

Thakur Educational Trust's (Regd)
THAKUR VIDYA MANDIR HIGH SCHOOL & JR.COLLEGE
III TERMINAL EXAMINATION 2017- 2018

Subject: ENGLISH

Name: _____ Std: IX Div: _____

Roll No: _____

Marks: 100

Date: 03/04/2018

Time: 3hrs

Section – I : Language Study

Q.1.A) Do the activities as instructed:

(16)

1. Make a meaningful sentence by using the given phrase : (1)
' to rattle someone'.
2. Use the given adverb in your own sentence – subconsciously (1)
3. Write homophone for the word 'weather' (1)
4. Spot the error and correct the sentence: (1)
'Two evils that fear lead us to is superstition and cruelty.
5. Write four sensible words using the letters of the following (1)
Word. Each word must be of at least 5 letters:- ' Psychological'
6. "Don't, Cyril, don't." (identify the kind of sentence) (1)
7. It was a custom for women have small feet. (1)
(use the underlined verb in the appropriate non finite form.)
8. Punctuate the following sentence- (1)
'the greeks have gone they said and the wall are no longer necessary'
9. The dreadful debt be paid (2)
(use a modal auxiliary showing obligation)
10. He asked me, "Did you take his number?"(Rewrite in the indirect speech) (2)
11. Their wise priest warned them not to do so. (change the voice) (1)
12. The gardeners had told the prince that you couldn't (1)
have animals and flowers.(name and identify the clauses)
13. Find four words related to banking in the given word grid: (2)

M	V	T	E	K
A	O	P	T	M
N	R	N	F	N
A	K	C	E	K
G	R	A	C	Y
E	E	S	E	F
R	L	H	T	L
A	C	C	O	U

(B) Do as directed:

(4)

- 1.Shop (2)
(Use the above word in a sentence as a noun and as a verb)
- 2.You may never meet anyone with this opinion. (2)
(Rewrite as a complex sentence)

Section II: Seen Prose Passages

Q.2.A) Read the passage and do the activities

(10)

A1. Complete the paragraph :- (2)

1) He took theand gave it to Clerk. He made me write the on a slip and my name in a book.

I went up to the accountant's wicket and poked the ball of money at him with a quick, convulsive movement, as if I were doing a conjuring trick.

My face was ghastly pale, Here," I said, "deposit it." The tone of the words seemed to mean, "Let us do this painful thing while the fit is on us."

He took the money and gave it to another clerk. He made me write the sum on a slip and sign my name in a book. I no longer knew what I was doing. The bank swam before my eyes.

“Is it deposited?” I asked in a hollow vibrating voice.

“It is,” said the accountant.

“Then I want to draw a check.”

My idea was to draw out six dollars of it for present use. Some one gave me a check-book through a wicket, and some one else began telling me how to write it out. The people in the bank had the impression that I was an invalid millionaire. I wrote something on the check and thrust it in at the clerk. He looked at it.

“What! Are you drawing it all out again?” he asked in surprise. Then I realised that I had written fifty-six instead of six. I was too far gone to reason now. I had a feeling that it was impossible to explain the thing. All the clerks had stopped writing to look at me.

A2.) Arrange the following procedure of opening a bank account in the correct order. (2)

- i) Writing the sum on a slip
- ii) Giving the amount to the accountant
- iii) Signing the name
- iv) Going to the wicket.

A.3) Write from the passage the adjectives for the following nouns (2)

- i) wicket
- ii) movement
- iii) trick
- iv) voice

A4) Underline the verb in the following sentences and state the tense. (2)

- i) All the clerks had stopped writing to look at me.
- ii) Then I want to draw a cheque.

A.5) What would be your reaction if you go to a strange place full of strangers? (2)

Q.2 B) Read the following passage and do the activities. (10)

A.1) Write down the names of four famous epics from the passage. (2)

The two famous Sanskrit epics are *The Ramayana* and *The Mahabharata*, and the two great epics of European literature, written in ancient Greek, are *The Iliad* and *The Odyssey*. Just as in Indian literature we go back to stories from *The Ramayana* and *The Mahabharata*, so in the literature of western countries, they go back to *The Iliad* and *The Odyssey*. Just as children all over India know the names of stories of Ram and Sita, Yudhishtira and Arjuna and Draupadi, so children in western countries know the names of Hector and Odysseus and Achilles and Helen of Troy, the most beautiful woman in the world, because of whom the Greek and Trojans fought for ten long years.

Nobody knows for certain who the author of these early epics is. It is thought that they arose and developed with the nation itself, and were handed down from singer to singer till perhaps one great poet gave them their final form.

It is believed that *The Iliad* and *The Odyssey* were composed and recited by a blind poet named Homer, who lived about 900 BCE and who wandered from one Greek city or village to another, singing his poems to all who would receive him in their homes and give him hospitality. This wandering singer has been honoured through the ages, not only in Greece but in all Europe, as the Father of European Poetry.

A.2) Complete the following table. (2)

Characters of the Indian epics		Character of the western Epics	
1	Ram	1	
2		2	Helen
3		3	Hector
4	Arjuna	4	

A.3) Unscramble the words and rewrite them correctly (2)

- 1) etproy 2) eekgr 3) raincte 4) eicnnta

A.4) Pick out the subordinate clause from the following sentences and mention the kind. (2)

- i) Nobody knows for certain who the author of these early epics is.
- ii) The Iliad and the odyssey were composed and recited by a blind poet named Homer, who lived about 900 BCE.

A.5) what values can we learn from the famous Indian epic 'The Ramayana'? Explain. (2)

Section - III : Poetry

Q.3 A) Read the following extract and complete the given activities: (5)

A.1) Pick out and write down four lines or expressions. (2)

which have a conversational tone.

Advice is cheap; 20 cents will get
you both Dear Abby and Billy Graham
in the same newspaper.
And I can do for myself; I am not helpless
Maybe discouraged and faltering
but not helpless.
When you do something for me that I can
and need to do for myself,
you contribute to my fear
and inadequacy.
But when you accept as a simple fact
that I feel what I feel
no matter how irrational,
then I can stop trying to convince you
and get about this business
of understanding what's behind
this irrational feeling.

A.2 write down what does the poet expect us to ----- (2)

- i) Do - ii) Not to do.....

A.3) Pick out the line with the Repetition figure of speech and write down reason for the same. (1)

B. Appreciation of Poem: (10)

Considering the below given points write an appreciation of the poem 'Invictus'

(Title, Poet, Rhyme scheme, favourite lines ,theme, figure of speech, special features of the poem, why I like / didn't like the poem.)

Section IV : Unseen Prose Passage

Q.4 A) Read the passage carefully and complete the given activities: (10)

A.1) Match the columns. (2)

A		B	
1	flowers	a)	Fireplace
2	hut	b)	breath takingly
3	Blessing	c)	Wild
4	sunrise	d)	Interesting
		e)	a shelter with a tin roof

There were wild flowers growing everywhere and our botanists had a field day identifying and documenting them without resorting to the cruel practice of making ‘collections’.

