SERVICE BEFORE SELF

SALWAN PUBLIC SCHOOL

Sector-15 (II), Gurgaon

Holiday Home Work

(2017-18)

CLASS – IX

English

Dear Students

Summer vacations are here! A respite from soaring temperature and scorching sun! It’s a welcome break.

To keep your palate full and brain cells tingling, exciting and interesting assignments have been compiled to keep you engaged with constructive activities.

The activities have been designed to enrich and enhance literary skills and aid in progressive learning.

GULLIVER'S TRAVELS (Term -1)

Instructions:

Please note that the Novel – Gulliver's Travels, has been initiated in the class.

Answer the following questions in about 80 - 100 words. Write the answers along with the questions in your literature notebook. Please mention the correct chapter and question number.

Last Date of Submission: July 10, 2017

Read Part 1 and Part 2 of Gulliver's Travels and answer the questions that follow briefly. (50-60 words)

Part – 1

Chapters 1 – 4

1. Where does Gulliver meet the Emperor?
2. How is Gulliver fed?
3. Why does Gulliver cooperate with the Lilliputians?
4. Who is Gulliver's worst enemy at the Lilliputian court?

Chapters 5-6

1. What is the great service performed by Gulliver to the Emperor of Lilliput, and what is his reward?
2. What is the first event that gets Gulliver into trouble?
3. How does Gulliver explain the difference between the ideal laws of Lilliput and its present corrupt condition?
4. How are children brought up in Lilliput?

Chapters 7-8

1. What are the main charges brought against Gulliver by the Lilliputians?
2. What is the original proposed punishment of Gulliver, and what is the final punishment?
3. How does Gulliver escape from the Lilliputians?

Part – II

Chapters 1-2

1. How does Gulliver get to Brobdingnag?
2. Why is he abandoned by his shipmates there?
3. Who in Brobdingnag befriends him most closely?
4. What does the farmer plan to do with Gulliver?

Chapters 3-4

1. What does the King of Brobdingnag discuss with Gulliver?
2. What do the Brobdingnagian philosophers think Gulliver is?
3. Who is Gulliver's enemy at the court of Brobdingnag?
4. How large is the palace of Brobdingnag, according to Gulliver?

Chapters 5-6

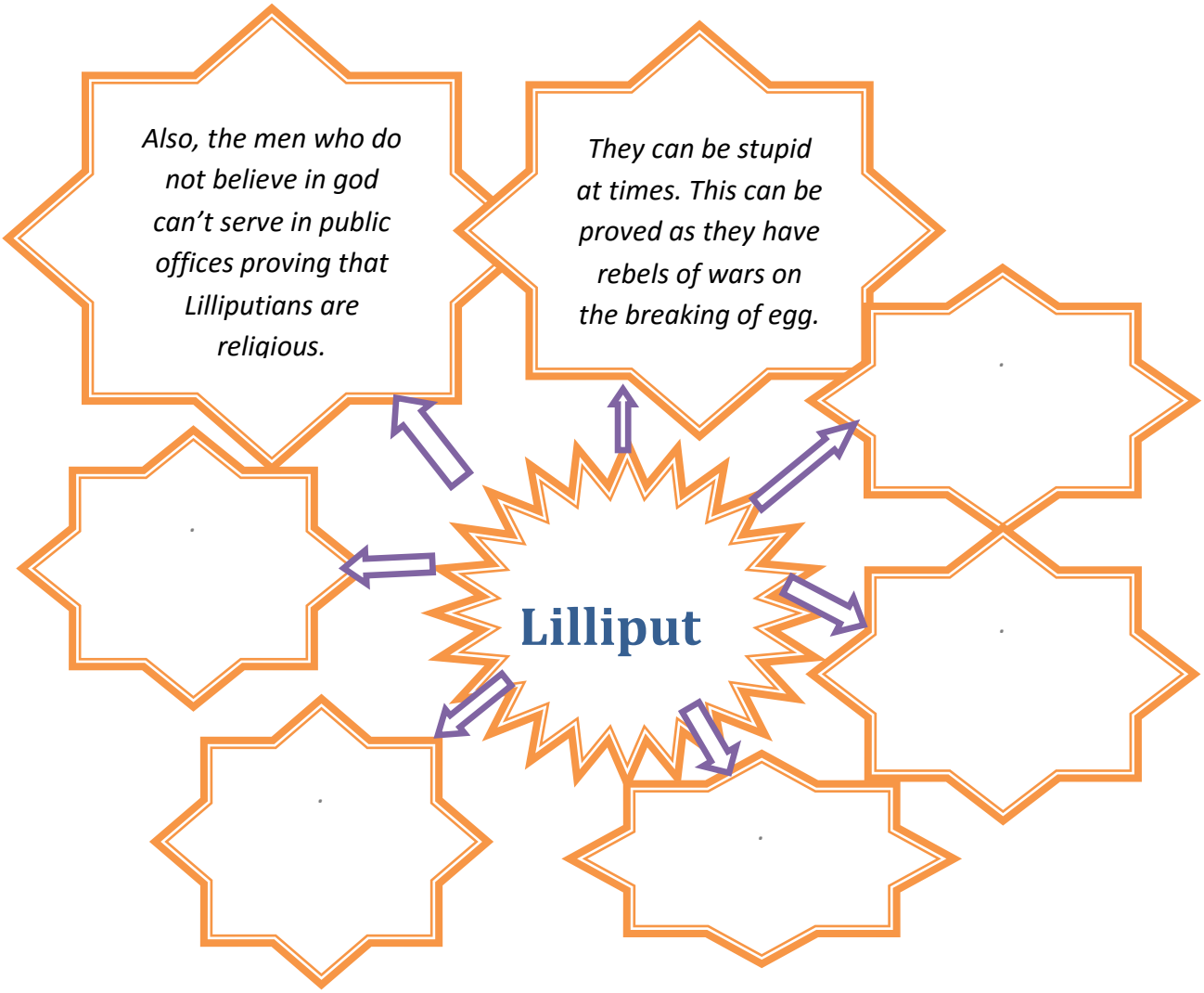
1. What do the Maids of Honor do in front of Gulliver and why?
2. How does their action affect him?
3. How does Gulliver try to perform musically in Brobdingnag?

