

# Sir Padampat Singhania School, Kota

Holiday Homework Session: 2019-20 Class – IX

# **English**

- 1. Compose a creative, original write up for your school magazine.
- 2. Read a book of your choice and write a review.
- 3. Read the following clues and write a story; give a suitable title and moral of the story.

Mr. Agarwal a wealthy businessman

- Thief entered – Mr. Agarwal thanked – to give company – birthday – gave him good food and drinks – gave a purse of silver coins – business ruined – Mr. Agarwal became poor – 50<sup>th</sup> birthday – alone – no food & drinks – a man entered – recognized – the old thief – came with fruits, sweets and drinks – and a bag full of money.

# Hindi

विवाह-समारोह में दिखावेबाज संस्कृति के बारे में दो मित्रों के संवाद को लिखें।

# **Social Science**

**Geography** – Write a note on black hole experiment explaining big band theory and silk route. **Political Science** – Project on Lok Sabha elections 2019.

\* Stick relevant pictures.

**Economics** - \* Pictorial representation of – Drawbacks of modern farming method.

\* Write note on – Rising importance of organic food.

#### Worksheet

## **History: French revolution**

### Answer the following questions.

- 1. What was Bastille? Why was it hated by all
- 2. What was the old regime?
- 3. What was Marseillaise? Who composed it? When was it sung for the first time?
- 4. What was Estates General?
- 5. State the events that led to the formation of the national assembly.
- 6. Why did members of the third estate walk out of the Assembly of the Estates General called by Louis XVI on May 5, 1789?
- 7. How did France become a constitutional monarchy?
- 8. Who were Jacobins what was their role in emergence of France as a republic
- 9. How did storming of the Bastille become the main cause of the French revolution?
- 10. Analyse the main features of the French constitution drafted in 1791.
- 11. Describe the triangular slave trade that was carried on during the 18th and 19th centuries.
- 12. What was the convention? Describe its role in France.
- 13. Analyse the role of Jacobins during the French revolution.
- 14. Which period in French history is known as reign of terror? Give reasons.
- 15. Why were women disappointed by the constitution of 1791 in France?
- 16. Evaluate the condition of women in France before and after the revolution.
- 17. How was slavery abolished in France

18. Explain the rise of Napoleon. Mention the laws enforced by Napoleon to modernize France.

#### Worksheet

## Geography: Physical features of India

### I. Define the following

1) Pass. 2) Glacier 3) Plateau. 4) Plate tectonics. 5) Pangaea

6) Strait 7) Gulf 8) bay. 9) Lagoon 10) Estuaries 11). Delta

## II. Answer the following.

- 1) Explain the plate boundaries
- a) Divergent boundary
- b) Convergent boundary
- c) Transform boundary
- 2) How did the Himalayas come into being?
- 3). 'The land of India displays great physical variation.' Explain with example.
- 4) Describe distinguishing features of Himachal Himadri and Shivalik.

#### Worksheet

## **Economics: The Story of village Palampur**

- Q1. What is production? Give an example.
- Q2. What is the aim of production?
- Q3. What are the factors of production?
- Q4. What is the most abundant factor of production in India?
- Q5. What is meant by yield?
- Q6. Which term is used for production for self consumption?
- Q7. Which is the main reason for growing three different crops in a year in Palampur?
- Q8. Scientific reports indicate that the modern farming methods have overused the land. Explain by giving examples.
- Q9. How did the introduction of Green Revolution affect the cost of cultivation?
- Q10. Mention the standard unit for measuring the area of land.
- Q11. What are the limitations of the Green Revolution?
- Q12. Give three reasons why small farmers have to arrange capital by borrowing.
- Q13. Explain any four efforts which can be made to increase non-farming production activities in villages.
- Q14. Explain the basic requirements for the production of goods and services. Which one is the most important?
- Q15. Distinguish between Fixed, Working and Human capital.
- Q16. How is land distributed amongst the farmers of Palampur? Explain.
- Q17. Highlight it the basic constraints in raising production from a Farm.
- Q18. Why is it important to develop irrigation facilities? Explain.
- Q19. Compare organic farming with modern method of farming. Which one is better and why?
- Q20. The farm laborers are exploited in India. Do you agree with the statement? Justify. Suggest any two ways to protect the exploitation of farm laborers.

# Science

#### **Biology**

- 1. To prepare a temporary mount of onion peel cells and human cheek cells. Write this activity in lab copy.
- 2. Ramesh notices that while cooking kheer, his mother has kept raisins in plain water. After sometime he observed that the raisins has got, swollen.
- (a) Why did the raisins swell when kept in plain water? What term is used for this phenomenon.

