| | | |
|---|---|---|
| Name: _____ | Std: X   Div: ____ | Roll No:___ |
| Marks:100 | Date: 25/09/2018 | Time: 3hrs |

## Section I: Language Study

**Q1.A1     Do as directed:**                                   **(8)**

1. Write the Past Participle of: **sting**.

2. My friend was young but _____ (quiet/ quite) efficient and firm.(Choose the correct word from the bracket)

3. croinbttiuno, sisasetd. (Rearrange the letters in words and rewrite the word)

4. why didnt you tell me  (Punctuate the sentence )

5. Bigger its quantity, less it weighs..(Insert articles wherever necessary and rewrite the sentence)

6. The people in the crowd found this claim interesting. (Divide the sentence into Subject and Predicate)

7.Walking is a great exercise.(State whether the underline word is Present Participle or Gerund)

8. It has been raining since this morning. (Pick out the verb and state its tense )

**A2.Do as directed:**                                         **(8)**

1. We should respect our National Flag. ( Rewrite the sentence into Passive Voice)

2.I asked,"What are you going to do with the papers, Grandpa?"(Change to Indirect Speech)

3. Children ………( Obligation)respect their elders.  (Fill in the blanks with correct Modal Auxiliary)

4. We saw an army of ants lugging a fly which was at least ten times the ants size.(Identify the clauses and state its kind)

**Q1.B      Do as directed:**                              **(4)**

1. The Hermit was frail. ( Change the Assertive sentence to Exclamatory and rewrite.)

 2.  Shakespeare is greater than all other dramatists.( Change to Superlative degree)

## Section II: Textual Passages
## (Reading Skills, Grammar and Vocabulary)

**Q2A. Read the following passage and do the activities**: **(10)**

**A1**      Complete the following:                                         **(2)**
 i)      The writer told Einstein that he liked anything by ………………………
 ii)      Einstein played something little more advanced by …………………. The Trumpeter.

I told him I like anything by Bing Crosby. At once, I could hear Bing Crosby's voice filling the room.
"Now, can you please tell me what you just heard?", he said.
The simplest answer seemed to be to sing the lines. So I sang it back to him.
He smiled. "You're not tone-deaf," he said.
I told him this was one of my favourite songs, something I had heard hundreds of times, so it didn't really prove anything.
"Nonsense!" said Einstein. "It proves everything! Do you remember your first arithmetic lesson in school? Suppose, at your very first contact with numbers, your teacher had ordered you to work out a problem in, say, long division or fractions. Could you have done it?"
"No, of course not."
"Exactly! It's like learning maths. You have to learn addition and subtraction in order to do multiplication and division. Now I'm playing something a little more advanced."
It was John McCormack singing The Trumpeter. "Sing that back", he ordered.
And we went on from level to higher level until he was playing just music without words.

**A2**.      Complete the Table:                                         **(2)**

| Statement | Who said | To Whom | Effect on the listener |
|---|---|---|---|
| "You're not tone-deaf" | -------------------- | --------------------- | ----------------------------- |

 **A3**      Find words from the passage which mean :                                         **(2)**
     i) make progress  ii)one or more calculations involving numerical operations

**A4**i)      It proves everything. (Add a Question Tag)                                         **(1)**
 ii)      We went on from level to higher level until he was playing just music without words
      (Pick out the Prepositions)                                         **(1)**

**A5**.      Do you think the comparison between music and arithmetic was a good one? Give reason your answer.   **(2)**

**Q2. B Read the following passage and do the activities: (10)**

**B1**  Answer in one  word or a phrase:                                         **(2)**
 i)  What should we not be trapped by?
 ii)  Name the amazing publication mentioned in the passage.

