

## Summer Assignment (2018-19)

Class IX

Subject - FOIT

Q. 1 Explain

- (1) Convergence (ii) Light pen (iv) Motherboard
- (2) Encryption and Decryption
- (3) OCR, MICR
- (4) CONTROL UNIT AND MEMORY UNIT
- (5) System software and Application software

### Subject - English

Ques. 1) One page daily handwriting (English) for 30 days, and date should be mentioned.

Ques.2 ) News paper cutting from Free Press or Times of India (positive news only) should be cut and pasted with five vocabularies and their meanings from 'dictionary' (30 days' news)

Ques. 3) Dream job: What do you want to become in your future....write one/two pages.

### Subject : mathematics

#### Number System (Summer Assignment for PT-1)

1. Convert to fraction: 18.567
2. Simplify  $3\sqrt{2} + 5\sqrt{3} - \sqrt{243} + \sqrt{32}$ .
3. Express in the form of  $\frac{p}{q}$  :  $32.\overline{732}$ .
4. Examine whether  $(7 - \sqrt{3})(7 + \sqrt{3})$  is a rational or an irrational number.
5. Express  $2.\overline{43}$  in the form of  $\frac{p}{q}$  where p and q are integers and  $q \neq 0$ .
6. Simplify the following:  
$$\frac{\sqrt{5} - 2}{\sqrt{5} + 2} + \frac{\sqrt{5} + 2}{\sqrt{5} - 2}$$
7. Simplify the following:  
$$\frac{3}{5 - \sqrt{3}} + \frac{2}{5 + \sqrt{3}}$$
8. Find the value of  $x + \frac{1}{x}$  given  $x = 2 + \sqrt{3}$ .
9. Represent  $\sqrt{3}$  on the number line.
10. Express the following rational numbers as decimal.  
(i)  $\frac{4}{9}$       (ii)  $\frac{437}{999}$       (iii)  $\frac{327}{400}$
11. Find an irrational number lying between  $\sqrt{5}$  and  $\sqrt{7}$ .
12. If both  $a$  and  $b$  are rational number, find the values of  $a$  and  $b$  in each of the following equalities:  
$$\frac{\sqrt{2} + \sqrt{3}}{3\sqrt{2} - 2\sqrt{3}} = a - b\sqrt{6}$$
13. If both  $a$  and  $b$  are real numbers, then find the value of  $a$  and  $b$  in the following equality:  
$$\frac{\sqrt{2} + \sqrt{3}}{3\sqrt{2} - 2\sqrt{3}} = a - b\sqrt{6}$$
14. Simplify the following :  
$$\sqrt{45} - 2\sqrt{20} + 4\sqrt{5}$$

15. If  $x = 3 - 2\sqrt{2}$ , find  $x^2 + \frac{1}{x^2}$ .

16. If  $x = 5 + 2\sqrt{6}$ , find the value of  $x + \frac{1}{x}$ .

17. Simplify:

$$\sqrt[4]{162} - 8\sqrt[3]{216} + 15\sqrt[5]{32} + \sqrt{225} + 3$$

18. Arrange the following surds in ascending order  $\sqrt[3]{2}, \sqrt[6]{3}, \sqrt[9]{4}$ .

19. Find the value of  $x$  if  $8^{2x+3} = 4^{x+1}$

20. Determine the values of  $p$  and  $q$ , if

$$p + 7\sqrt{5}q = \frac{7 + \sqrt{5}}{7 - \sqrt{5}} - \frac{7 - \sqrt{5}}{7 + \sqrt{5}}$$

**SANMATI H. S. SCHOOL**

**SUMMER ASSIGNMENT**

***SUBJECT: SOCIAL SCIENCE***

***CLASS: IX***

***Topic:***

***Submitted to:***

***Submitted by:***

# ACKNOWLEDGEMENT

For this project our team would like to thank our Social Science teacher

\_\_\_\_\_ madam as she had provided us lot of efforts.

We would also like to thank our **Principal Mrs. Pinky Joshi Madam** as she gave us a golden opportunity to show our talent.

