A good deed I am going to do:
- A place I would like to visit:
- A book I would like to read:
- A letter I am going to write;
- A new food I would like to try:
- This year ,I am going to be better at?
- A person I would like to thank:
- A lesson I learnt in 2020:
- The best part of last year was:

CHARAN'S PUBLIC SCHOOL - STD-9
ENGLISH - CHRISTMAS HOLIDAY H. W

1 You were a member of your school quiz team which won the CBSE Quiz contest at the National level. Draft a report about it to be published in your school magazine in about 125 words.

2 Write an article in about 200 words on the growing influence of the media of the youth. Discuss only one of the media, detailing its positive and negative effects.

3 Write a letter to the Editor of a leading daily highlighting the problems faced in communication during the peak hours, by the office goers and students. Give suitable suggestions to solve the problem.

4 Write an essay on Demonitization.

5 What is an aadhar card?

6 Where is it being used?

7 Why is the Aadhar project's validity being challenged in the Supreme Court?

8 What do you think are the merits and demerits of the aadhar card project?

Creative writing:

9 What would you do if you found out, you had the magic powers?

10 Give yourself an hour just to sit outside with no electronics. Listen to all sounds around you write about the sound.

11 Do you crave adventure or attention? Why or why not?

12 Write about something that you find challenging why is it hard? What could you do to improve?

ಕನ್ನಡ

I. ಗಾದೆ ವಿವರಿಸಿ :

- 1) ಹಾಸಿಗೆ ಇದ್ದಷ್ಟು ಕಾಲು ಜಾಚು
- 2) ತಾಳಿದವನು ಬಾಳಿಯಾನು

II. ನಿಮ್ಮನ್ನು ರಾಜಾಜಿನಗರದ ಸರ್ಕಾರಿ ಪ್ರೌಢಶಾಲೆಯ ವಿದ್ಯಾರ್ಥಿ 'ಮಹೇಶ್' ಎಂದು ಭಾವಿಸಿಕೊಂಡು ನಿಮ್ಮ ಶಾಲೆಯ ವಾರ್ಷಿಕೋತ್ಸವದ ವರದಿಯನ್ನು ಪ್ರಕಟಿಸುವಂತೆ ಕೋರಿ 'ಪ್ರಜಾವಾಣಿ' ದಿನಪತ್ರಿಕೆಯ ಸಂಪಾದಕರಿಗೆ ಪತ್ರ ಬರೆಯಿರಿ.

III. ರಾಷ್ಟ್ರೀಯ ಹಬ್ಬಗಳು - ಈ ವಿಷಯಕ್ಕೆ 10-15 ವಾಕ್ಯಗಳಲ್ಲಿ ಪ್ರಬಂಧ ಬರೆಯಿರಿ.

CHARAN'S PUBLIC SCHOOL

STD-IX

MATHEMATICS

1. Quadratic equations

1. Check whether the following are quadratic equations :

(i) $(x + 1)^2 = 2(x - 3)$

(ii) $x^2 - 2x = (-2)(3 - x)$

(iii) $(x - 2)(x + 1) = (x - 1)(x + 3)$

(iv) $(x - 3)(2x + 1) = x(x + 5)$

2. Find the roots of the following quadratic equations by factorisation:

(i) $x^2 - 3x - 10 = 0$ (ii) $2x^2 + x - 6 = 0$

3. Find two consecutive positive integers, sum of whose squares is 365.

4. Find two numbers whose sum is 27 and product is 182.

5. Find the roots of the following quadratic equations by formula method.

(i) $2x^2 + x - 4 = 0$ (ii) $3x^2 - 8x + 5 = 0$

6. Solve $\frac{1}{x+4} - \frac{1}{x-7} = \frac{11}{50}$

7. The difference of squares of two numbers is 180. The square of the smaller number is 8 times the larger number. Find the two numbers.

8. A train travels 360 km at a uniform speed. If the speed had been 5 km/h more, it would have taken 1 hour less for the same journey. Find the speed of the train

9. Find the nature of the roots of the following quadratic equations. If the real roots exist, find them: (i) $2x^2 - 3x + 5 = 0$ (ii) $3x^2 - 4x + 4 = 0$ (iii) $2x^2 - 6x + 3 = 0$

10. Find the values of k for each of the following quadratic equations, so that they have two equal roots. (i) $2x^2 + kx + 3 = 0$ (ii) $kx(x - 2) + 6 = 0$