About a year ago I was diagnosed with cancer. My doctor advised me to go home and get my affairs in order, which is doctor's code for 'prepare to die'. I lived with that diagnosis all day. Later that evening I had a biopsy. It turned out to be a very rare form of pancreatic cancer that is curable with surgery. I had the surgery and I'm fine now.
This was the closest I've been to facing death, and I hope it's the closest I get for a few more decades. Having lived through it, I can now say this to you: your time is limited, so don't waste it living someone else's life.
Don't be trapped by dogma- which is living with the results of other people's thinking. Don't let the noise of other's opinions drown out your own inner voice.
And most important, have the courage to follow your heart and intuition. They somehow already know what you truly want to become.
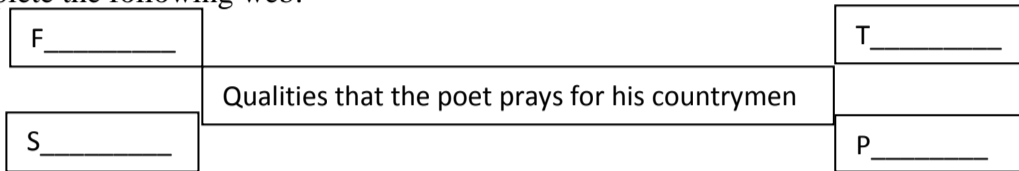
When I was young, there was an amazing publication called *The Whole Earth Catalogue.* In the final issue, on the back cover they put a photograph of an early morning country road. Beneath it were the words: Stay Hungry, Stay Foolish. It was their farewell message as they signed off. I have always wished that for myself. And now, as you graduate to begin anew, I wish that for you. Stay Hungry, Stay Foolish.

**B2.**State whether the following statements are true or false: **(2)**
   i)     The doctor advised me to go home and get my affairs in order.
   ii)    Our time is limited, so waste it living someone else's life.
   iii)   We should not let the noise of other's opinions drown out your own inner voice.
   iv)    We must have the courage to follow our heart and intuition.
**B3**i)   Give the noun forms of – a) hungry -              b) equal -                                              **(1)**
   ii)    From the extract pick out the opposites of: a) sensible   b) common                          **(1)**
**B4**i)   <u>About a year ago</u> I was diagnosed with cancer.( Frame 'Wh' question to get the underlined part as answer)   **(1)**
   ii)    My doctor advised me .(Name the Tense of the Verb and change to Future Continuous Tense)   **(1)**
**B5**.    What message do you get from this passage?                                                              **(2)**

## Section III: Poetry

**Q3 A. Read the extract and do the following activities**: **(5)**
**A1**     Complete the following web:                                                                           **(2)**

```
 F_____                                          T_____

              Qualities that the poet prays for his countrymen

   S_____                                          P_____
```

Where the mind is without fear and head is held high
Where knowledge is free
Where the world has not been broken up into fragments
By narrow domestic walls
Where words come out from the depth of truth
Where tireless striving stretches its arms towards perfection
Where the clear stream of reason has not lost its way
Into the dreary desert sand of dead habit
Where the mind is led forward by Thee
Into ever-widening thought and action
Into that heaven of freedom, my Father, let my country awake.

**A2**i)   What 'reason' and 'dead habit' are compared to?                                                       **(1)**
   ii)    What is the rhyme scheme of the extract?                                                               **(1)**
**A3**     Name and explain the Figure of Speech:                                                                **(1)**
           Where tireless striving stretches its arms towards perfection

**Q3B**    **Read the following poem and write an appreciation of it with the help of the given points in paragraph format.**   **(10)**

When God at first made Man,
Having a glass of blessings standing by;
Let us (said He) "pour on him all we can:"
Let the world's riches, which dispersed lie,
Contract into span.

So strength first made a way;
Then beauty flow'd, then wisdom, honour, pleasure:
When almost all was out, God made a stay,
Perceiving that alone of all His treasures
Rest in the bottom lay.

For if I should (said He)
Bestow this jewel also on my creature,
He would adore my gifts instead of me,
And rest in Nature, not the God of Nature.
So both should losers be.

Yet let him keep the rest,
But keep them with repining restlessness:
Let him be rich and weary, that at last,
If goodness lead him not, yet weariness
May toss him to my  breast.

You may use the following points while appreciating the given poem.
**\*Title \* Poet \* Central Idea \* Rhyme Scheme \*Any two favourite lines \* Theme \* Figures of Speech\* Tone of the poem \*  Why you like the poem.**

**Q4. A. Read the passage and do the activities:** (10)

**A1.Arrange the following sentences in the chronological order as they appear in the passage:** (2)

    i) The villager has traditionally been a believer in philosophy of 'karma' or fate.

    ii) The rate of change is sluggish.

    iii) His attitude, in many respects, is: 'home made is best'.

    iv) Antiquated attitudes, value systems and outlooks are changing.

