

**GANGA INTERNATIONAL SCHOOL**  
**HOLIDAY HOMEWORK**  
**CLASS – IX**

**ENGLISH**

1. Write an Acrostic Poem using your name on colourful A4 size paper.
2. Make detailed project on the following authors/poets on A4 size sheets and arrange it properly in a file.(Include life history, famous works, photographs etc.) Do according to your Roll number.

Sudha Murty (Roll No. 1-9)  
William D. Ellis (Roll No. 10-18)  
Alfred Lord Tennyson (Roll No. 19-27)  
Robert Frost (Roll No. 28-36)  
William Wordsworth (Roll No. 37-45)

3. Make a list of Twenty English proverbs and their meanings. Choose the theme according to your Roll Number. Do on colourful A4 size sheet.

Health (Roll No. 1-9)  
Wisdom (Roll No. 10-18)  
Friendship (Roll No. 19-27)  
Unity (Roll No. 28-36)  
Time (Roll No. 37-45)

4. Make a list of five unusual professions and give details about them. (Include educational qualification required, future prospects, job demands etc.)
5. Now a days one of the most important discussions in every family is children's studies. Develop a humorous conversation among parents and children over the concern for studies.
6. Write article on the following topic with the help of the given points. (on A4 size sheet)

**Afforestation is the answer to Global Warming**

Plant trees and nurture them  
Organisation of 'Van Mahotsav' in schools  
Use tree guards  
Ban cutting of green trees  
Nails/iron plates not to be used  
Create awareness camps

7. Write article on the following topic with the help of the given points. (on A4 sizesheet)

**Adult Education in India**

India biggest democracy but majority illiterate  
Main cause of superstition, ignorance, backwardness  
Illiterates easily misled by politicians  
Cannot benefit from modern technology—poor remain poor  
Adult education for grown-ups, unable to go to school  
Most of them farmers and factory workers  
Enable them to read, write and calculate; vocational training  
Night schools can be opened  
Make it a mass movement

8. Make a beautiful collage on 'Educate Girl Child'.
9. Make a poster on the theme 'Environment'. (A3 size sheet)

10. Write stories on the following themes. (Write on A4 size papers in about 150- 200 words).
  - i. 'Every Drop Counts'
  - ii. ' My Dream, My Life'
11. Read lesson 1-10 of the novel 'Three Men in A Boat'.
12. Write the summary of all the lessons (on A4 size sheet).
13. Write character sketch of Jerome K. Jerome, Harris, George and the dog Montmorency. .
14. Make a collection of 25 inspirational thoughts. Submit the soft copy (in pen drive) to the concerned teacher.
15. Read a book of any Indian Writer in English Literature and write the book review.
16. Write character sketch of the Hero and Heroine of the story.
17. Pick 50 difficult words from the book and write their English meanings from the dictionary.
18. Visit any monument of historical importance and write a report.
19. Write your experience in the form of a diary entry.
20. Write the historical importance of the monument.
21. Interview the foreign visitors there at the site and also paste photographs with them.
22. Write speech on the topic 'My Planet, My Responsibility'.
23. Read newspaper daily and paste twenty news from 'Sports or Politics' each in a scrapbook.
24. Cut and paste 5 news about language in the scrapbook.
25. Compose a beautiful poem on 'Childhood'.

## HINDI

- (i) स्वतंत्रता सेनानियों के चित्रों का संकलन कर एक एलबम तैयार कीजिए।
- (ii) प्रेमचन्द की एक कहानी लिखो।
- (iii) पाठ्य पुस्तक के अतिरिक्त कबीर के कोई दस दोहे लिखो।
- (iv) अपनी किसी भी यात्रा का वर्णन, यात्रा-वृत्तांत विधा पर आधारित तैयार करें।
- (v) भारत के दर्शनीय स्थलों की सूची सचित्र बनाइए।
- (vi) सामाचार पत्र में आपको कौन-सा पृष्ठ सबसे अच्छा लगता है और क्यों कोई दो खबरें काटकर अपनी कॉपी में चिपकाइए।
- (vii) 'लड़का - लड़की एक समान' विषय पर एक स्लोगन तैयार कीजिए।
- (viii) अपने विद्यालय में बच्चों के दाखिले हेतु विज्ञापन बनाइए।
- (ix) समाचार - पत्रों तथा विभिन्न पत्रिकाओं में से पर्यावरण संबंधी जो भी जानकारी मिले(चित्र सहित) अपनी फाइल में लगाइए।
- (x) अलंकार के प्रत्येक भेदों के पांच- पांच उदाहरण फाइल में लगाएं।
- (xi) किसी एक लेखक/लेखिका का जीवन परिचय सचित्र लिखिए।
- (xii) समास के प्रत्येक भेद के दस-दस उदाहरण लिखो व फाइल में लगाओ।
- (xiii) कवि रहीम के कोई पांच दोहे सचित्र लिखिए।
- (xiv) कोई एक अनौपचारिक पत्र लिखिए।
- (xv) श्रीकृष्ण का बाल वर्णन से संबंधित सुन्दर-सा पद सचित्र लिखिए।
- (xvi) देश प्रेम से संबंधित एक कविता लिखिए।
- (xvii) प्रकृति से संबंधित सचित्र कविता लिखिए।
- (xviii) ' मेरा प्रिय गांव ' पर अनुच्छेद लिखिए।
- (xix) ' जल ही जीवन है ' पर एक पोस्टर तैयार करें।
- (xx) समाचार पत्रों या विभिन्न पत्र- पत्रिकाओं से मजदूरी करते हुए बच्चों के चित्र काटकर चिपकाए।  
(कोई पांच)
- (xxi) घर के सदस्य जिसने आपको सबसे अधिक प्रभावित किया? उसके बारे में लिखिए।
- (xxii) कोई एक औपचारिक पत्र लिखिए।
- (xxiii) किसी दो विषय पर प्रतिवेदन लिखो।
- (xxiv) उन समाचारों को एकत्रित कीजिए जिसमें दहेज प्रथा के कारण लड़की ने विवाह करने से मना कर दिया हो।
- (xxv) अपने बचपन की कोई स्मृति का वर्णन संस्मरण शैली में कीजिए।