Chapters 7-8

1. Why does Gulliver tell the King of Brobdingnag about gunpowder?
2. What does Gulliver think of the King of Brobdingnag's ideas about government?
3. Why do they have an army, since there are no external enemies?
4. How does he leave Brobdingnag?

MIND MAP

Q. On the basis of the Lilliputians laws, their concepts of justice, their way of raising children, of granting employment and other believes, assess their qualities and express your opinions on the same using Web Chart.



Q. Describe Gulliver's sea voyage that led him to Brobdingnag in the form of the Flow Chart. Why did his companions leave him behind?

On 20th June, 1702, Gulliver along with the captain sailed for Surat. They had a prosperous gale till they arrived at the Cape of Good Hope; where they landed for water; but discovered a leak. They could not leave Cape till the end of March.

⇩

They then sailed and had a good voyage till they passed straits of Madagascar.

हिन्दी

निर्देशः निम्नलिखित कार्य व्याकरण की नोटबुक में करेंः

अनौपचारिक पत्र

1 आपके मित्र का चयन 'जिला स्तरीय क्रिकेट टीम' में हो गया है। मित्र को बधाई देते हुए एक पत्र लिखिए।

2 आप समुद्र किनारे रहते हैं। दिल्ली में रहने वाले अपने मित्र को शीतावकाश में अपने घर बुलाने के लिए एक निमंत्रण पत्र लिखिए।

अनुच्छेद लेखन

1 मनोरंजन के आधुनिक साधन

2 मन के हारे हार है मन के जीते जीत

संवाद लेखन

1 आपने कुछ दिन पहले जापान की यात्रा की है, वहाँ पर आपने बुलेट ट्रेन की सवारी की है। बुलेट ट्रेन के विषय पर दो मित्रोम् के बीच संवाद को लिखिए।

2 शहर में आए दिन होने वाली सड़क दुर्घनाओं से बचकर रहने के बारे में पिता पुत्र के बीच संवाद लिखिए।

विज्ञापन लेखन

1 चॉकलेट कंपनी के लिए एक आकर्षक विज्ञापन तैयार कीजिए।

संस्कृत

निर्देशः चार्ट पेपर पर वर्ग पहेली बनाइए

कक्षा नौवीं – पढ़ाये गये पाठों के आधार पर कोई एक वर्ग पहेली बनाइए।

French

Objective type questions to be done in the Workbook itself and subjective type questions in the notebook.

Name of the Book : Get Ready Practice Book

Section A: Compréhension Ecrite

Compréhension 1- Compréhension 9

Section B: Expression Ecrite

Décrire une personne - Page 34

Section C: Grammaire

- Pages 50 to 58
- Pages 61 and 62
- Pages 72 to 75
- Pages 78 ,81, 82
- Pages 84 to 92

Section D: Littérature

Question Answer: Chapter 1 to Chapter 4

Maths

MENTAL MATHS WORKSHEET

Instruction: Attempt all the Mental Maths questions in these worksheet only.