The villager has customarily been very conservative in his attitude and approach. He is reluctant to change his traditional way of thinking and doing things. His attitude, in many respects, is: 'home made is best'. For instance, most cattle farmers in the villages prefer to feed their cows and buffaloes with a home-mix comprising of local oil-cakes like mustard or cottonseed, pulses, jiggery, salt, etc. it takes numerous visits, hard-convincing, daily trials and experiments to convince the rural cattle farmer that compound feeds, scientifically formulated, improve the yields of milk without any incremental costs.

The age old values and attitudes towards caste, creed, women, time and money take time to change. The villager has traditionally been a believer in philosophy of 'karma' or fate. He has found more convenient to blame his economic destitution and poor living conditions. The security that the villagers find in the 'status quo', acts as a disincentive to change and experiment in the short run. Many of these antiquated attitudes, value systems and outlooks are changing due to improved levels of awareness and education. However, the rate of change is sluggish. Attitudes that have fossilized over the centuries do take time to change.

**A2. Match the column:** (2)

| A | B |
|---|---|
| 1. The villager was customarily very conservative | i). a believer in philosophy of 'karma' or fate. |
| 2. Most cattle farmers in the villages | ii) take time to change. |
| 3. The villager has traditionally | iii) in his attitude and approach |
| 4. Attitudes that have fossilized over the centuries | iv) prefer to feed their cows and buffaloes with a home-mix |

**A3.**     **Select the correct adjective forms from the bracket:** (2)

    (improved, sluggish, economics, sluggishly, convenience, economic, improvise, convenient,)

    i) slug -------- ii) improve -------- iii) economy ------- iv) conveniently ---------

**A4**i)   He has found more convenient to blame his economic destitution.

    (Pick out the verbs and state whether Finite or Infinitives) (1)

  ii)   He is reluctant to change his traditional way of thinking .

    (Name the Parts of Speech of the underlined words.) (1)

**A5.**     How do you think we can bring about rapid change in Indian villages? (2)

**Q4B.**     **Read the following passage and write a summary/précis writing:(Write a title and use appropriate language)** (5)

Bern Bronson, 30 loved animals. Raised on a family owned zoo, he had grown up caring for antelope, deer and wildcats. He was fiercely, at times stubbornly, protective. Once, when a tiger cub was born with a deformed leg, the local veterinarian and Bret's parents believed the animal would never live a full life. Even so, the boy bottle-fed the cub and cared for it. Despite Bret's 'mothering', the cub died, but Bret's nurturing instinct lived on.

In college he studied animal science, and afterwards he worked at a safari park where, in 1980, he trained his first African elephant and found his true calling. From the beginning, Bronson was awed by elephants. They have the brute force to uproot trees and can outturn the fastest human sprinter. But they also have delicate fine- motor skills. The same trunk that could hoist the front end of an automobile or fracture a predator's skull could gently pluck a peanut from the fingers of a small child. He'd also learned to respect their extraordinary intelligence.

Every elephant has distinct personality and can express a wide range of emotions through sounds and eye and body movements., Bronson had even heard that elephants could cry. The magnificent beasts kept him endlessly fascinated.

**Section V: Writing Skill**

**Q5A.**     **Letter writing:** (5)

  A     **Write a letter of application in response to the advertisement in The Mid Day which follows:**

> ABC Pvt. Ltd. requires efficient computer operator with knowledge of accounts and excellent communication skills. Send your application to: The Advertiser, P.O. Box No: 111, The Mid Day, Mumbai -400001.

**Q5B.**     **Dialogue writing / Interview questions:** (5)
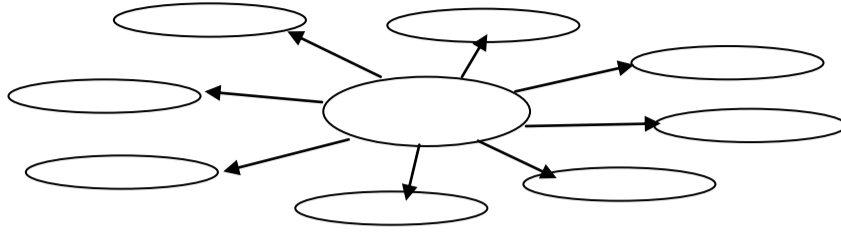
    Imagine that you are selected to interview a famous personality 'Kailash Satyarthi.' Write 8 to 10 questions that you would ask him at the interview.