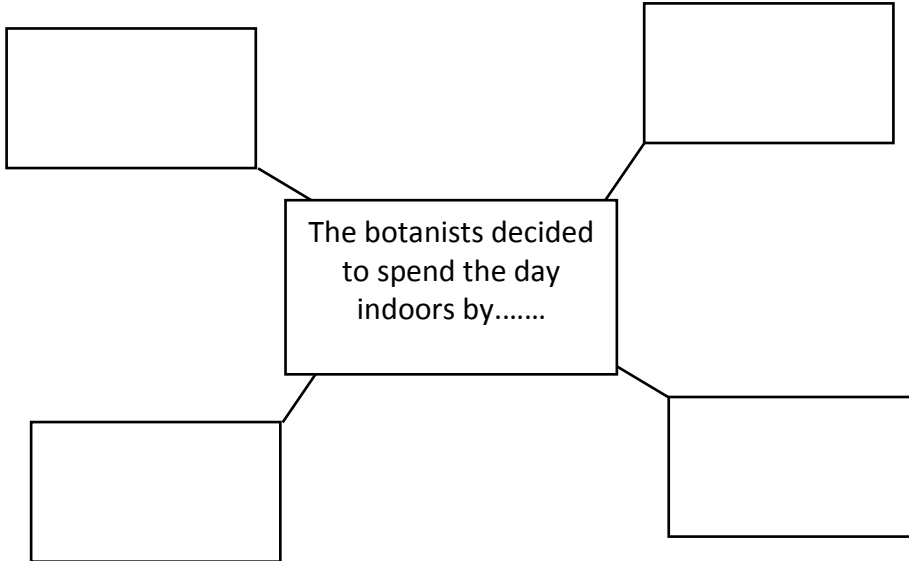
We were expected to reach a hut, our shelter for the night, in another hour and though my hungry and weary body welcomed the idea, there was a part of me which regretted the necessity of exchanging the beauty of this enchanted land for the warmth and shelter of the indoors.

The hut turned out to be just what its name implied - a shelter with a tin roof, two rooms, a kitchen and a toilet, and blessing of blessings, a fireplace.

By now the drizzling rain had become a torrent and we reluctantly decided to spend the remainder of the day indoors, cooking food, drying our clothes, tending to our equipment and disinfecting and dressing the leech-bites. By nightfall, it had become quite cold and we were thankful for the fireplace and the dry firewood stored behind the kitchen by the last occupant of the hut.

The new day began with a breathtakingly dramatic sunrise, as the sun’s first rays touched the hills turning them golden-red. We got through our breakfast and then started out to explore the surroundings and to document, wherever possible, interesting flora and fauna found in the area.

A.2) Complete the following web: (2)



A.3) Write from the passage - (2)

- i) Antonym of - a) kind b) cool
- ii) Synonym of - a) deluge b) inquire into

A.4) Change the voice (2)

- 1. The sun’s first ray touched the hills
- 2. My hungry and weary body welcomed the idea.

A.5) Can travelling be a learning experience? Define. (2)

(B) Write the summary of the following passage. Suggest a suitable title. (5)

(Points: father of a wealthy family – on their return from the trip, the father asked what did you learn – the son answered – the father was speechless)

One day, a father of a very wealthy family took his son on a trip to the country with the firm purpose of showing his son how poor people live. They spent a couple of days and nights on the farm of what would be considered a very poor family. On their return from their trip, the father asked his son, “How was the trip?”

“It was great, Dad.”

“Did you see how poor people live?”

“Oh yeah,” said the son.

“So, tell me. What did you learn from the trip?”

The son answered, “I saw that we have one dog and they had four. We have a pool that reaches to the middle of our garden, and they have a creek that has no end. We have imported lanterns in our garden, and they have the stars at night. Our patio reaches to the front yard, and they have the whole horizon. We have a small piece of land to live on, and they have fields that go beyond our sight. We have servants who serve us, but they serve others. We buy our food, but they grow theirs. We have walls around our property to protect us; they have friends to protect them.”

The boy’s father was speechless.

Then his son added, “Thanks, Dad, for showing me how poor we are.”

Section V : Writing Skills

Q.5.A) letter writing (Informal)

(5)

Stay healthy
Stay fit

yoga for all !

- Essential in modern age
- Reduces tension
- Provides energy
- Develops concentration

Write a letter to your younger brother telling him about the importance of yoga and advise him to join yoga classes.

B .Interview Question:

(5)

You have been appointed as the monitor of your class. Prepare a set of ten questions to interview the head boy/ girl of your school to take inspiration from him/her.

Q.6 A) Information transfer (Verbal to Non- verb):

(5)

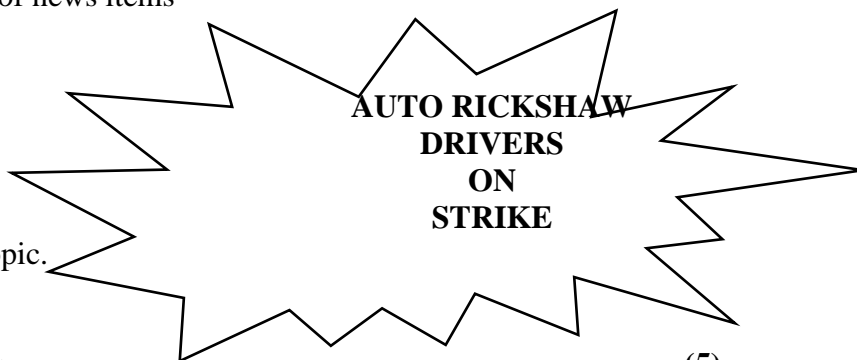
Given below are some instructions as to how to recycle used paper. The instructions are in jumbled order. Prepare a flow chart showing the correct process.

Give some book to poor children- make bound books with papers not used at all -- keep partly – used paper for personal use – give some books to NGO’s – sort out the used paper into three piles – use some books for home work --sell completely used paper to ‘junk - dealer’ – use some books for rough work.

B. Report writing :

(5)

Read the following headline of news items



Write a report on the same topic.

Q.7.A) Expansion of theme:

(5)

Explain the idea contained in the theme ‘Go green’.

B. Review writing:

(5)

Write a review of a play you have watched recently.

ALL THE BEST

Thakur Educational Trust's (Regd)

THAKUR VIDYA MANDIR HIGH SCHOOL & JR.COLLEGE

III Terminal Exam 2017- 2018

Subject: Geography.

Name: _____ STD: IX Div: _____ Roll No: _____

Marks: 40

Date: 02/04/2018

Time: 2hrs.

QIA) Rewrite the following statements by choosing the correct option: -

(4)

1. Tourism is a _____ occupation. (Primary / Secondary / Tertiary)
2. The American professor _____ decided the International Date Line in the year 1884. (J.M. Keynes / Davidson / Alfred Marshall)
3. When people from different religious background live together in peace, it is called _____. (Social harmony / Urbanization / Modernization)
4. The _____ method is most suitable for that variable which is freely scattered across a region.

(Isopleth /Dot / Choropleth)

QI.B) Answer in one sentence each :-

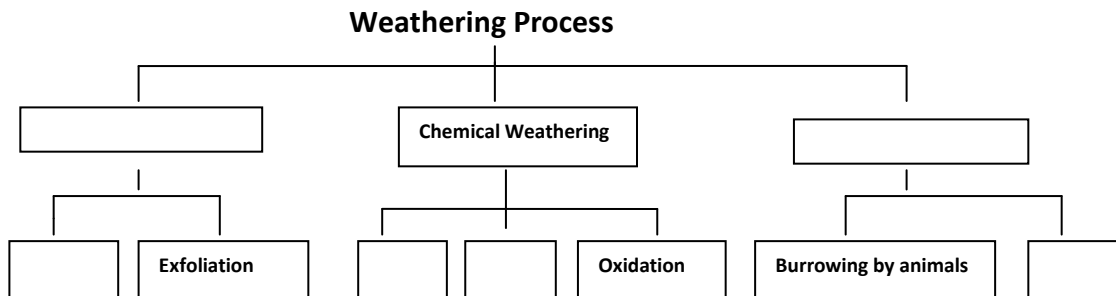
(4)

1. How is a river formed?
2. What is meant by domestic tourism?
3. Define "World Standard Time".
4. What is urbanization?

QII A) Answer the following :-

(6)

1. Complete the flow chart below:-



2. Explain the nature of the mixed economy.
3. Name the following:-
 - (a) Two landforms created by erosional work of sea waves.
 - (b) Name two types of volcanoes.

QII B) Give geographical reasons :- (Any 2)

(6)

1. Reddish coloured rocks are mostly found in the area with high rainfall.
2. The IDL doesn't pass through land.
3. Oceans located at the same latitude do not have same salinity.