11. Define quadratic equation and write its standard form with example.

12. Write the summary which is given in end of the chapter.

2. Trigonometry

1. If $\sin A = 3/4$, Calculate $\cos A$ and $\tan A$.

2. If $\tan(A + B) = \sqrt{3}$ and $\tan(A - B) = 1/\sqrt{3}$, $0^\circ < A + B \leq 90^\circ$; $A > B$, find A and B.

3. If $\tan 2A = \cot(A - 18^\circ)$, where $2A$ is an acute angle, find the value of A.

4. $\sqrt{1 + \sin A / 1 - \sin A} = \sec A + \tan A$.
5. $(1 + \tan^2 A / 1 + \cot^2 A) = (1 - \tan A / 1 - \cot A)^2 = \tan^2 A$.
6. Given $\sec \theta = 13 / 12$ calculate all other trigonometric ratios.
7. Evaluate the following : (i) $\sin 60^\circ \cos 30^\circ + \sin 30^\circ \cos 60^\circ$
(ii) $2 \tan^2 45^\circ + \cos^2 30^\circ - \sin^2 60^\circ$
8. Evaluate : (i) $\sin 18^\circ / \cos 72^\circ$ (ii) $\cos 48^\circ - \sin 42^\circ$
9. If $\tan 2A = \cot (A - 18^\circ)$, where $2A$ is an acute angle, find the value of A .
10. $(\sin A + \operatorname{cosec} A)^2 + (\cos A + \sec A)^2 = 7 + \tan^2 A + \cot^2 A$
11. Write all 3 trigonometric identities.
12. Write the summary which is given in end of the chapter.

SCIENCE
CHRISTMAS HOLIDAY HOMEWORK

- PHYSICS: 1. Make a working model of biogas plant.**
2. Make a model of solar cooker and solar cell panel

Chemistry: 1. Balance the following equations

- a. $\text{HNO}_3 + \text{Ca}(\text{OH})_2 \rightarrow \text{Ca}(\text{NO}_3)_2 + \text{H}_2\text{O}$
- b. $\text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$
- c. $\text{NaCl} + \text{AgNO}_3 \rightarrow \text{AgCl} + \text{NaNO}_3$
- d. $\text{BaCl}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{BaSO}_4 + \text{HCl}$

2. Write the balanced chemical equations:

- a. Calcium hydroxide + carbon dioxide \rightarrow calcium carbonate + water
- b. Zinc + silver nitrate \rightarrow Zinc nitrate + silver
- c. Aluminum + copper chloride \rightarrow Aluminum chloride + copper
- d. Barium chloride + potassium sulphate \rightarrow Barium sulphate + potassium chloride

Biology : 1. Make a model of longitudinal section of flower and germination of pollen grains on stigma.

Social-Science

History- Collect pictures of the famous freedom fighters (any 5) and make a chart with interesting information about them. (Also write their famous slogan)

Geography- collect information about any one means of communication and give advantages and disadvantages regarding it. (In Notebook)

**CHARAN'S PUBLIC SCHOOL
ENGLISH LITERATURE**

MOCK TEST

NAME: _____

STD-IX

PART-A

MAX.MARKS:25

I Multiple choice questions: (4)

1 I can't very well be seen carrying an eel pie through the streets of Paris can I?
Says Gaultier. This shows that He is
(a)lazy (b) wise (c) too conscious and proud of his position (d)active.

2 Buttoo says All that I have all I conquer by my skill, gladly shall I do thee sign"
This shows Bottoo's
(a)reverence to Drona (b) generosity (c) gratitude (d) foolishness

3 Who opens the door when Jean goes to get the tart?

(a)Gaultier (b) Marion (c) Mayor (d) Pierre

4 On Which Mahabharatha Character is the Poem "Butoo" based?

(a)Ekalavya (b)karna (c) Arjuna (d) Bhishma

II Quote from memory: (3)

5 I was angry _____

_____end.

III Answer the following in two or three sentences: 2x5=10

6 What is the success story of Pepsi and Coca -Cola ?

7 How was Marion going to identify Gaultier's messenger?

8 What thrills the present day Indian shoppers?

9 Why did Buttoo revere Drona as his Master?

10 Why was Pierre pinched? How did he defend himself before Jugdge Gaston?

IV write a letter to your friend expressing about interschool sports meet held in your school? (CPL) 5

V Reference to context:

12 The severed thumb was on the sod. There was no tear in Buttoo's eye.

(a)Why was the thumb severed?

(b) why was there no tear in Buttoo's eye?

(c) What does it tell you about Buttoo?