Topic : Number Series

1) **In each of the following questions a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and fill in the blank spaces.**

Q1 . 2, 7, 14, 23, ?, 47

(a) 31 (b) 28 (c) 34 (d) 38

Q2. 4, 6, 12, 14, 28, 30 ?

(a) 32 (b) 64 (c) 62 (d) 60

Q3. 4, 9, 13, 22, 35, ?

(a) 57 (b) 70 (c) 63 (d) 75

Q4. 11, 13, 17, 19, 23, 29, 31, 37, 41, ?

(a) 43 (b) 47 (c) 51 (d) 53

Q5. 15, 31, 63, 127, 255, ?

(a) 513 (b) 511 (c) 523 (d) 517

Q6. 5, 11, 17, 25, 33, 43, ?

(a) 49 (b) 51 (c) 52 (d) 53

Q7. 9, 12, 11, 14, 13, ?, 15

(a) 12 (b) 16 (c) 10 (d) 17

Q8. 0.5, 0.55, 0.65, 0.8, ?

(a) 0.7 (b) 0.9 (c) 0.95 (d) 1

Q9. 1, 4, 27, 16, ?, 36, 343

(a) 125 (b) 50 (c) 78 (d) 132

Q10 .20, 19, 17, ?, 10, 5

(a) 15 (b) 14 (c) 13 (d) 12

Topic: Ranking Test

Q1.Madhav ranks thirteenth in a class of thirty-one. What is his rank from the last?

(a) 17 (b) 18 (c) 20 (d) none of these

Q2.In a row of children, Deepa is ninth from the left and Ajay is thirteenth from the right. When they exchange places, Deepa will be seventeeth from the left. Which of the following will be the new position of Ajay from the right?

(a) 20^{th} (b) 7^{th} (c) 21^{st} (d) 9^{th}

Q3.Prabir remembers that his father's birthday is between thirteenth and sixteenth of May whereas his sister remembers that their father's birthday is between fourteenth and eighteenth of May. On which day of may is their father's birthday?

(a) 14^{th} (b) 16^{th} (c) 19^{th} (d) 17^{th}

Q4.Mahi ranked ninth from the top and thirty eighth from the bottom in a class. How many students are there in the class?

(a) 42 (b) 44 (c) 46 (d) 48

Q5.In a row of girls facing North, Reena is 10th to the left of Pallavi, who is 21st from the right end. If Malini, who is 17th from the left end, is fourth to the right of Reena, how many girls are there in the row?

(a) 37 (b) 41 (c) 43 (d) 49

Q6.In a queue, Viji is fourteenth from the front and Jack is seventeenth from the end, while Mary is in between Viji and Jack. If Viji be ahead of Jack and there be 48 persons in the queue, how many persons are there between Viji and Mary?

(a) 5 (b) 6 (c) 7 (d) 8

Q7.In a queue, Arun is 10th from the front while Mukesh is 25th from behind and Maha is just in the middle of the two. If there be 50 persons in the queue, What position does Maha occupy from the front?

(a) 17^{th} (b) 18^{th} (c) 19^{th} (d) 20^{th}

Q8.In a row of girls, Ramya is fifth from the left and Priya is sixth from the right. When they exchange their positions, then Ramya becomes thirteenth from the left. What will be Priya's position from the right?

(a) 7^{th} (b) 9^{th} (c) 12^{th} (d) 14^{th}

Q9. If Ajay finds that he is twelth from the right in a line of boys and fourth from the left, how many boys should be added to the line such that there are 28 boys in the line?