QIII A) Write short notes on:- (Any 2)

(6)

1. Film Tourism.
2. Write a short on Swachh Bharat Abhiyan.
3. Objectives of WTO.

QIIIB) Draw neat and labelled diagram of the following:-

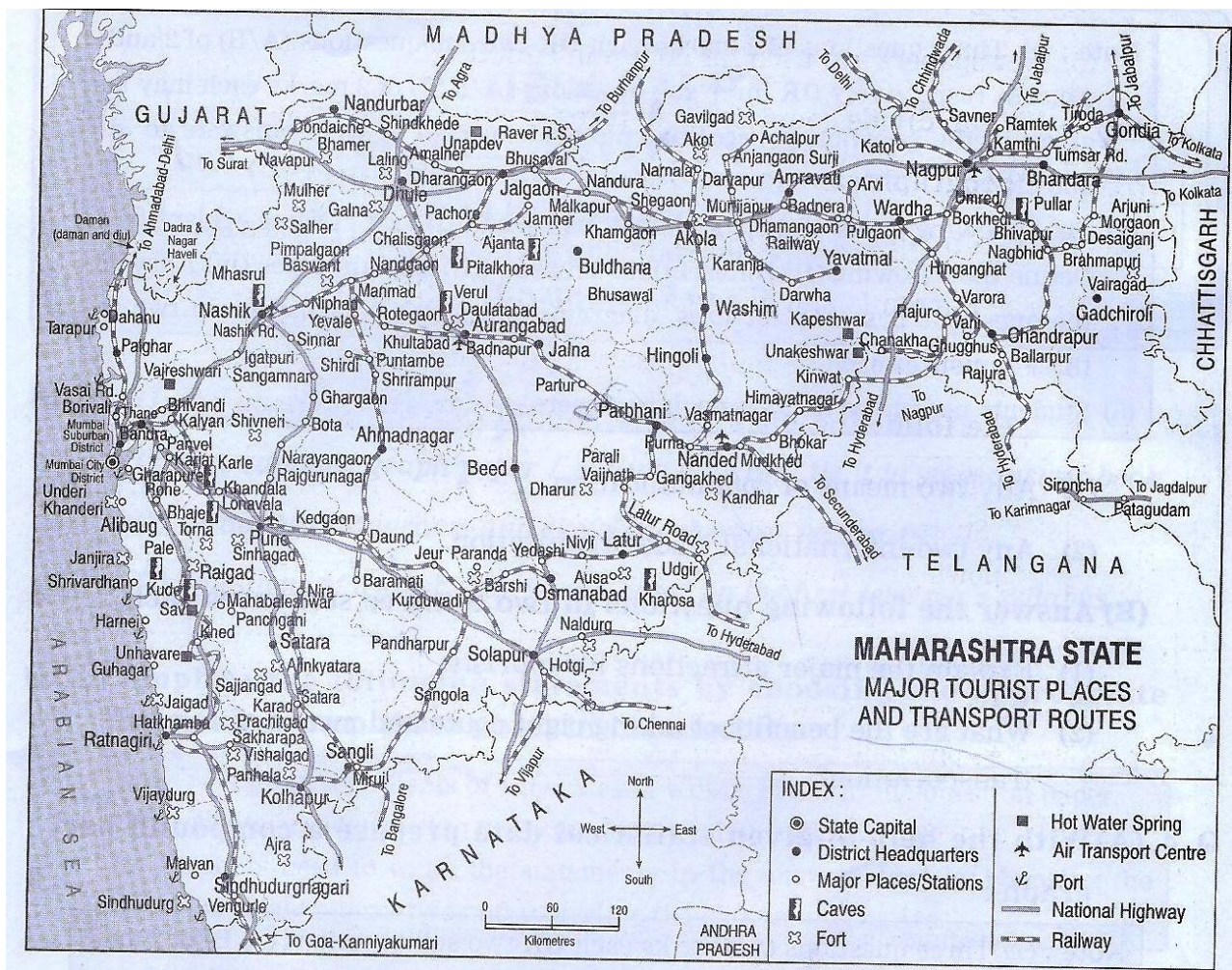
(4)

- a) Block Mountain
- b) Yardang

QIV) Observe the map and answer the following questions.

(2)

1. Name any two places having hot springs.
2. Name any two caves.



QV) Answer the following questions in detail: - (Any 2)

(8)

1. Differentiate between Railways and Roadways.
2. If condensation occurs closer to the earth's surface, what types of forms become visible?
3. Explain the types of seismic waves.

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Thakur Educational Trust's (Regd)

THAKUR VIDYA MANDIR HIGH SCHOOL & JR. COLLEGE

III Terminal Exam-2017- 2018

Subject: History/Political Science

Name: _____ STD: IX Div: _____ Roll No: _____

Marks: 60

Date: 05/04/2018

Time: 2 hrs.

HISTORY

Q1.A. Fill in the blanks.

(4)

1. India won the cricket world cup in 1983 under the captainship of _____. (Sunil Gavaskar, Kapil Dev, Sandip Patil)
2. The first open heart surgery was successfully performed in the city of _____. (Chennai, Vellore, Mumbai)
3. Ludhiana is the major Indian city in the production of _____. (bicycles, leather, tea)
4. The magazine Jeevan Shikshan is published by _____. (MSCERT, NCERT, Balbharati)

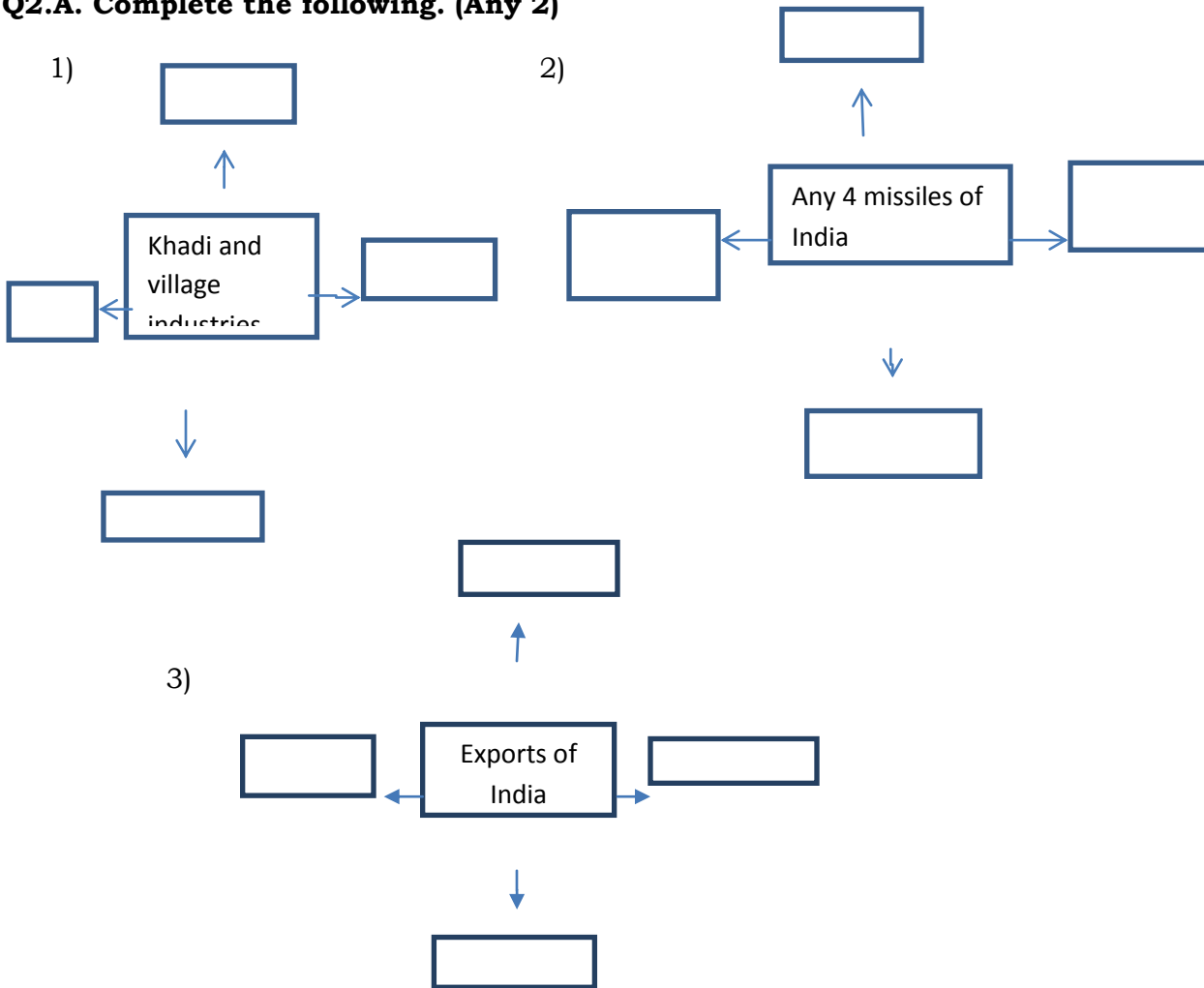
Q1.B. Identify the wrong pair and correct it.