**Q6 A.** **Information transfer: Verbal to Non- Verbal / Non-Verbal to Verbal** **(5)**

Read the following information and draw a web diagram.

Thoughts and feelings are a part of our being. We go through a series of thoughts and feelings which are pleasant and exciting. Some feelings are serene and dignified. There are other thoughts and feelings which are spontaneous and rewarding… some anxious feelings too are experienced by us. Some feelings can be intimate while others can stem from the concern and care we have for others. It all depends on the state of mind we are… after all aren't our lives enriched due to these very thoughts and feelings.



**Q6B.** **View/ Counterview / Speech** **(5)**

Write a speech to be delivered on the occasion of Labour Day on the topic 'Dignity of Labour.'

**Section VI: Creative Writing**

**Q7A1.** **Expansion of idea / Report writing (Any one)** **(5)**
   1.   An idle mind is a devil's workshop.
   2.   Slow and steady wins the race.

**Q7B.** **Developing a story:** **(5)**

Develop a story to narrate to your friends in order to convince them that Laziness never pays. Give a suitable Title.

***** **ALL THE BEST******

**Q1)Choose the correct option** (4)

1)_____ is world famous for spices . (Pakistan , Bangladesh , India , Bhutan )

2)The Lakshadweep Island of the Arabian sea are _____ . ( made from the part separated from the mainland , coral island , volcanic islands , continental island )

3) Huge anacondas are found in the areas near to _____. (Guyana highlands ,Brazilian Highlands , the great Escarpment , Pantanal )

4)Brazil has nearly _____ % of words total population .( 2.41 ,2.78 ,5.6 ,17.5 )

**Q2)Match the following** (4)

| A | B |
|---|---|
| 1)Himalayan forest | a)Pau Brasil |
| 2)Coastal forest | b)Orchid |
| 3)Deciduous forest | c)Sundari trees |
| 4)Evergreen forest | d) Pine |
| | e) Teak |
| | f)Sal |

**Q3) Answer the following in one sentence** (4)

1) What is sex ratio ?

2) How will you obtain various types of information during field visit ?

3) Which state of India receives the maximum amount of retreating monsoon ?

4) Which region of Brazil receives rainfall throughout the year ?

**Q4) A .Mark the following on the outline map of India and make an index** (4)

1) Western Himalayan

2) Any two states of India with high density of population

3) Punjab Haryana plain

4) Capital of Maharashtra

**B. Read the map and answer the following** (4)

1) What is shown in the map?

2) Between which two highland is the Amazon river basin located ?

3) What is the name of the highest mountain peak in Brazil ? What is its height?

4) Swampy land in Brazil is located in which river basin ?

**Q5) Give geographical reason (Any 3)** (6)
1) The density of population in sparse in Amazon basin
2) The northern part of Brazil is covered with dense forest
3) Convectional type of rainfall is not prominent in India
4) As compared to Amazon , pollution in river Ganga will affect human life greatly

**Q6)  With the help of given statistical date prepare a simple line graph and answer the following question**
(6)

Brazil percentage of urban population (1960 to 2010 )

| Year | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 |
|---|---|---|---|---|---|---|
| % of urban population in Brazil | 47.1 | 56.8 | 66 | 74.6 | 81.5 | 84.6 |

1) What is the interval of data?
2) In which period did urbanization occur rapidly?
3) In which period did urbanization occur slowly?

**Q7) Answer in Brief** (8)
1) Giving example correlate climate and population distribution ?
2) Why do human settlements grow in specific location only ?
3) Why does the deciduous type of vegetation occupy   most of India ?

# ALL   THE   BEST

*Thakur Educational Trust's (Regd.)*

THAKUR VIDYA MANDIR HIGH SCHOOL &JR.COLLEGE

I PRELIMINARY EXAMINATION 2018- 2019

Subject: History/ Political Science

Name: _____ STD: X Div: _____ Roll No: _____

Marks: 60                 Date:01/10/2018                 Time: 2hrs 15mins.