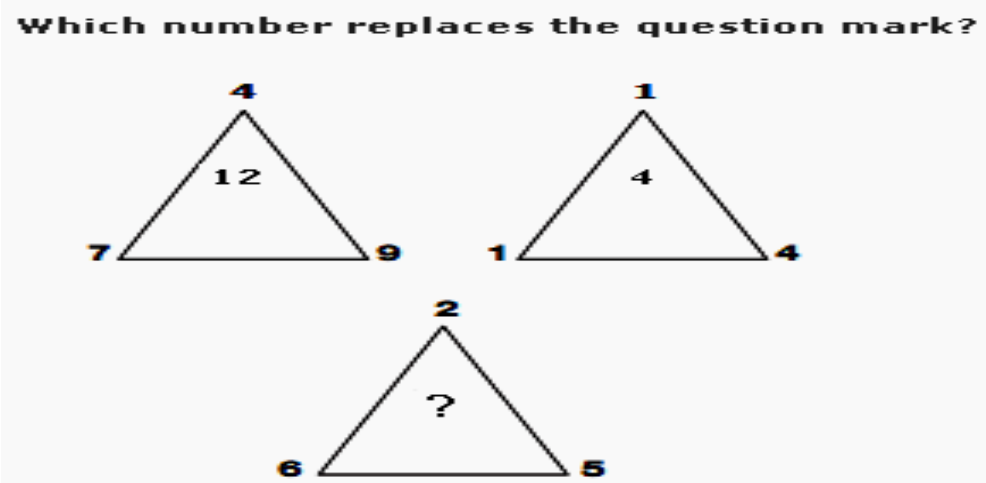
(a) 13 (b) 14 (c) 16 (d) 20

Q10.Sugan ranks sixteenth from the top and forty ninth from the bottom in a class. How many students are there in the class?

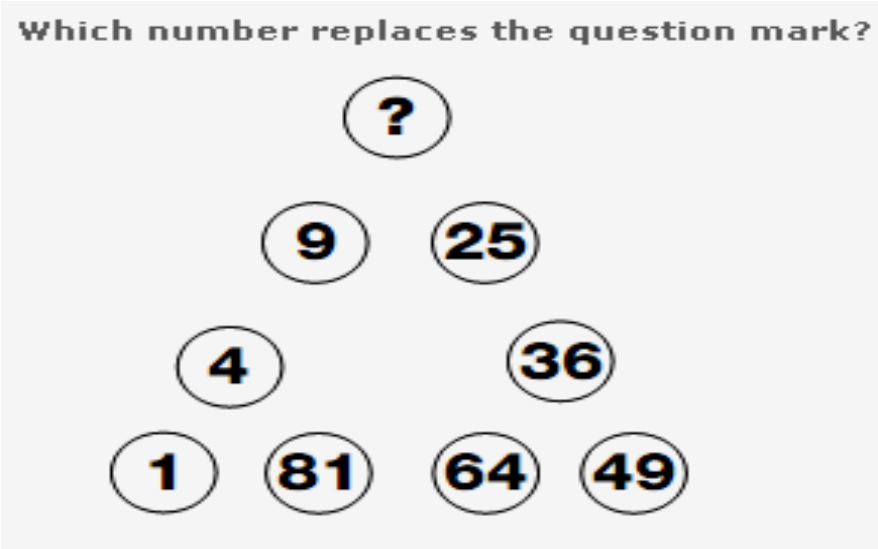
(a) 54 (b) 64 (c) 65 (d) 66

Topic: Puzzles

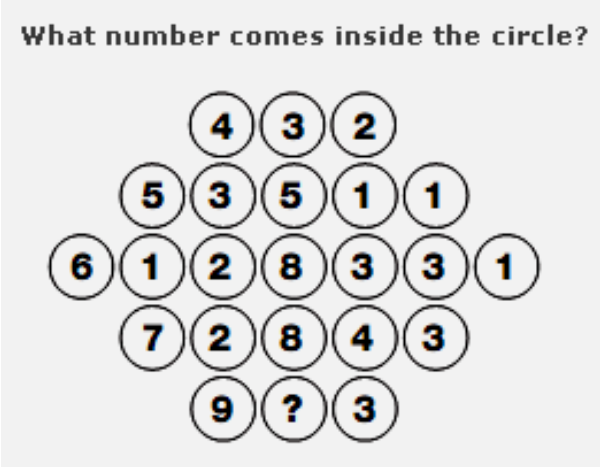
Q1.



Q2.



Q3



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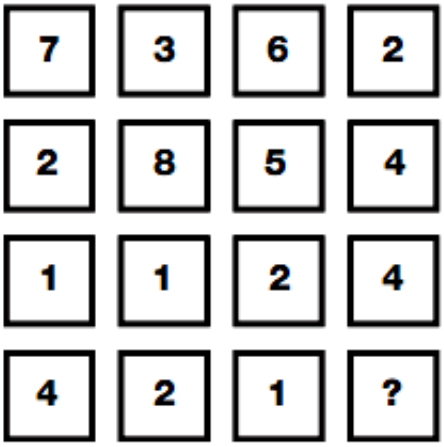
Q4.

Which number replaces the question mark?