PART-B

VI Match the meanings:

sl	Word	Meaning
11	Bewildering	Arrested
12	Impoverishment	Manufacturers and suppliers
13	Pinched	Magic
14	Strife	Trouble
15	Revere	puzzling
16	Wretched	opened
17	Undone	Respect
18	Purveyors	Miserable

VII Answer the following questions in five- six sentences:3X4=12

- 19 Man today is an unstoppable buying machine. Elucidate with example?
- 20 How are Jean and Pierre similar?
- 21 Write the summary of the poem "C.L.M"?
- 22 Write a short note on the views expressed by the writer on the tragic comedy Of development?

VIII Write an essay on the topic: Social media (5)

IX Read the following carefully and answer the following? (4)

George Washington was the first President of the United States of America. He was born over two hundred years ago in the state of Virginia on February 22. When George was a boy, he had lots of fun exploring the Woods and forests near his home.

He enjoyed hunting, boating, and fishing. He lived on a Farm and helped His father with the chores that needed to be done. George went to school Until he was 14 year old .His favourite subject was Mathematics. George Was good, quiet boy who got along well with others.

George grew up to be a tall and strong man. He joined the military. He was a great leader and helped with many battles. He is best remembered as a revolutionary was against Great Britain for independence.

- 23 What did George enjoy doing?
- 24 Why is George best remembered?
- 25 How did he help the Americans?
- 26 Young George was fun exploring. How?

MOCK TEST

ಕನ್ನಡ [II LANGUAGE]

PART-A

ಬಹು ಆಯ್ಕೆಯ ಪ್ರಶ್ನೆಗಳು:

[4]

1] ವರ್ಷಗಳಿಂದ ಪದವು ಈ ವಿಭಕ್ತಿಯಲ್ಲಿದೆ.

1] ಪ್ರಥಮ 2] ತೃತೀಯ 3] ಚತುರ್ಥಿ 4] ಪಂಚಮಿ

2] ಗಿಡ, ಮರ, ಬೆಟ್ಟ ಪದಗಳು ನಮಸೂಚಕದ ಈ ಗುಂಪಿಗೆ ಸೇರುತ್ತದೆ _____

1] ರೂಢನಾಮ 2] ಭಾವನಾಮ 3] ಅಂಕಿತನಾಮ 4] ಸರ್ವನಾಮ

3] 'ಸಿರಿ'ಪದ ಸಂಸ್ಕೃತ ಪದ _____

1] ಸಂಪದ 2] ಐಶ್ವರ್ಯ 3] ಲಕ್ಷ್ಮಿ 4] ಶ್ರೀ

4] 'ಮಹೇಶ' ಇಲ್ಲಿರುವ ಸಂಧಿ _____

1] ಆಗಮ 2] ಲೋಪ 3] ಆದೇಶ 4] ಗುಣ

ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ ಒಂದು ವಾಕ್ಯದಲ್ಲಿ ಉತ್ತರಿಸಿ:

[4]

5] ಶ್ರೇಷ್ಠ ಗುರುವಿನಲ್ಲಿ ಎಂತಹ ಶಕ್ತಿ ಇರುತ್ತದೆ ?

6] ಗೋಪಾಲನ ಗೆಳೆಯರ ಹೆಸರೇನು?

7] ಸುರರ ಸತಿಯರ ಸ್ಥಾನವನ್ನು ಯಾರು ತುಂಬುತ್ತಾರೆ?

8] ಧನವಿಧವರಲ್ಲಿ ಇರಬೇಕಾದ ಗುಣ ಯಾವುದು?

ಸಂದರ್ಭ ವಿವರಿಸಿ:

[9]

9] ನನ್ನ ಕಾಫಿ ಕೂಡ ಚೆನಾಗಿರುತ್ತದೆ.

10] ಅಮ್ಮನ ಮಾತು ಸುಳ್ಳಾಗಲಾರದು..

11] ನೀರ ಕಂಡಲಿ ಮುಳುಗುವರಯ್ಯ.

ಈ ಕವಿಯ ಕಾಲ, ಸ್ಥಳ, ಕೃತಿಗಳು ಮತ್ತು ಪ್ರಶಸ್ತಿಗಳನ್ನು ಬರೆಯಿರಿ:

[3]

12] ಗುರುರಾಜ ಕರ್ಜಗಿ

13] ನಿಮಗೆ ಅವಶ್ಯವಿರುವ ಪುಸ್ತಕಗಳನ್ನು ಕಳುಹಿಸಿಕೊಡುವಂತೆ ಕೋರಿ ಸ್ವಪ್ನ ಬುಕ್ ಹೌಸ್, ಬೆಂಗಳೂರು ಇವರಿಗೆ ಪತ್ರ ಬರೆಯಿರಿ:

[5]

ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ ಮೂರು- ನಾಲ್ಕು ವಾಕ್ಯದಲ್ಲಿ ಉತ್ತರಿಸಿ:

2X4=8

- 14] ಹೆಡ್ ಮಾಸ್ತರರು ತಂದಿಟ್ಟ ಟ್ರೇನಲ್ಲಿ ಯಾವ ತರಹದ ಕಷ್ಟಗಳಿದ್ದವು?
 15] ರೂಪಿದ್ದು ಫಲವಿಲ್ಲ- ಈ ಮಾತಿನ ವೈಶಿಷ್ಟ್ಯವೇನು?
 16] ಬಸವಣ್ಣನವರು ಯಾವ ಧಾರ್ಮಿಕ ಜೀವನವನ್ನು ಕಂಡಿಸಿದ್ದಾರೆ?
 17] ಶತ್ರು ಭಲಕೆ 'ನಮೋ' ಎಂದು ಏಕೆ ಉತ್ತರನು ಹೇಳಿದನು?

ಈ ಪದ್ಯವನ್ನು ಪೂರ್ಣಗೊಳಿಸಿ : [4]

18] ನೀರ ಕಂಡಲಿ _____ ಕೂಡಲಸಂಗಮದೇವ.

ಈ ಕೆಳಗಿನ ಪ್ರಶ್ನೆಗಳಿಗೆ ಎಂಟು-ಹತ್ತು ವಾಕ್ಯದಲ್ಲಿ ಉತ್ತರಿಸಿ: [4]

19] ಗೋಪಾಲನೂ ಹೂಬಣದ ಸೊಗಸನ್ನು ಯಾವ ರೀತಿ ವರ್ಣಿಸಿದನು?

21] 'ಹವ್ಯಾಸಗಳು- ಬಗ್ಗೆ ಕುರಿತು 8-10 ವಾಕ್ಯದಲ್ಲಿ ಒಂದು ಪ್ರಬಂಧ ಬರೆಯಿರಿ:

[5]

ಗಾದೆ ವಿಸ್ತರಿಸಿ: [4]

21] ತಾಳಿದವನು ಬಳಿಯಾನ

CHARANS PUBLIC SCHOOL

STD- IX

MOCK TEST

MATHEMATICS

PART-A

MARKS:25

I. CHOOSE THE CORRECT ANSWER:

5X1=5

1. The discriminant of $2x^2+4x+5=0$ is _____

- a) 24 b) -24 c) 0 d) $-\frac{1}{2}$

2. If the discriminant of the quadratic b^2-4ac then the roots _____

- a) Two distinct real roots b) equal real roots c) No real roots d) none of the above

3. $\sin(90^\circ-A)$ is _____

- a) $\cos A$ b) $\tan A$ c) $\cot A$ d) $\sec A$

4. The value of $\operatorname{Cosec} 60^\circ$ is _____

- a) $\frac{1}{2}$ b) 2 c) $2/\sqrt{3}$ d) $\sqrt{3}/2$

5. The value of $\sin 45^\circ - \cos 45^\circ$ is _____

- a) 0 b) 1 c) 2 d) $\sqrt{2}$

II. ANSWER THE FOLLOWING QUESTION:

4X1=4

6. If $\cos A = \frac{5}{13}$ then find $\sec A$

7. Evaluate $\sin 18^\circ / \cos 72^\circ$

8. Define quadratic equation and write its standard form

9. Write all 3 conditions of discriminant of roots.

III. ANSWER THE FOLLOWING QUESTION:

4X4=16

10. The difference of squares of two numbers is 180. The square of the smallest number is 8 times the larger number. Find two numbers.

11. Find two consecutive positive integers sum of whose squares is 365.

12. Prove that

$$\cos A(1+\sin A) + (1+\sin A)/\cos A = 2 \sec A$$

13. Prove that

$$\sqrt{(1+\sin A)/(1-\sin A)} = \sec A + \tan A$$

CHARANS PUBLIC SCHOOL
STD- IX
MOCK TEST
MATHEMATICS
PART-B

MARKS: 25

IV. ANSWER THE FOLLOWING QUESTIONS:

5 x 2 = 10

14. Find the roots of Q. E $2x^2+x-6=0$ by factorisation method.
15. Find the roots of Q. E $2x^2-7x+3=0$ by formula method
16. If $\tan 2A = \cot (A-18^\circ)$, where $2A$ is an acute angle, find the value of A .
17. If $\sin A = \frac{3}{4}$ calculate $\cos A$ and $\tan A$
18. Find the value of K if $2x^2+kx+3=0$ has equal roots.