(4)

1. First Chairman of Atomic Energy Commission - Dr. Homi Bhabha
2. White revolution- Dr. Varghese Kurien
3. Green Revolution- Shri Morarji Desai

Q2.A. Complete the following. (Any 2)

(4)



Q2.B. Short note. (Any 2)

(4)

1. Importance of dialects of Indian languages.
2. Challenges faced in rural development.
3. Leather industry in India.
4. Mixed Economy.

Q3.A. Give reasons. (Any 3)

(6)

1. The postal department tries to preserve the heritage and integrity of Indian culture through postal stamps.
2. The Prohibition of Dowry (Amendment) Act was enacted in 1984.
3. USA imposed economic sanctions on India.
4. The Rural Water Supply scheme was started.

Q3.B. Answer in 25-30 words. (Any 2)

(4)

1. Name any four projects started in the second five year plan.
2. How one can do computerized reservation for rail tickets?
3. Why were the banks nationalized in 1969 ?

Q4. Read the passage and answer the questions.

(4)

The working class has contributed culturally as well as through folk theatre, folk art and literature. Anna Bhau Sathe and Shahir Amar Shaikh were popular for their programmes aimed at public education. Poets like Narayan Surve, Namdev Dhasal, etc. portrayed the real life of the workers through their poems.

1. How has the working class contributed ?
2. Which leaders were popular for their public education programmes ?
3. What did the poets portray through their programmes ?
4. Name any two poets mentioned in the passage ?

Q5. Answer in detail. (Any 2)

(10)

1. Plot any 5 states and their capitals on the map of India.
2. Protection of Human Rights Act.
3. Which changes have taken place in the medium of television ?

Q6. Fill in the blanks choosing the correct option.

(4)

1. _____ is an international problem. (Border dispute between Maharashtra and Karnataka, Naxalism in Andhra Pradesh, Problems of refugees)
2. _____ performs the task of bringing people's lives to normalcy during threats. (Rapid Action Force, NCC, Coast Guard)
3. A system of independent and sovereign states is called _____. (Political system, international system, social system)
4. _____ conducts workshops in India on remedial measures to tackle the problem of malnutrition. (UNESCO, FAO, UNICEF)

Q7. State whether True or False with reasons. (Any 2)

(4)

1. The League of nations was established after the first cold war.
2. Every nation creates a strong security system for itself.
3. The number of member nations in the UN are 190.

Q8.A. Short Notes. (Any 2)

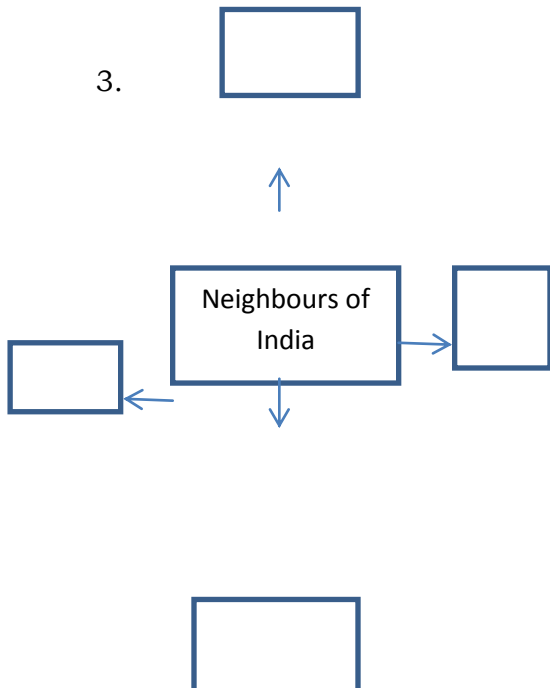
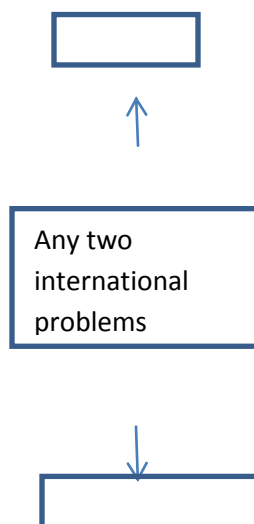
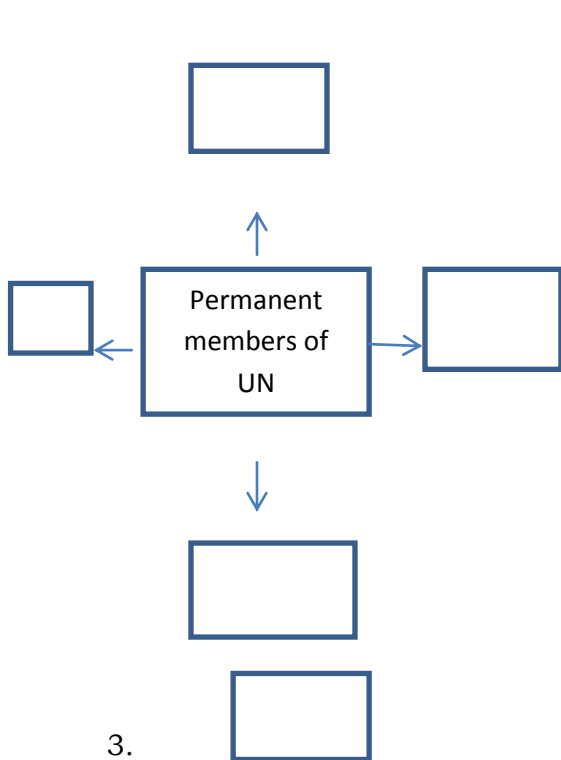
(4)

1. Objectives of the UN.
2. Functions of the Border Security Force.
3. Veto.

Q8.B. Complete the following. (Any 2)

(4)

- 1.
- 2.



Q9. Write your opinion. (Any 2)**(4)**

1. Do you think that strong relations with America are conducive for India's development ? Why ?
2. Narrate the effects of terrorism and suggest remedies.
3. Narrate the effects of degradation of environment and suggest remedies.