(b) What will happen if t	hese raisins are kept in	concentrated sugar solution.
Physics	•	C
1. How are states of rest and motion relative?		
2. Write S.I Unit of –		
(i) Velocity	(ii) Distance	(iii) Acceleration

- 3. Give two uses of v-t graph.
- 4. Differentiate between uniform and non uniform acceleration.
- 5. In what situation the v-t graph shows a straight line with negative slope?
- 6. Which of the following is moving faster?
  - (a) A car moving at a speed of 36 km/h
  - (b) A scooter moving with a speed of 300 m per minute.
- 7. A particle moves 3 m North then 4 m East and finally 6 m South. Calculate displacement.
- 8. A train 100 m long is moving with a constant velocity of 60 km/h. Find the time it takes to cross the bridge 1 km long.
- 9. A car moves with a speed of 30 km/h for half an hour, 25 km/h for one hour and 40 km/h for two hour. Calculate average speed of the car.
- 10. The graph given below shows the position of a body at different times. Calculate speed of the body as it moves from
  - (a) A to B (b) B to C (c) C to D

#### **Chemistry**

- 1. Define diffusion? Give one example each of diffusion of (a) Solid into liquid (b) gas into liquid.
- 2. Name the state of matter which can expand to any extent and remains homogenous even during expansion.
- 3. What would happen to interparticle forces of attraction when solid change into a liquid?
- 4. Give one example in which matter is present in plasma state.
- 5. Sporge is a solid. Yet me are able to compress it. Why?

# **Computer**

Explain different categories of computers on the basis of principles of operations and configuration.

# **Mathematics**

# Activity

- 1. To draw square root spiral (up to  $\sqrt{13}$ )
- 2. To prepare the chart of mathematical identities.

# Worksheet - Number System

- 1. Write three irrational numbers between  $\frac{5}{2}$  and  $\frac{7}{2}$ .
- 2. Express  $18.\overline{48}$  in the form p/q, q  $\neq$  0
- 3. Represent  $\sqrt{17}$  on the number line.
- 4. What is the rationalising factor of  $2\sqrt[3]{5}$ ?
- 5. Rationalise the denominator of  $\frac{1}{\sqrt{7}-\sqrt{3}}$ .
- 6. How many rational numbers lie between  $\sqrt{2}$  and  $\sqrt{3}$ ? Find any one rational number lying between  $\sqrt{2}$  and  $\sqrt{3}$ .
- 7. Find the square root of 3.6 geometrically.
- 8. Simplify  $\sqrt[4]{81} 8\sqrt[3]{216} + 15\sqrt[5]{32} + \sqrt{225}$

9. If 
$$a = \frac{4}{3 - \sqrt{5}}$$
, find the value of  $a + \frac{4}{a}$ 

10. If 
$$\frac{5+\sqrt{3}}{5-\sqrt{3}} = a+b\sqrt{3}$$
, find rational numbers, a and b.

## **Topic: Polynomial**

- Find the zero of the polynomial 2z+6. 1.
- Find the zero of the polynomial p(x) = 7, if any give reason. 2.
- 3.
- Find the zeroes of the polynomial  $2x^2 + 7x 4$ . Find the remainder where  $x^3 ax^2 + 6x a$  is divided by x a. 4.
- Find the value of  $346^2 345^2$ . 5.
- By remainder theorem, find the remainder where  $p(x) = 4x^3 3x^2 + 2x 5$  is divided by g(x) = 1 2x. 6.
- Factorise the polynomials: 7.

(a) 
$$16x^2 + 25 - 40x$$

(b) 
$$x^4 + x^2 + 1$$

(c) 
$$27x^3 + 125y^3$$

(d) 
$$27a^3 + 8b^3 + 54a^2b + 36ab^2$$

(e) 
$$x^3 - 6x^2 + 11x - 6$$

(a) 
$$16x^2 + 25 - 40x$$
 (b)  $x^4 + x^2 + 1$  (c)  $27x^3 + 125y^3$  (d)  $27a^3 + 8b^3 + 54a^2b + 36ab^2$  (e)  $x^3 - 6x^2 + 11x - 6$  (f)  $x^2 + \frac{1}{x^2} + z - 2x - \frac{2}{x}$ 

(g) 
$$9x^2 + y^2 + z^2 - 6xy + 2yz - 6zx$$
 (h)  $(x-3y)^3 + (3y-7z)^3 + (7z-x)^3$ 

(h) 
$$(x-3y)^3 + (3y-7z)^3 + (7z-x)^3$$

(i) 
$$2\sqrt{2}a^3 + 8b^3 - 27c^3 + 18\sqrt{2}abc$$
 (j)  $(x^2-2x)^2 - 11(x^2-2x) + 24$ 

(j) 
$$(x^2-2x)^2 - 11(x^2-2x) + 24$$

- Find the value of  $x^3 8y^3 36xy 216$ , when x = 2y + 6. 8.
- If  $x + \frac{1}{x} = 7$ , then find the value of  $x^3 + \frac{1}{x^3}$ . 9.
- Using factor theorem, show that  $x^2 + 5x + 6$  is a factor of  $x^4 + 5x^3 + 9x^2 + 15x + 18$ . 10.