V. ANSWER THE FOLLOWING QUESTIONS:

5 x 3 = 15

19. Find the nature of
 - I) $2x^2-3x+5=0$
 - II) $3x^2-4\sqrt{3}+4=0$
20. Find the roots of Q. E $\sqrt{2}x^2+7x+5\sqrt{2}=0$ by factorisation method.
21. Find the roots of $\frac{1}{x+4} - \frac{1}{x-7} = \frac{11}{30}$, x is not equal to $-4, 7$
22. Evaluate $2 \tan^2 45^\circ + \cos^2 30^\circ - \sin^2 60^\circ$
23. If $\tan (A+B) = \sqrt{3}$ & $\tan (A-B) = \frac{1}{\sqrt{3}}$ find A and B .

STD: IX

Mock test

Max. Marks : 25

Part - A

I. Choose the correct answer:

1 × 4 = 4

1. Butanone is a four carbon compound with the functional group

- a. Carboxylic acid b. Aldehyde c. Ketone d. Alcohol

2. Asexual reproduction takes place through budding in _____

- a. Amoeba b. Yeast c. Plasmodium d. Leishmania

3. The anther contains _____

- a. Sepals b. Ovules c. Pistil d. Pollen grains

4. Which one of the following materials cannot be used to make a lens?

- a. Water b. Glass c. Plastic. d. Clay

II. Answer the following question:

4 × 3 = 12

5. Nitrogen (atomic number 7) and phosphorus (atomic number 15) belong to group 15 of the periodic table. Write the electronic configuration of these two elements.

Which of these will be more electronegative? Why?

6. What are the advantages and disadvantages of using a solar cooker? Are there places where solar cookers would have limited utility?

7. A convex mirror used for rear view on an automobile has a radius of curvature of 3.00 m. If a bus is located at 5.00 m from this mirror, find the position, nature and size of the image.

III. Answer the following question:

5 × 1 = 5

8. Explain the mechanism of the cleaning action of soap with a neat labelled diagram.

IV. Draw the following diagrams

2 × 2 = 4

9. Draw a neat diagram of water longitudinal section of flower.

10. Draw a neat labelled diagram of a bio gas plant.

Part-B

V. Answer the following questions:

1 × 6 = 6

11. What is a good fuel?
12. What is geothermal energy?
13. Find the focal length of a convex mirror whose radius of curvature is 32cm.
14. What are fossils?
15. Define pollination and fertilisation
16. Name three elements with filled outermost shells.

VI. Answer the following questions:

2 × 5 = 10

17. What are the disadvantages of fossil fuels?
18. Find the focal length of a lens of power -2.0 D. What type of lens is this?
19. Explain the terms analogous and homologous organs with examples.
20. How does the embryo get nourishment inside the mother's body?
21. Why do you think the noble gases are placed in separate group?

VII. Answer the following questions:

3 × 3 = 9

22. A doctor has prescribed a corrective lens of power + 1.5 D. Find the focal length of the lens. Is the prescribed lens diverging or converging?
23. How is the sex of a child determined in human beings?
24. Draw the structures of the following compounds.
a. Ethanoic acid b. Hexanal c. Butanone.

Charans Public School
Social-Science **Mock Test**

Std.IX **I Term** **MM:50**

HISTORY **MM: 25**

I. Answer the following questions:- **1×2=2**

1. Who are radicals?
2. What is meant by Human Rights?

II Answer the following questions:- **2×3=6**

3. What is Women's Movement? Give examples.
4. Division of Bengal was an example of divide and rule policy of the British. Discuss.
5. What were the major problems that emerged after the Second World War.

III. Answer the following questions:- **3×3=9**

6. Why did environmental activists oppose Sardar Sarovar Project?
7. What were the reasons for the withdrawal of Division of Bengal?
8. Why are Human Rights important?

IV. Answer the following questions:- **4×2=8**

9. Discuss the role of Balagangadhara Tilak in the Independence movement.
10. Arms race led to total destruction of world. In this background, what are the effects of Arms Race?

GEOGRAPHY**MM: 25****I. Answer the following questions:-****1×2=2****1. What is GPS?****2. What are the main uses of Manganese Ore?****II. Answer the following questions:-****2×3=6****3. Define the terms Minerals and Mining.****4. Define Transport and Communication.****5. Why Bengaluru is called the 'Silicon City' of India?****III. Answer the following questions:-****3×3=9****6. Why India is facing energy crisis?****7. List out the major industrial regions of India.****8. Write the importance of knowledge-based Industry in India.****IV. Answer the following questions:****4×2=8****9. What measures can be taken to conserve energy resources?****10. Explain briefly the importance of Transport in India.**