BEST OF LUCK*Thakur Educational Trust's (Regd)*

THAKUR VIDYA MANDIR HIGH SCHOOL & JR.COLLEGE

III Terminal Exam 2017 - 2018

Subject: Algebra

Name: _____ STD: IX Div: _____

Roll No: _____

Marks: 40

Date: 09/04/2018

Time : 2hrs

IA) Choose the correct alternative for the following questions.**(5)**

- 1) What is the median of 7, 10, 7, 5, 9 and 10?
a) 7 (b) 9 (c) 8 (d) 10
- 2) Which of the following set represent $N \cap W$?
a) {1, 2, 3.....} (b) {0, 1, 2, 3} (c) {0} (d) { }
- 3) The value of $| 12 - (13 + 7) \times 4 |$ is _____.
a) -68 (b) 68 (c) -32 (d) 32
- 4) If $x - 1$ is a factor of the polynomial $3x^2 + mx$ then the value of m is _____.
a) 3 (b) -3 (c) 2 (d) 1
- 5) What is the ratio of 1 mm to 1 cm?
a) 1:100 (b) 10:1 (c) 1:10 (d) 100:1

IB) Attempt any 5 out of 6 questions.**(5)**

- 1) If $n(A) = 7$, $n(B) = 13$, $n(A \cap B) = 4$, then $n(A \cup B) = ?$
- 2) Subtract the second polynomial from the first
 $2ab^2 + 3a^2b - 4ab$; $3ab - 8ab^2 + 2a^2b$
- 3) a, b, c are in continued proportion. If $a = 3$ and $c = 27$, then find b.
- 4) If $12x + 17y = 48$ and $17x + 12y = 68$, then what is the value of $x - y$?
- 5) How much secondary and higher education cess is payable on the incometax of ₹ 8,500?
- 6) Find the class mark of the class 21 to 30.

II) Attempt any 4 out of 6 questions.**(8)**

- 1) If $U = \{ 1, 2, 3, 4, 5, 6, 7, 8 \}$; $A = \{ 1, 3, 5, 7 \}$; $B = \{ 1, 2, 4, 6 \}$ Find (i) A' (ii) B' (iii) $A' \cap B'$ (iv) $A' \cup B'$
- 2) Write any two rational numbers between 5.2 and 5.3.
- 3) Factorize $63x^2 + 5x - 2$
- 4) If $5x = 4y$, then find the value of the ratio $\frac{3x^2 + y^2}{3x^2 - y^2}$.
- 5) Decide whether sets A and B are equal sets. Give reason for your answer
 $A = \{\text{Even prime numbers}\}$
 $B = \{x \mid 7x - 1 = 13\}$

6) In a basket there are 10 tomatoes. The weight of each of these tomatoes in grams is as follows

60, 70, 90, 95, 50, 65, 70, 80, 85, 95 Find the median of the weights of tomatoes.

III) Attempt any 3 out of 5 questions.

(9)

1) Multiply $(3\sqrt{2} - \sqrt{3})(4\sqrt{3} - \sqrt{2})$

2) Factorize the following polynomial $(x - 5)^2 - (5x - 25) - 24$

3) If $(x + 3) : (x + 11) = (x - 2) : (x + 1)$, then find the value of x.

4) Solve the following simultaneous equations

$$\frac{x}{3} + 5y = 13; 2x + \frac{y}{2} = 19.$$

5) The following table shows the number of buses and trucks in nearest lakh units. Draw a percentage bar diagram

Year	Number of trucks	Number of buses
2005 - 2006	47	09
2007 - 2008	56	13
2008 - 2009	60	16
2009 - 2010	63	18

IV) Attempt any 2 out of 3 questions

(8)

1) Solve the following equation

$$\frac{(2x + 1)^2 + (2x - 1)^2}{(2x + 1)^2 - (2x - 1)^2} = \frac{17}{8}$$

2) The distance between two places A and B on road is 70 kms. A car starts from A and the another car starts from B. If they travel in the same direction, they will meet after 7 hours. If they travel towards each other they will meet in one hour. Then find their speeds?

3) Mr. Shekhar spends 60% of his income from the balance he donates ₹ 300 to an orphanage. He is then left with ₹ 3,200. What is his income?

V) Attempt any 1 out of 2 questions

(5)

1) The data for 50 students regarding their marks (out of 100) in English is given below. Take classes 0 – 10, 10 – 20 and prepare a frequency distribution table and cumulative frequency more than or equal to type and also less than type cumulative frequency.

47, 62, 83, 87, 48, 61, 46, 50, 30, 79, 20, 10, 76, 78, 09, 22, 25, 39, 45, 53, 78, 70, 46, 69, 42, 59, 31, 82, 27, 14, 79, 86, 07, 22, 27, 36, 35, 44, 75, 80, 43, 67, 48, 59, 32, 83, 23, 17, 87, 14

From the prepared table answer the following questions

- (i) How many students obtained 50 or above 50 marks?
- (ii) How many students obtained 80 or above 80 marks?
- (iii) How many students obtained less than 40 marks?
- (iv) How many students obtained less than 60 marks?

2) If $(2x + 1)$ is a factor of $(3b + 2)x^3 + (b - 1)$, then find b.

HINT

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

(ii) Remainder = $p\left(\frac{-1}{2}\right)$

(iii) Find value of $p\left(\frac{-1}{2}\right)$

(iv) By factor theorem $p\left(\frac{-1}{2}\right) = 0$

(v) Find value of b.

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Thakur Educational Trust's (Regd)

THAKUR VIDYA MANDIR HIGH SCHOOL & JR.COLLEGE

III Terminal Exam 2017 - 2018

Subject: Geometry

Name: _____ STD: IX Div: _____ Roll No: _____

Marks: 40

Date: 11/04/2018

Time : 2hrs

QIA) Choose the correct alternative answer for the multiple choice questions.

[5]

- Find d(A,B) ,if the coordinates of A and B are -2 and 8 respectively.
A) 2 B) 6 C) 10 D) 8
- The number of angles formed by a transversal of two lines is
A) 2 B) 4 C) 8 D) 16
- In $\triangle ABC$, $\angle B=90^\circ$, $\angle A=30^\circ$, $AC=10\text{cm}$. What is the length of AB?
A) 5cm B) $5\sqrt{3}\text{cm}$ C) 8m D) 6cm
- In which quadrant or which axis will the point A lie, if $A(x,y)$ and $x<0$, $y=0$?
A) Quadrant II B) Quadrant III C) X-axis D) Y-axis
- $2\tan 45^\circ + \cos 30^\circ - \sin 60^\circ = ?$
A) 2 B) 0 C) 1 D) 4

QIB) Solve the following (Any 5) -

[5]

- Write the following statement in 'if-then' form.
i) The diagonals of a rectangle are congruent
- If $\angle A$ and $\angle B$ are two interior angles and $\angle A=70^\circ$ then find $\angle B$.
- In $\triangle ABC$, $\angle B=90^\circ$, $\angle A=45^\circ$, $\angle C=45^\circ$ and $AC=5\text{cm}$, find length of AB.
- The radius of a circle is 2.9cm, what is the length of the longest chord ?
- Write the equation of the line parallel to Y-axis at a distance of 7units from it to its left.
- The perpendicular height of a cone is 12cm and its slant height is 13cm. Find the radius of the base of the cone.

QII. Solve the following (Any 4) -

[8]

- Write the antecedent and the consequent in the following statement-
i) The diagonals of a parallelogram bisect each other.
- State Alternate angle test.
- $\triangle ABC$ and $\triangle PQR$ are similar to each other , $BC=4$, $QR=6$, $AB=3$, $PR=7.5$, find AC.
- State with reason whether the following statement is true or false-
i) Every rhombus is a rectangle
- Find the surface area of a sphere having radius 7cm.

QIII. Attempt the following (Any 3) -

[9]

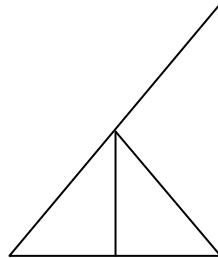
- Prove that the opposite angles formed by two intersecting lines are of equal measures.
- Ray PQ and Ray PR are perpendicular to each other. Points B and A are in the interior and exterior of $\angle QPR$ respectively. Ray PB and Ray PA are perpendicular to each other. Draw a figure showing all these rays and write-
i) A pair of complementary angles
ii) A pair of supplementary angles
- Construct $\triangle XYZ$, in which $\angle Y=58$, $\angle X=46$ and perimeter of triangle is 10.5cm

4. Volume of a cuboid is 34.50 cubic meter. Breadth and height are 1.5m and 1.15m respectively. Find area of base of cuboid.