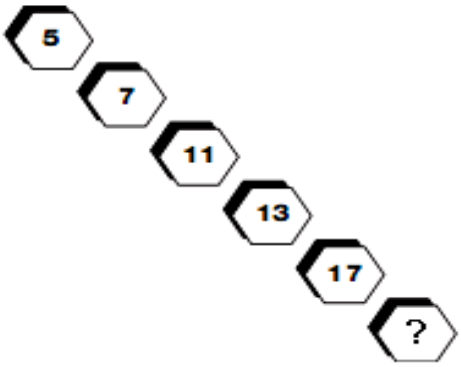


Q5.

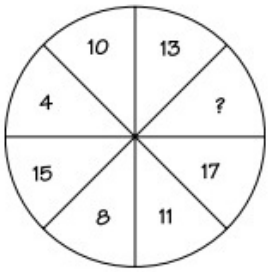
Which number replaces the question mark?

Q6.

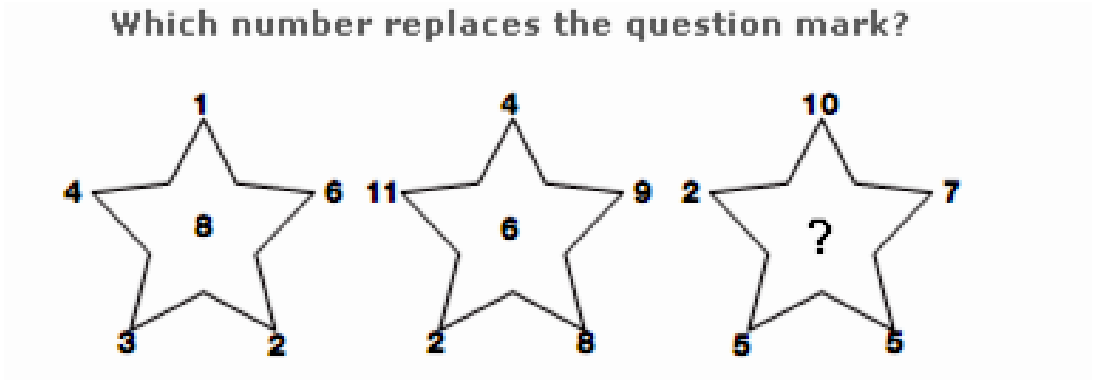
Which number completes the puzzle?



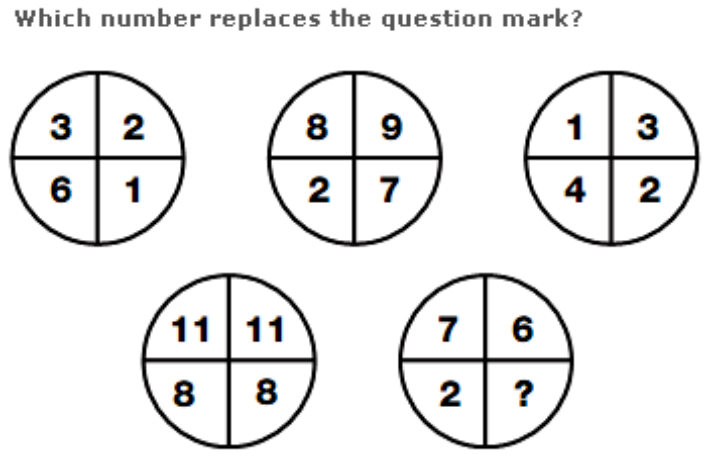
Q7.


10
13
4
?
15
17
8
11

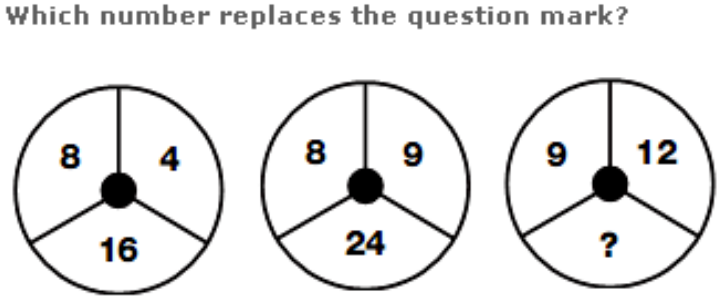
Q8.


Which number replaces the question mark?
1
4
6
8
3
2
4
11
9
6
2
8
10
2
7
?
5
5

Q9.


Which number replaces the question mark?
3
2
6
1
8
9
2
7
1
3
4
2
11
11
8
8
7
6
2
?

Q10.


Which number replaces the question mark?
8
4
16
8
9
24
9
12
?

Topic – Polynomials , Heron's Formula and Number System

Instruction: The holiday Assignment to be done in the Assignment Register.