We would also like to thank our parents as they provided us with necessary materials needed for the project

‘No Endeavour achieves success without the advice and co-operation of other’

# CERTIFICATE

This is to certify that under signed have assented and evaluated the project on Topic:

Submitted by – \_\_\_\_\_

This project is original to the best of our knowledge and has been accepted for Internal Assessment.

Teacher's  
Signature

HOD's  
Signature

CO-ORDINATOR's  
Signature

PRINCIPAL's  
Signature

# PROJECT EVALUATION PROFORMA

SCHOOL'S NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STUDENT'S NAME: \_\_\_\_\_

ROLL NO. : \_\_\_\_\_

CLASS: \_\_\_\_\_

SECTION: \_\_\_\_\_

## TEACHERS' ASSESSMENT

1. Content accuracy and originality	
2. Presentation and creativity	
3. Process of project completion	
4. Viva – Voce'	

5. Overall remarks: \_\_\_\_\_

\_\_\_\_\_

6. Teacher's signature \_\_\_\_\_

Date \_\_\_\_\_

**Subject: Social Science**

“We cannot stop natural disasters but we can arm ourselves with knowledge: so many lives wouldn't have to be lost if there was enough disaster preparedness.” - Petra Nemcova

Keeping the above statement in mind, prepare a project on Disaster Management as per the following guidelines:

1. Highlight the following: - Definition of ‘Disaster’.
- What is a disaster management cycle?
- What are the types of Disasters?
- What is vulnerability and risk?
- What is a Hazard? How is it classified?
- Differentiate between hazard and disaster.
- Contrast and compare physical, chemical and biological hazard.

Complete the following table with the relevant information:(Any one physical, chemical, biological disaster)

Hazard	Elements of the Hazard	Vulnerable groups	Prevention	Examples
Physical				
Chemical				
Biological				

3a. Prevention and Mitigation of Common Disasters in India. Select any two for your project.  
Prevention and Mitigation of Common Disasters in India. Select any two for your project.

- Earthquake
- Cyclones
- Flood
- Drought
- Landslides
- Any man – made disaster

3b. Based on your selection in Point 3a above, enumerate the following in your project:

- Meaning
- Causes
- Do's and don'ts
- Prevention and mitigation measures
- Your emergency Kit
- Latest means of forecasting Disasters
- Prepare a case study on any one of the Disasters that you have chosen to research

Following essentials are required to be fulfilled for its preparation and submission-

1. The total length of the project report will not be more than 15 written pages of foolscap size (A-4 size).
2. The project report will be handwritten and credit will be awarded to original drawings, illustrations and creative use of materials.
3. The students should continuously discuss with the teacher and prepare a draft before finalizing the report.
4. The project report will be presented in a neatly bound simple folder.
5. The project report will be developed and presented in this order Cover page showing project title, student information, school and year List of contents with page numbers. Acknowledgements (acknowledging the institution, offices and libraries visited and persons who have helped).  
Project Overview: Purpose, Aim, Methodology and experiences while doing the project  
Chapters with relevant headings  
Summary and conclusions based on findings.  
Planning and activities to be done during the project, if any giving a calendar of activities.

Bibliography : should have the Title, pages referred, author, publisher, year of publication and if a website the name of the website with the specific website link which has been used. All the photographs and sketches should be labeled and acknowledged.

Teacher's evaluation report

### Subject-Physics

1. What is the difference between uniform and non uniform acceleration?
2. What happen to the speed, velocity and acceleration? When an object is moving in a circle with uniform speed?
3. A object goes from point X to Y then come back from Y to X. what is the displacement and average velocity.
4. Write down the difference between scalar and vector quantity.
5. Write down the difference between Speed and velocity
6. A car accelerates from 36 Km/h to 54 Km/h in 10 sec. find the acceleration and the distance travelled by the car.
7. A scooter travelling at 10m/sec to 20m/sec in 4 sec. find the acceleration of the scooter.
8. A particle is moving in a circle of diameter 20m. what is its distance as per the table given below