QIV. Attempt the following (Any 2) -

[8]

- In figure seg PT is the bisector of $\angle QPR$. A line through R intersects ray QP at point S. seg PT \parallel Seg SR. Prove that PS=PR.
- Construct incircle and circumcircle of an equilateral $\triangle DSP$ with side 7.5cm. Measure the radii of both the circles and find the ratio of radius of circumcircle to the radius of incircle.

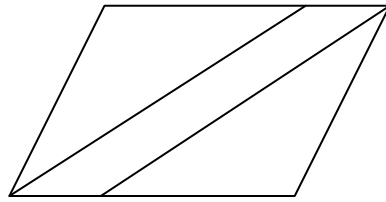


3. If $\tan \theta = 8/15$ then find $\sin \theta$ and $\cos \theta$.

QV . Attempt the following (Any 1) -

[5]

- Quadrilateral ABCD is a parallelogram. Seg AX and seg CY are the bisectors of $\angle DAB$ and $\angle DCB$ respectively. Prove that seg AX \parallel seg CY.
- The radius and the slant height of a cone are in the ratio 7:25. If its curved surface area is 26950 sq.cm, find its perpendicular height.



ALL THE BEST

Thakur Educational Trust's (Regd)

THAKUR VIDYA MANDIR HIGH SCHOOL & JR.COLLEGE

III Terminal Exam 2017- 2018

Subject: Science & Technology I

Name: _____ STD: IX Div _____ Roll No: _____

Marks: 40

Date: 04/04/2018

Time: 2Hrs.

Q1A. (a) State whether the following is true or false:

(3)

- 1 newton = 1 kg x 1 m/s²
- The total amount of energy in the universe remains constant.
- The number 6.022×10^{22} is called Avogadro's number

(b). Fill in the blanks based on the given relationship.

(2)

- Calcium: Ca :: Cadmium : _____
- K.E. : $\frac{1}{2} mv^2$:: P.E. : _____

Q1 B. Multiple choice questions:

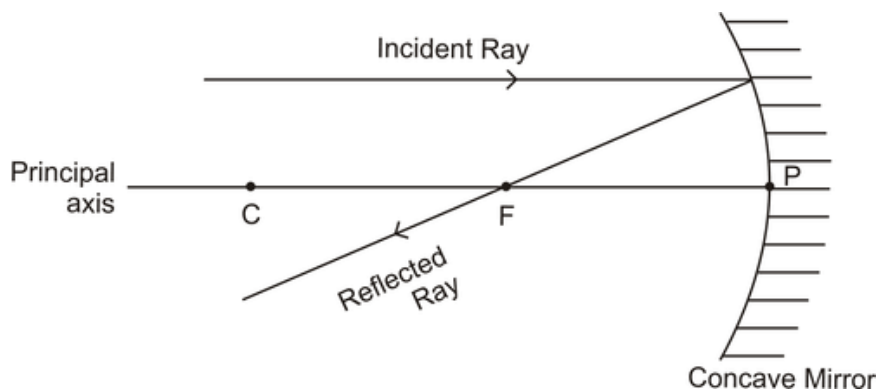
(5)

- Acceleration is the rate of change of _____ with respect to time.
 - Speed
 - displacement
 - distance
 - Velocity
- Power is the _____
 - rate of change of momentum
 - rate of doing work
 - product of force and displacement
 - capacity to do work
- The electronic configuration of an element is (2, 4). Hence, its valency is ____
 - 2
 - 4
 - 6
 - 8
- Positively charged ions are called _____
 - cation
 - anion
 - electrons
 - neutrons
- All instances of inertia are examples of Newton's _____
 - First law of Motion
 - Second law of Motion
 - Third law of Motion
 - Law of Momentum

Q2. Answer the following questions (Any 5)

(10)

- A current of 0.24 A flows through a conductor when a potential difference of 24 V is applied between its two ends. What is its resistance?
- Write the chemical equation when NaOH solution is added to HCl solution.
- Observe the figure and state the rule for drawing the following ray diagram.

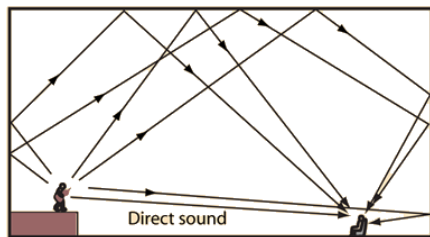


- Give scientific reason why we cannot hear the echo produced in a classroom.
- Write practical uses of CO₂ (Any 4)
- What is the chemical formula of Bleaching powder, Washing soda, Common salt and Baking soda?
- Define – Radioactivity.

Q3. Answer the following questions (Any 5)

(15)

- Artificial dyes are prevalent in our daily life. They are in our lipstick, nail polish, hair dyes and so on. They contain various chemicals and are linked to many health concerns. Can you point out some of the harmful effects?
- Differentiate between Diamond and Graphite.
- Observe the given figure and answer the questions:



(i) Identify the phenomenon.

(ii) Define the above given phenomenon.

4. Show the dissociation of the following compounds on dissolving in water, with the help of chemical equation and write whether the proportion of dissociation is small or large.

Magnesium chloride, Acetic acid, Potassium hydroxide, Hydrochloric acid, Copper sulphate, Ammonia.

5. How will you prove experimentally that graphite is good conductor of electricity?

6. Draw a well labeled electric circuit diagram

7. Choose the correct alternative and complete the following paragraph:

(Convex, concave, vertical, erect, larger, positive, smaller, negative)

The mirrors used in cars and motorcycles are _____ mirrors. In these mirrors, the image of a face is _____ and _____. The special mirror which is used for shaving is a _____ mirror. When held close to the face, it gives _____ and _____ image of the face.

Q4. Attempt the following (Any 1)

(5)

1. Read the following paragraph and answer the questions based on it:

Animal dung, dry leaves, wet garbage get decomposed by anaerobic microbes in a biogas plant. It takes place in two stages. The microbes act on the biodegradable complex organic compound and produce organic acids. The methanogenic bacteria act on the organic acids to produce methane gas. This methane gas is also known as biogas. Biogas is a very cheap fuel option which meets the demand for cooking gas. It is also used for production of electricity. Biogas contains about 55% to 60% methane and the rest is carbon dioxide. Biogas is a fuel which is convenient to use and very good manure is also produced as a side product of the process.

(i) Name the gas produced in a biogas plant.

(ii) Explain how the gas is produced in biogas plant.

(iii) Write any two use of biogas.

(iv) Write the composition of gases in biogas.

2. Complete the following table:

Sr.No.	Allotrope of Carbon	Uses
1.	Fullerenes	1. 2.
2.	Coal	1. 2. 3.

ALL THE BEST

Thakur Educational Trust's (Regd)

THAKUR VIDYA MANDIR HIGH SCHOOL & JR.COLLEGE

III Terminal Exam 2017- 2018

Subject: Science & Technology II

Name: _____ STD: IX Div _____

Roll No: _____

Marks: 40

Date: 10/04/2018

Time: 2 hrs.

Q1A.(a) Identify the odd word out:

(3)

1. Pteridophyta, Thallophyta, Bryophyta, Gymnosperms.
2. Nitrogen cycle, Carbon cycle, Oxygen cycle, Phosphorus cycle.
3. Pneumonia, diphtheria, chicken pox, cholera.