## MATHS

**General instructions:** Do the holiday homework in a separate thin copy.

1. Prepare a power point presentation on different types of quadrilaterals and their properties.
2. Construct a square root spiral on an A4size sheet showing the position of irrational numbers on the number line
3. Conduct a survey of at least 20 families in your locality and find:
  - a) The number of people suffering from various diseases like diabetes, hypertension, thyroid, cancer and cardiovascular diseases and express the information with the help of a bar graph.
  - b) The food most relished and popular among young children like pasta, pizza, momos, noodles & French fries. Depict the data on a pi chart .

4. Simplify the following

$$(16 \times 2^{n+1} - 4 \times 2^n) / (16 \times 2^{n+2} - 2 \times 2^{n+2})$$

5. Simplify  $(\sqrt{4})^{-7} (\sqrt{2})^{-5}$  removing the radical signs and negative indices.
6. Show that  $[(x^{a+b})^2 (x^{b+c})^2 (x^{c+a})^2] / (x^a x^b x^c)^4 = 1$
7. Prove that  $[a^{-1} / (a^{-1} + b^{-1})] + [a^{-1} / (a^{-1} - b^{-1})] = 2b^2 / (b^2 - a^2)$
8. Find the value of x if  $5^{x-3} \times 3^{2x-8} = 225$
9. Rationalize the denominator of
  - a)  $1 / (7 + 3\sqrt{2})$
  - b)  $5 / (\sqrt{3} - \sqrt{5})$
  - c)  $(3\sqrt{2} + 1) / (2\sqrt{5} - 3)$
10. Simplify  $3 / [(5 - \sqrt{3})] + 2 / [(5 + \sqrt{3})]$
11. If  $x = 2 + \sqrt{3}$ , find the value of  $x^2 + 1/x^2$
12. If  $a = (2 - \sqrt{5}) / (2 + \sqrt{5})$  and  $b = (2 + \sqrt{5}) / (2 - \sqrt{5})$ , Find the value of  $a^2 - b^2$
13. Evaluate  $15 / (\sqrt{10} + \sqrt{20} + \sqrt{40} - \sqrt{5} - \sqrt{80})$ , being given that  $\sqrt{5} = 2.236$  and  $\sqrt{10} = 3.162$ .
14. Find the product of  $(x - 1/x) (x + 1/x) (x^2 + 1/x^2) (x^4 + 1/x^4)$
15. Evaluate the following using identities.
  - a)  $185 \times 185 - 115 \times 115$
  - b)  $103 \times 185$
  - c)  $(0.99)^2$
16. Factorize the following
  - a)  $(x^2 + 3x - 18)$
  - b)  $(x^2 + 99x - 100)$

c)  $21x^2 - 2x + 1/21$

17. Divide the following

a)  $x^3 - 6x^2 + 11x - 6$  by  $x - 3$

b)  $x^3 - 6x^2 - 19x + 84$  by  $x - 7$

c)  $3x^3 + x^2 - 20x + 12$  by  $3x - 2$

18. A field in the shape of a trapezium whose parallel sides are 25 m and 10 m. The non-parallel sides are 14m and 13 m. Find the area of the field.

19. The lengths of the sides of a triangle are 5cm, 12 cm and 13cm. Find the length of the perpendicular from the opposite vertex to the side whose length is 13 cm.

20. Find the percentage increase in the area of a triangle if each of its side is doubled.

21. Expand using identities

a)  $(\sqrt{2}x - 3y)^2$

b)  $(x + 5)(x - 3)$

c)  $[(2x + 1) / 3x]^2$

22. An angle is equal to one third of its supplement. Find its measure.

23. The exterior angle of a triangle is  $110^\circ$  and one of its opposite angles is  $30^\circ$ . Find the other two angles of the triangle.