Level - 1

Q1. Find the value of polynomial $x^2 - x - 1$ at $x = -1$.

Q2. Find the remainder when $x^3 - 2x^2 + x + 1$ is divided by $(x - 1)$

Q3. If $(x - 2)$ is a factor of $2x^3 - 6x^2 + 5x + k$, then find the value of k.

Q4. One side of an equilateral triangle measures 8cm. Find its area using heron's formula. What is its altitude?

Q5. Examine if $2x - 3$ is factor of $2x^3 - 9x^2 + x + 12$.

Q6. Use remainder theorem to find remainder when p(x) is divided by q(x) in following questions :

(a) $p(x) = x^9 - 5x^4 + 1$, $q(x) = x + 1$

(b) $p(x) = 4x^3 - 12x^2 + 11x - 5$, $q(x) = x - \frac{1}{2}$

(c) $p(x) = x^3 - 6x^2 - 2x - 4$, $q(x) = 1 - 3x$

Q7. The perimeter of a triangle is 30cm. Its sides are in the ratio 1 : 3 : 2, then find its smallest side.

Q8. Factorise each of the following expressions

(a)$27 - 125a^3 - 135a + 225a^2$

(b) $k^2 - 26k + 133$

Q9. If $x + \frac{1}{x} = \sqrt{3}$ then find the value of then find the value of $x^3 + \frac{1}{x^3}$

Q10. Factories : (a) $P^4 - 81q^4$

(b) $125a^3 + \frac{b^3}{27}$

Level – 2

Q1. If $x + 1$ and $x - 1$ are factors of $mx^3 + x^2 - 2x + n$, find the value of m and n.

Q2. Factorise : $x^3 - 3x^2 - 10x + 24$.

Q3. If $f(x) = 2x^3 + x^2 + bx - 6$ leaves a remainder 36 when divided by $(x - 3)$, find the value of b and with this value of b, factories f(x).

Q4. Find the remainder when $f(x) = x^4 - 3x^2 + 4$ is divided by $(x - 2)$,by using remainder theorem and verify the result by actual division.

Q5. The polynomial $x^3 + 2x^2 - 5ax + 7$ when divided by $(x + 1)$ leaves a remainder R_1 and the polynomial $x^3 + ax^2 - 12x + 6$ divided by $(x - 2)$ leaves remainder R_2. If $R_1 - R_2 = 20$,find the value of a.

Q6. Find the remainder when $x^3 - 2x^2 + x + 1$ is divided by $(x - 2)$

Q7. If $x = 5 - 2\sqrt{6}$,then find the value of $x^2 + \frac{1}{x^2}$

Q8. Find the value of a if the polynomial $P(x) = 2x^4 - a x^3 + 4x^2 + 2x + 1$ is divisible by $1 - 2x$

Q9. Factorise $a^2 + b^2 + 2ab + 2bc + 2ca$

Q10. Show that $p(x) = x^3 - 3x^2 + 2x - 6$ has only one zero

Level – 3

Q1. Using factor theorem, factories the polynomial $x^4 + x^3 - 7x^2 + 8x + 12$

Q2. Let A and B are the remainders when the polynomial $x^3 + 2y^2 - 5ay - 7$ and $y^3 + ay^2 - 12y + 6$ are divided by $x+1$ and $y-2$ respectively. If $2A + B = 6$, find a.

Q3. If a,b,c are all non-zero and $a+b+c = 0$, prove that :

$$\frac{a^2}{bc} + \frac{b^2}{ca} + \frac{c^2}{ab} = 3$$

Q4. A rhombus sheet whose perimeter is 40m and one of its diagonal is 12m long, on painted on both sides at the rate of Rs. 5 per m^2. Find the cost of painting.

Q5 If a teacher divides a material of volume $(x^3 + 6x^2 + 12x + 8)$ cubic units among three students of his class equally. Is it possible to find the quantity of material each of them gets. Which moral value is depicted by the teacher?

Q6. What must be subtracted from $\frac{x}{y}$ to make it $\frac{y}{x}$.

Q7. Find square root of $(x^2 + 4x + 4)(x^2 + 6x + 9)$.

Q8. If $x = 1001$, $y = 1002$ and $z = 1003$, find the value of that $x^3 + y^3 + z^3 - 3xyz$, without actually calculating the cubes.

Q9. Find the integral zeroes of the polynomial $2x^3 + 5x^2 - 5x - 2$.

Q10. If $(x + 2)$ and $(x - 2)$ are factors of $ax^4 + 2x - 3x^2 + bx - 4$, then find the value of $a + b$.