(b). Match the column

(2)

A	B
1. Dandruff	a. production of antibiotics
2. Penicillium	b. Primary consumers
3. Herbivores	c. Nephrolepis
4. Pteridophyta	d. Fungi

Q1.B Multiple choice questions:

(5)

1. Moss is an example of Division _____
a. Pteridophyta b. Bryophyta c. Thallophyta d. Gymnosperms
2. Oxygen is released into the atmosphere by the biotic process of _____
a. volcanic activity b. forest fire c. photosynthesis d. burning of fossil fuel
3. Conversion of ammonia into a nitrite and then nitrate is known as _____
a. Denitrification b. Nitrification c. Ammonification d. Nitrogen fixation
4. _____ lives in the root nodules of the leguminous plants
a. Rhizobium b. Staphylococcus c. Clostridium d. Lactobacilli
5. The process in which the cells convert carbohydrates into alcohol and carbon dioxide is known as _____
a. Bio-remediation b. Fermentation c. Budding d. Symbiosis

Q2. Answer the following questions (Any 5)

(10)

1. Give two examples of each types of waste – Plastic waste, Domestic waste, Biomedical waste and Industrial waste.
2. What devices will you use to share with others the knowledge that you have?
3. Name any four endocrine glands and hormones secreted by them.
4. Alex is a short heighted boy with short wide neck, flat nose and short life expectancy. He is diagnosed with a chromosomal abnormality. He has one extra chromosome with the 21st pair in every cell of his body.
(i) Name the disease Alex is suffering from.
(ii) What is the most prominent characteristic of this disease?
5. Define – Biotechnology

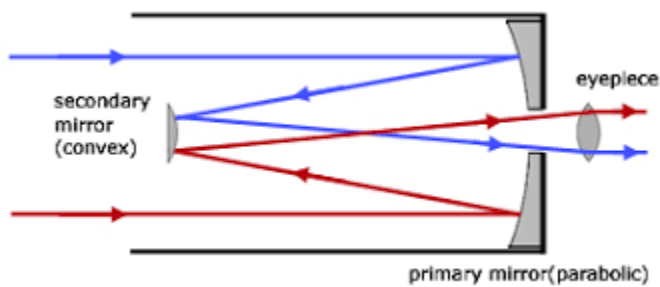
6. Complete the table –

	Simple	Collenchyma
Permanent Tissue		
	Complex	

7. Why can an X – ray telescope not be based on the earth?

Q3. Answer the following questions (Any 5)

(15).



1. Study the above given figure and answer the following questions

- (i) What type of telescope is shown in the figure?
- (ii) Label the main parts of the telescope.
- (iii) What other type of telescope uses a curved mirror?

2. Complete the following paragraph with given alternatives:

(boiling water, hydrochloric acid, mulberry plant, orchid plant, Bombyx mori, pupa, cocoon, salivary glands)

_____ is the most commonly used variety for production of silk. The life cycle of the silk moth consists of four stages, namely egg, larva, _____ and adult. Thousands of eggs deposited by female moths are incubated artificially. Larvae hatching out of eggs are released on _____. After feeding for 3 – 4 days, larvae move to branches of the plant. The silk thread is formed from the secretion of their _____. Larvae spin this thread around themselves to form a _____. Before ten days, it is transferred into _____ to loosen up silk fibres.

3. Distinguish between monohybrid and dihybrid cross.

4. Draw a well-labelled diagram of Nephron.

5. Write a brief note on RNA.

6. How does a computer work?

7. State the scientific and eco-friendly methods of waste management.

Q4. Attempt the following (Any 1)

(5)

1. Read the paragraph and answer the questions based on it:

Many waste materials are generated through the various daily human activities. This is called solid waste. If these waste materials are properly disposed of, they can be a valuable source of energy. Currently, solid waste is a serious worldwide problem as it causes both water and soil pollution. Solid waste is also a serious problem from the point of view of economic growth, environmental degradation and health. It has posed a serious threat to nature and human habitat because of the air, water and soil pollution it causes. On 26th July 2005, a serious flood calamity had arisen in Mumbai. Improper solid waste management was one of the main reasons behind that calamity. Thus we see that accumulation of solid waste can lead to various calamities.

- (i) What is solid waste? (1)
- (ii) Why is solid waste a serious worldwide problem? (2)
- (iii) Why did Mumbai face a serious flood calamity in 2005? (1)
- (iv) What is the benefit of proper disposal of waste? (1)

2. Study the given figure and answer the questions based on it:

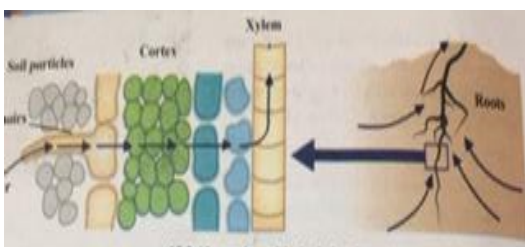


Fig (1)

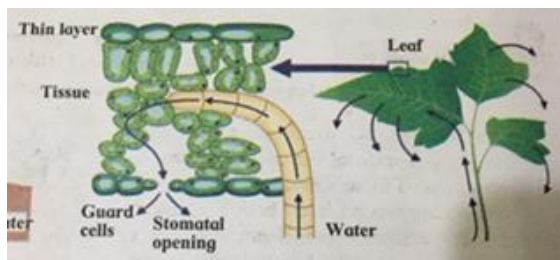


Fig (2)

- (i) Name the transportation process shown in Fig (1) and Fig (2) (1)
- (ii) Name the process that pushes water up in the plant during the night time. (1)
- (iii) Which transportation process works on the process of evaporation? (1)
- (iv) Explain in short the transportation process shown in Fig (1) (2)

ALL THE BEST

Thakur Educational Trust's (Regd)

Name: _____ STD: IX Roll No: _____

Marks: 40 Date:18/04/2018 Time:2hrs

Q1A.1. State whether the following is true or false: (3)

1. Power is a scalar quantity.
2. Change in momentum occurs in the direction of force.
3. Sulphate ion is a negatively charged simple radical.

A.2.Fill in the blanks based on the given relationship. (2)

1. Calcium: Ca :: Cadmium : _____

2. K.E. : $\frac{1}{2} mv^2$:: P.E. : _____

Q1B. Multiple choice questions: (5)

1. If the valence shell of an element has 6 electrons, its valency is _____

- a. 6 b. 2 c. 3 d. 1

2. Power is the _____

- a. rate of change of momentum b. rate of doing work
c. product of force and displacement d. capacity to do work

3. Acceleration is the rate of change of _____ with respect to time.

- a. speed b. displacement c. distance d. velocity

4. Positively charged ions are called _____

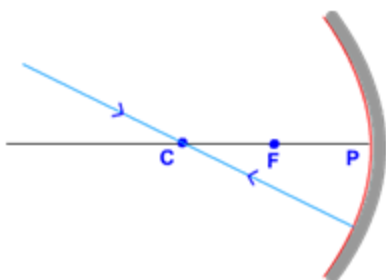
- a. cation b. anion c. electrons d. neutrons

5. All instances of inertia are examples of Newton's _____

- a. First law of Motion b. Second law of Motion c. Third law of Motion d. Law of Momentum

Q2. Answer the following questions (Any 5) (10)

1. What is electric current? Write its formula.
2. Write the chemical equation when dilute nitric acid was added to calcium oxide.
3. Observe the figure and state the rule for drawing the following ray diagram.



4. Give scientific reason why the roof of a movie theatre is curved.
5. Write uses of diamond.
6. What type of colours will you use to celebrate ecofriendly Rang Panchmi? Why?
7. Define – Radioactivity.

Q3. Answer the following questions (Any 5)

(15)

1. Radioactive substances are relevant to our day to day life. Mention hazards of radioactive substances and radiation.
2. Differentiate between crystalline and non – crystalline forms of carbon.
3. Observe the given figure and answer the questions:



(i) Identify the machine.

(ii) State the use of the above machine.