S. No.	Round	Displacement	Distance
1	1		
2	1.5		
3	2		
4	2.5		

9. A ball is thrown upwards and it goes to the height of 100m and come back (i) what is the net displacement (ii) what is the net distance?
10. When an object is thrown upward. What is the velocity at the highest point of motion of the object?
11. A bullet is moving at a speed of 367 m/s. when it embeds into a lump of moist clay. The bullet penetrates for a distance of 0.0621. Determine the acceleration of the bullet while moving into the clay.
12. Distinguish b/w uniform and non uniform motion. Is uniformly accelerated motion is a uniform motion? Give one example of each, uniform and non-uniform motion.
13. Define uniform circular motion and give example of it. Why it is called accelerated motion?
14. A man weight 60kg runs along the rails with a velocity of 18km/h and jump in to a car of mass 100 kg standing on the rail calculates the velocity with which car will start travelling along the rail.
15. A stone is thrown vertically upward with a velocity of 40m/s and is caught back. Taking 10 m/s<sup>2</sup>. Calculate the maximum height reached by stone. What is the net displacement and total distance covered by the stone?
16. (i) Differentiate between uniform linear and uniform circular motion.  
(ii) write any 4 example of uniform circular motion.  
(iii) is uniform circular motion is accelerated motion?
17. (i) Differentiate between speed and velocity.  
(ii) When is a body said to have uniform velocity?  
(iii) How we can describe the position of object? Illustrate with suitable example.





- Q9. What happens when an inflated air balloon is pricked with a pin? Name the property of the gaseous state exhibited by this observation.
- Q10. Why do we see water droplets on the outer surface of a glass containing ice cold water?
- Q11. Why are gases compressible but not liquid?
- Q12. What causes more severe burns-boiling water or steam?
- Q13. Which gas is called dry ice? Why?
- Q14. Why do the doctors advise to put strips of wet cloth on the forehead of a person having high fever?
- Q15. Why do wet cloths dry quickly in the sun than in the shade?
- Q16. Why do people sprinkle water on the roof after a hot sunny day?
- Q17. It is a hot summer day; Priyanshi and Ali are wearing cotton and nylon clothes respectively. Who do you think would be more comfortable and why?
- Q18. Write some properties of gases.
- Q19. Explain how the rate of evaporation of a liquid is affected with:
- Increase in temperature of the liquid.
  - Decrease in exposed surface area.
- Q20. How does evaporation differ from boiling?
- Q21. Comment on the following statements:
- Evaporation causes cooling.
  - Sponge though compressible is a solid.
  - Ice is solid at 0°C, while water is liquid at room temperature.
- Q22. Give reasons-
- Our palm feel cold when we put some acetone or petrol or perfume on it.
  - We are able to sip hot tea or milk faster from a saucer rather than a cup.
  - Desert cooler cool better on a hot dry day.
- Q23. How will you demonstrate that particles of matter are continuously moving?
- Q24. How will you demonstrate that particles of matter attract each other?
- Q25. What is dry ice? How is it prepared?
- Q26. What is evaporation? In what way is it different from boiling?
- Q27. What do you understand by diffusion? Give one example.
- Q28. With proper explanation, explain whether the following statements are true or false?
- Sublimation occurs only when the solid is heated.
  - A lighter gas can move downwards and a heavier gas can move upwards.
  - Interconversion of matter is a constant temperature process.
- Q29. Define latent heat of fusion and latent heat of vaporization.
- Q30. Suggest an activity to show that the rate of diffusion of liquid decreases with increase in intensity of the liquid.

## विषय—हिन्दी

बोध आधारित—

- उपसर्ग, प्रत्यय की परिभाषा व उनका आगम हिन्दी भाषा में कैसे हुआ बताइए।
- रकार युक्त 20 शब्दों, रेफ़ युक्त 20 शब्दों, और (र)पदेन युक्त 20 शब्दों की सूची बनाइये—

रचनात्मक—

- समाचार पत्रों की लुभावनी हिन्दी का एक कोलॉज बनाइये—
- मध्यकालीन कवि रहीम, रैदास और कबीर के जीवन पर प्रकाश डालिए—
- मिट्टी से संबंधित तीन कवितायें लिखिए—

कल्पनाशीलता पर आधारित—

- कोई एतिहासिक इमारत की सुरक्षा क्यों जरूरी है? संवाद शैली में नुक्कड़नाटक लिखिए—