**HISTORY**

**Q1. A. Fill in the blanks in the given statements choosing the correct alternative from the brackets.** **(4)**

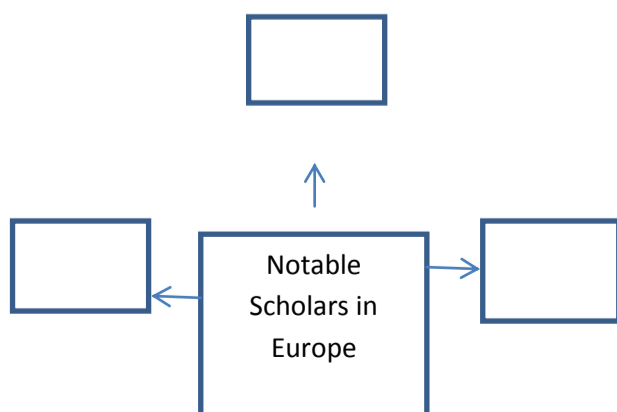1. It may be said that_____ was the founder of modern historiography.
   (Voltaire, Rene Descartes, Leopold Ranke, Karl Marx)
2. _____was the first Director General of the Archaeological Survey of India.    (Alexander Cunningham, William Jones, John Marshall, Friedrich Max Muller)
3. The National Archives of India is in _____.   (Delhi, Kolkata, Mumbai, Chennai)
4. The _____ saw the rise of Mathura school.
   (Kushana period, Gupta period, Rashtrakuta period, Maurya period)

**Q1. B. Identify the wrong pair, correct it and rewrite:** **(4)**
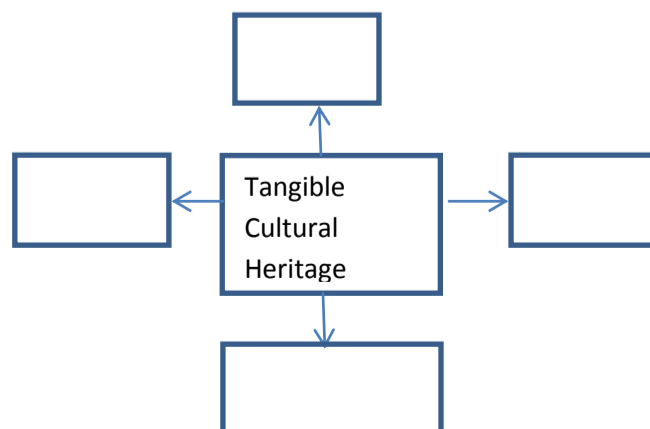
a.  1. Prabhakar –      Acharya  P. K. Atre
    2. Darpan –          Balshastri Jambhekar
    3. Deenbandhu –  Krishnarao Bhalekar
    4. Kesari –           Bal Gangadhar Tilak

b.  1. Raigadala Jevha Jag Yete – Vasant Kanetkar
    2. Tilak Ani Agarkar –          Vishram Bedekar
    3. Sashtang Namaskar –       Acharya Atre
    4. Ekach Pyala –                 Annasaheb Kirloskar

c.  1. Mallakhamb-    Outdoor game based on physical skills
    2. Water polo -     Water sport
    3. Skating –          Adventurous ice sport
    4. Chess –            Outdoor game

d.  1. Matheran -  Hill Station
    2. Tadoba –     Rock-cut caves
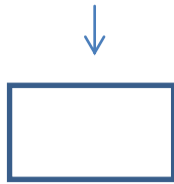    3. Kolhapur –  Pilgrim Centre
    4. Ajanta –      World Heritage