4. Show the dissociation of the following compounds on dissolving in water, with the help of chemical equation and write whether the proportion of dissociation is small or large.

Magnesium chloride, Acetic acid, Potassium hydroxide, Hydrochloric acid, Copper sulphate, Ammonia.

5. What are the different types of coal? What are their uses?

6. Draw a well labeled electric circuit diagram

7. Choose the correct alternative and complete the following paragraph:

(Convex, concave, vertical, erect, larger, positive, smaller, negative)

The mirrors used in cars and motorcycles are _____ mirrors. In these mirrors, the image of a face is _____ and _____. The special mirror which is used for shaving is a _____ mirror. When held close to the face, it gives _____ and _____ image of the face.

Q4. Attempt the following (Any 1)

(5)

1. Read the following paragraph and answer the questions based on it:

Animal dung, dry leaves, wet garbage get decomposed by anaerobic microbes in a biogas plant. It takes place in two stages. The microbes act on the biodegradable complex organic compound and produce organic acids. The methanogenic bacteria act on the organic acids to produce methane gas. This methane gas is also known as biogas. Biogas is a very cheap fuel option which meets the demand for cooking gas. It is also used for production of electricity. Biogas contains about 55% to 60% methane and the rest is carbon dioxide. Biogas is a fuel which is convenient to use and very good manure is also produced as a side product of the process.

(i) Name the gas produced in a biogas plant.

(ii) Explain how the gas is produced in biogas plant.

(iii) Write any two use of biogas.

(iv) Write the composition of gases in biogas.

2. What sign conventions are used for reflection from a spherical mirror?

Name: _____ STD: IX Roll No: _____

Marks: 40 Date: 19/04/2018 Time: _____

Q1A. 1. Complete the following statements: (3)

1. Toxins of fungal origin are called _____
2. _____ plants have soft and fibre like body.
3. The flow of nutrients is _____.

A.2. Match the column (2)

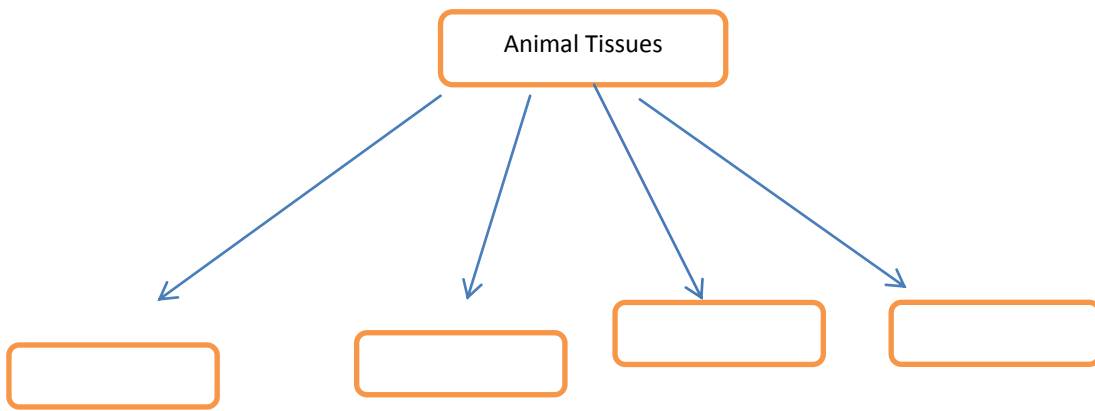
A	B
1. Dandruff	a. production of antibiotics
2. Penicillium	b. Primary consumers
3. Herbivores	c. Nephrolepis
4. Pteridophyta	d. Fungi

Q1B. Multiple choice questions: (5)

1. Moss is an example of Division _____
a. Pteridophyta b. Bryophyta c. Thallophyta d. Gymnosperms
2. Oxygen is released into the atmosphere by the biotic process of _____
a. volcanic activity b. forest fire c. photosynthesis d. burning of fossil fuel
3. Conversion of ammonia into a nitrite and then nitrate is known as _____
a. Denitrification b. Nitrification c. Ammonification d. Nitrogen fixation
4. _____ lives in the root nodules of the leguminous plants
a. Rhizobium b. Staphylococcus c. Clostridium d. Lactobacilli
5. The process in which the cells convert carbohydrates into alcohol and carbon dioxide is known as _____
a. Bio-remediation b. Fermentation c. Budding d. Symbiosis

Q2. Answer the following questions (Any 5) (10)

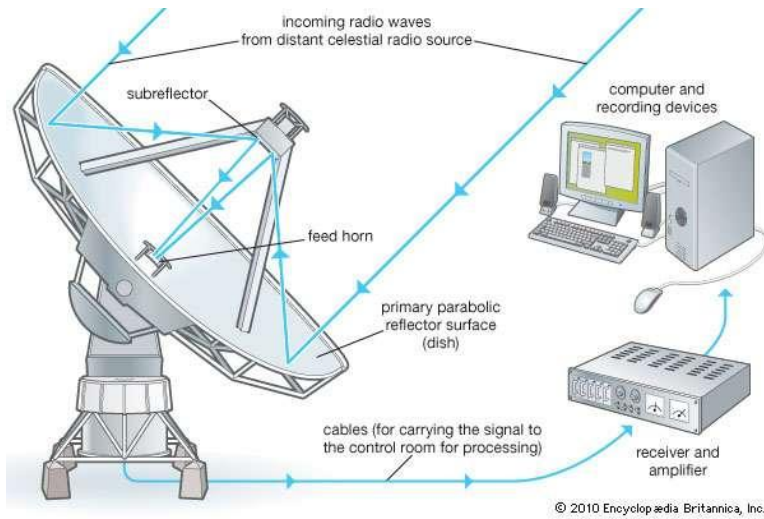
1. Write in short about Non-biodegradable waste.
2. What precautions should be taken while using various types of software on the software?
3. Name any four endocrine glands and hormones secreted by them.
4. What are the symptoms of Sickle cell Anaemia .
5. Define – Tissue Culture
6. Complete the table –



7. Which type of telescopes can be made using a concave mirror, convex mirror, plane mirror and a lens?

Q3. Answer the following questions (Any 5)

(15).



1. Study the above given figure and answer the following questions

- (i) What type of telescope is shown in the figure?
- (ii) Explain the construction of the above telescope.

2. Complete the following paragraph with given alternatives:

(boiling water, hydrochloric acid, mulberry plant, orchid plant, Bombyx mori, pupa, cocoon, salivary glands)

_____ is the most commonly used variety for production of silk. The life cycle of the silk moth consists of four stages, namely egg, larva, _____ and adult. Thousands of eggs deposited by female moths are incubated artificially. Larvae hatching out of eggs are released on _____. After feeding for 3 – 4 days, larvae move to branches of the plant. The silk thread is formed from the secretion of their _____. Larvae spin this thread around themselves to form a _____. Before ten days, it is transferred into _____ to loosen up silk fibres.

- 3. Distinguish between weather and climate.
- 4. Draw a well labelled diagram of Structure of brain.
- 5. Write a brief note on RNA.
- 6. How does a computer work?
- 7. What is meant by 'Chromosome'. Explain its types.

Q4. Attempt the following (Any 1)

(5)

- 1. Explain Mendel's monohybrid progeny with the help of any one cross.
- 2. Study the given figure and answer the questions based on it:

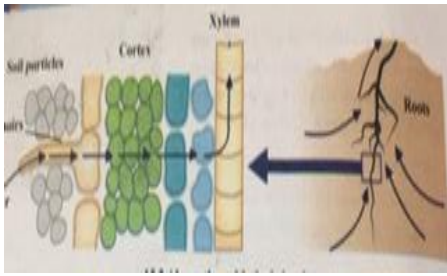


Fig (1)

(i) Name the transportation process shown in the figure

(ii) Explain in short the transportation process shown in the above figure.