Q11. Simplify the following $(4\sqrt{3} - 2\sqrt{2})(3\sqrt{2} + 4\sqrt{3})$

Q12. If $a = 6 - \sqrt{35}$ find $a^2 + \frac{1}{a^2}$

Q13. If $x = \frac{\sqrt{2}+1}{\sqrt{2}-1}$ and $y = \frac{\sqrt{2}-1}{\sqrt{2}+1}$ find the value of $x^2 + y^2 xy$

Q14. If $x = 7 + 4\sqrt{3}$, find the value of $\sqrt{x} + \frac{1}{\sqrt{x}}$

Q15 Express $0.74\overline{35}$ as a rational number.

Q16. Express $0.1\overline{34}$ as a rational number.

Q17. If $5^a = 3125$, then the value of $5^{(a-3)}$.

Q18. Evaluate n, if $(243)^{n/5} \times 3^{2n+1}/9^n \times 3^{n-1} = 7^{3n} \times 3^{2n}$

Q19 . Rationalize the denominator

$$\frac{4\sqrt{3} + 5\sqrt{2}}{\sqrt{48} + \sqrt{18}}$$

Q20 How many numbers lie between two given real numbers? In a school if 20 kg sweets is to be distributed among 500 students, then what quantity of sweets would each student receive? Let 50 students be absent in the class, then find the amount of sweets received by each of the students. What moral value does it depict?

Science

Instructions:

a) Students to do the questions in their respective CA/HA registers.

b) To submit the registers by 5th July 2017

Section A: Biology

1. What will happen if dry raisins are kept in plain water for some time? State the process. What will happen if dry raisins are kept in salt solution?
2. What is DNA? Where is it found? What is the functional segment of DNA called?
3. What is endoplasmic reticulum? Where is it found? Name its types and describe the structure. What role do they play in the liver cells of vertebrates? What is membrane biogenesis?
4. Distinguish between the plasma membrane and cell wall. What is endocytosis?
5. Distinguish between leucoplasts and chloroplasts with respect to their pigment and functions.
6. What would you observe when you drop a deshelled egg in pure water? Give reason.
7. Draw a neat labeled diagram of a prokaryotic cell. How plastids and mitochondria are show similarity in the presence of genetic material and synthesis? What do they synthesize?
8. Why lysosomes are called as suicide bags of the cell?
9. Explain why chromosomes are called important component of nucleus?
10. Classify the process as osmosis or diffusion
    a) Aquatic animals using dissolved oxygen from water
    b) Swelling up of raisins when dissolved in water
    c) Spreading of virus on sneezing

Section B: Chemistry

1. Explain with the help of an activity that gases do not have fixed shape or volume.
2. What is dry ice? What are its properties
3. How are vapors different from gases? Give example of each
4. Define boiling ?Why boiling is considered as bulk phenomenon
5. Explain evaporation and its cooling effect in terms of kinetic energy of particles

6. Give three examples of tyndall effect in your surroundings
7. Sucrose crystals from beetroot and sugarcane are mixed together? Will it be a pure substance or mixture .Give reasons for the same
8. Differentiate between homogenous and heterogeneous mixture with example
9. Explain why particles of colloid do not settle down whereas particles of suspension settle down on standing.
10. State the properties of metalloids along with suitable examples

Section C: Physics

1. A person starts from his house and travels a circular distance of 15 km around the walled city before returning back. What is (i) the distance covered by person (ii) the displacement of the person?
2. A train starts from rest and covers a distance of 450 m in 2 min. Calculate the speed of the train in (i) m/s (ii) km/hr.
3. A man has to cover a distance of 1 km. He covers the first 200 m walking at a rate of 40 m/min. How fast should he run to cover the remaining distance, such that his average speed for the entire trip is 100 m/min?
4. A long distance athlete runs for 10 minutes at a speed of 18 km/hr, for 45 minutes at a speed of 27 km/hr and for 5 minutes at a speed of 36 km/hr. Calculate the average speed of the athlete.
5. The brakes of a car can produce a reta4rdation of 8 m/s^2. For how long are the brakes to be applied so that its velocity is reduced from 108 km/hr to 18 km/hr.
6. Derive v= u+ at and $s=ut+1/2at^2$ using graphical method.
7. Differentiate between Distance and Displacement.
8. Give an example of a body which covers a known distance, but displacement is zero.
9. What do you understand by average speed and average velocity? Write down mathematical expression.
10. The brakes of a car can produce an acceleration of $-12m/s^2$. If speeding car is brought to rest in 3 seconds, calculate initial velocity of car in km/hr.