24. Three cubes each of side 5cm are joined end to end. Find the TSA of the resulting cuboid.

25. Find a and b if  $(\sqrt{3} - 1)/(\sqrt{3} + 1) = a + b\sqrt{3}$

## SCIENCE

1. What happens when the temperature of the solids increase?
2. When heat is being supplied to a solid, then what does the heat energy do to the particles of solid?
3. Why do we say that evaporation is a surface phenomenon?
4. Why it is that to smell cold food, we have to go close but smell of hot food reaches us several meters away?
5. Give an experiment to show that ammonium chloride undergoes sublimation.
6. What is Tyndall effect? Which kinds of solution show it?
7. What is centrifugation? Where is it used?
8. Differentiate between mixtures and compound by giving appropriate examples?
9. What is crystallization? Where is it used? Why is this better than simple evaporation technique?
10. What is chromatography? What are its various applications and underline the basic principle involved?
11. A solution of H<sub>2</sub>SO<sub>4</sub> acid is labelled as 95%. What is the mass of this that must be diluted with water to get 5L of solution containing 10g of H<sub>2</sub>SO<sub>4</sub> per litre?
12. What is the importance of nucleus?
13. What is ATP? Write its full form.
14. Draw the structure of mitochondria.
15. What are cell organelles? Write the names of different cell organelles and explain functions of any three of them.
16. A body starts from rest and moves with a uniform acceleration of 4m/s<sup>2</sup> until it travels a distance of 800m, find the final velocity?
17. The driver of a car traveling along a straight road with a speed of 72KM/hour observes a signboard which gives the speed limit to be 54KM/hour. The signboard is 70m ahead when the driver applies the brakes. Calculate the acceleration of the car which will cause the car to pass the signboard at the stated speed limit?
18. The displacement  $x$  of a particle in meters along the  $x$ - axis with time 't' in seconds according to the equation-  $X = 20m + (12m/s) t$  (a) draw a graph if  $x$  versus  $t$  for  $t = 0$  and  $t = 5$  sec (b) What is the displacement come out of the particles initially? (c) What is slope of the graph obtained?
19. Draw the graph for uniform retardation – (a) position – time graph (b) velocity – time (c) Acceleration-time.
20. The inability of the body to change its state of rest or motion is :- (a) Momentum (b) Force (c) Inertia (d) Acceleration.
21. Why are the passengers sitting in a moving bus pushed in the forward direction when the bus stops suddenly?
22. Derive the law of conservation of momentum from Newton's third law?
23. A certain particle has a weight of 30N at a place where the acceleration due to gravity is 9.8m/s<sup>2</sup> . (a) What are its mass and weight at a place where acceleration due to gravity is 3.5m/s<sup>2</sup>. (b) What will be its mass & weight at a place where acceleration due to gravity is zero.
24. The monsoon season is about to arrive after your summer vacation. Prepare a case study on various health disorders that can affect human life during this season.
25. Prepare a 3D model to show the states of matter.

## SOCIAL SCIENCE

*\*Please do this on the A4 size sheet*

*\*It should be represented in a single file*

1. Visit any Historical monument in your City and gather the detail information about it. Click photographs, take interviews of the tourist (Ask them about their experience) and get the questionnaire form filled from the foreigners. Compile all above information in the form of PPT or video or project file.

**Note:** (Mandatory to paste or post your pictures with monuments and Foreigners while taking their Interview)

2. Explain the 'Reign of Terror' in brief.

3. Write a short note on Napoleon Bonaparte and his contribution to France.

4. Make a project on the Second World War highlighting its Causes, Events of the War and Role of Germany under Hitler.

5. Compare the Role of Women in France and in Nazi society of Germany.

6. Make a project file on the life history of Adolf Hitler and his rise to power in Germany

7. On an outline map of France mark the following:

- (a) A place where fortress- prison was stormed by the people in 1789.
- (b) A port of France related to slave trade.
- (c) The National Anthem of France got its name from the name of this place.
- (d) Centre of the peasants panic movement.

8. On an outline map of India show

- a) Standard meridian,
- b) Latitude of the North and South of India
- c) Longitude of the East and west of India

9. On an Outline map of India show the ranges of India.

10. On an outline map of World Draw and label different Plate margins.

11. On an outline map of India draw major River of India.

12. On an outline map of India label the lakes of India.

13. Write the five feature of Peninsular Plateau, Indian desert, coastal plains and Island.

14. Prepare a Project file on Disaster Management In which you will mention about any two disasters (This file will be separated by others)

Format: i) Definition of Disaster

ii) Causes

iii) Mitigations

15. Find the latitude and longitude of the area where you are living.
16. Do you think it is good to elect someone President for life? Or it is better to hold regular election after every few years.
17. Follow the newspaper for one month and collect news items related to any Country. Do you find the news coverage adequate? If yes/no (How).
18. Find out more about the history and various organs of the UNO.
19. Collect any five news about the decision of the World Bank and IMF.
20. Visit Parliament House and write your views about it.
21. Visit a field and talk to the farmers of your region to find out what kind of farming method do the farmers use.
22. Write a short note on "Sarva Shiksha Abhiyan"
23. Make a Flow chart of the three sectors of Economic Activities.
24. Make a flow chart of four requirements for production of goods.
25. Justify the necessity of education for women for the success of the country.

## **COMMERICAL ARTS**

Scripting A-Z (7\*4 size), 3D