Sample Question Paper

Subject : Science	Class : IX	Holiday Home Work	M.M.: 40

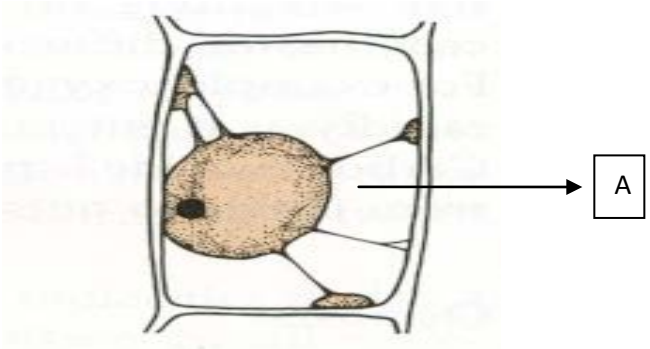
This paper contains 2 printed pages and 19 questions.

General Instructions:

a) All questions are compulsory.
b) Students to do the questions in their respective CA/HA registers.
c) To submit the registers by 5th July 2017

PHYSICS

1.	Define Uniform motion. Give example.	1
2.	Write down the formulae for average speed and average velocity of an object moving with uniform motion. When will they both be equal?	2
3.	Suppose you walk across a room of length 9 meters with a velocity of one and half kilometer per hour. Express this velocity in m/s and find the time you will take to move across the room.	2
4.	An object moves across a circular path of diameter **d**. What will be its displacement if it covers $3/4^{th}$ of this path?	2
5.	Plot distance-time graphs for each of the following: (i) A stationary object. (ii) An object undergoing a non-uniform motion.	3
6.	A train starting from a railway station and moving with a uniform acceleration attains a speed of 40 kmph in 10 min .Find its acceleration.	3
	CHEMISTRY	
7.	Convert the following into Kelvin a) 63^oC b) 23^0C	1
8.	Define the following: a)Latent heat of vaporization b) Melting point	2
9.	Draw flowsheet diagram to illustrate interconversion of three states of matter?	2
10.	Explain the properties of homogenous mixture.	2
11.	Account for the following: a) When solid melts,temperature remains constant b) A liquid generally flows easily. c) Acetone sprinkled on hand produces cooling.	1+1+1
12.	Explain with the help of activity that particles of matter are small in size.	3

	BIOLOGY	
13.	What will happen if dry raisins are kept in plain water for some time? State the process. What will happen if dry raisins are kept in salt solution?	1
14.	Why is plasma membrane called as semi-permeable membrane?	1
15.	Classify the process as osmosis or diffusion a) Aquatic animals using dissolved oxygen from water b) Swelling up of raisins when dissolved in water c) Spreading of virus on sneezing	2
16.	Observe the diagram below and answer the questions that follow  a) Identify the process taking place and label the part marked as "A". b) When does this process take place? Define it.	2
17.	Who proposed Cell theory? Give its postulates.	1+1
18.	a) How do substances like carbon dioxide and water move in and out of the cell? Explain. b) Explain why chromosomes are called important component of nucleus? c) Distinguish between the plasma membrane and cell wall. What is endocytosis?	1+1+1
19.	a) Draw a neat labeled diagram of a prokaryotic cell. b) How plastids and mitochondria are show similarity in the presence of genetic material and synthesis? What do they synthesize?	1.5+1.5

Social Science
Subject: Geography

(Compile all the map work in the Folder)

Topic	Latitude & Longitude (India)
Content Coverage	Extent of India latitudinal & longitudinal Important Latitude & Longitude (India)
Nature of task	Individual Activity
Learning Objectives	To make the students aware about the extent of India Latitudinal & longitudinally. Location & extent of India North- South extent & East – West extent.
Task / Tools / Techniques	World Atlas and Political map of India
Execution of task / Procedure	To make the students familiar with the use of Atlas. Each student will prepare a File containing three Maps of India. <u>First Map to show:-</u> 1. North- South Extent of India duly marked with Latitude & Longitude. 2. East- West Extent of India duly marked with Latitude & Longitude. <u>Second Map to show</u>: 1.Tropic of Cancer 2. Standard Meridian of India. 3. Latitude & longitude of Gurgaon & Delhi. <u>Third Map to show</u> -: (a)Mark & name the Latitude & Longitude of your birth place. (b) Mark & name the birth place of your parents. (c) Mark the Longitude & Latitude of any place visited by you recently.