**Q2. A. Complete the concept map. (any 2)** **(4)**
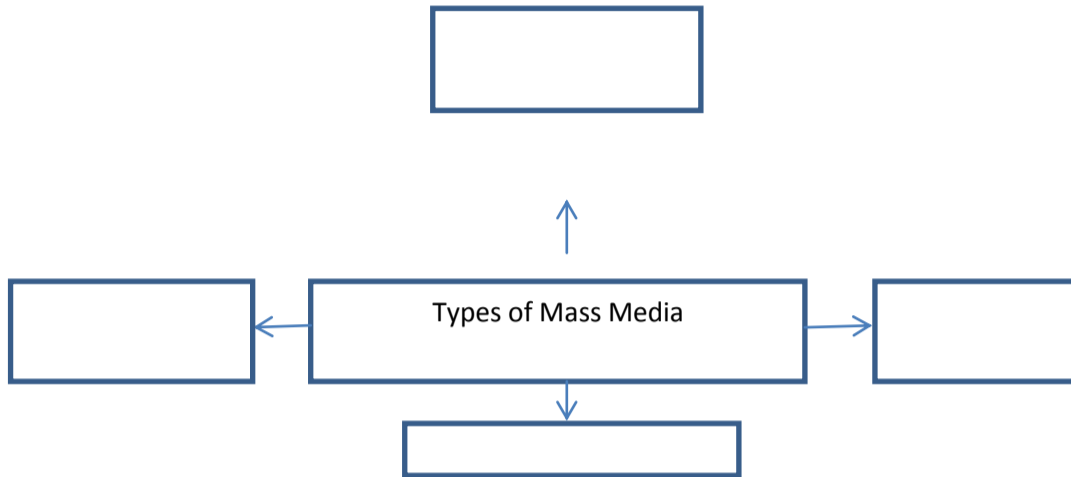
1)                                                          2)

**3)**

Types of Mass Media

**Q2. B Write short notes/Explain the concept. (any 2)** **(4)**

1. Need of entertainment
2. Sports and movies
3. Agro-tourism

**Q3. A Explain the statements with reasons. (any 2)** **(6)**

1. Archives and libraries publish research journals, informative pamphlets, leaflets, posters etc.
2. The number of people travelling back and forth from India has increased considerably.
3. Currently the structure of sports economy has been significantly affected.
4. Expertise in history is important in the film industry.
5. Any information received through mass media needs to be reviewed critically.

**Q3. B. Answer in brief.  (any 2)** **(6)**

1. Explain the importance of sports.
2. What is Powada?
3. Which things are included in the descriptions by Emperor Babur in his autobiography?

**Q4. Read the passage and answer the questions based on it.** **(4)**

Radio: 'Indian Broadcasting Company' (IBC), a private radio company was the first one to broadcast daily programmes. Later the same company was taken over by the British Government and named as, 'Indian State Broadcasting Service (ISBS). On 8th June 1936 it was renamed as All India Radio (AIR).

After Independence, AIR became an integral part of the Ministry of Information and Broadcasting (India). Initially, it broadcasted Governmental programmes and schemes. It was named as 'Akashvani' on the suggestion of the famous poet Pandit Narendra Sharma. Akashvani broadcasts various entertainment, awareness creating and literary programmes. It also broadcasts special programmes for farmers, workers, the youth and women. The 'Vividh Bharati' programmes are broadcasted in 24 regional languages as well as 146 dialects of Indian languages. Lately, various new channels like 'Radio Mirchi' are providing radio services.

1. Akashvani is an integral part of which ministry? **(1)**
2. In how many regional languages and local dialects are 'Vividh Bharati' programmes broadcasted? **(1)**
3. How AIR was named Akashvani? **(2)**

**Q5. Answer the following in detail. (any 2)** (8)

1. Explain Karl Marx's 'Class Theory'.
2. Explain the difference between indoor and outdoor games.
3. Describe any three types of tourism.

### POLITICAL SCIENCE

**Q6. Fill in the blanks in the given statements choosing the correct alternative from the brackets.** (4)

1. The major challenge faced by all democratic nations in the world is _____.(Religious conflicts, Naxal activities, Deepening the roots of democracy, Importance to muscle power)
2. To increase agricultural production and become self sufficient with regard to foodgrains _____ was initiated.(Water revolution, Green revolution, Industrial revolution, White revolution)
3. National Conference is a party in _____State. (Orissa, Assam, Bihar, Jammu and Kashmir)
4. Constituencies are created by _____committee of the Election Commission. (Selection, Delimitation, Voting, Timetable)

**Q7. Explain with reason whether the statements are true or false.(any 2)** (4)

1. People may lose confidence in the democratic process due to corruption during elections.
2. Political parties act as a link between government and people.
3. Indian democracy is considered the largest democracy in the world.
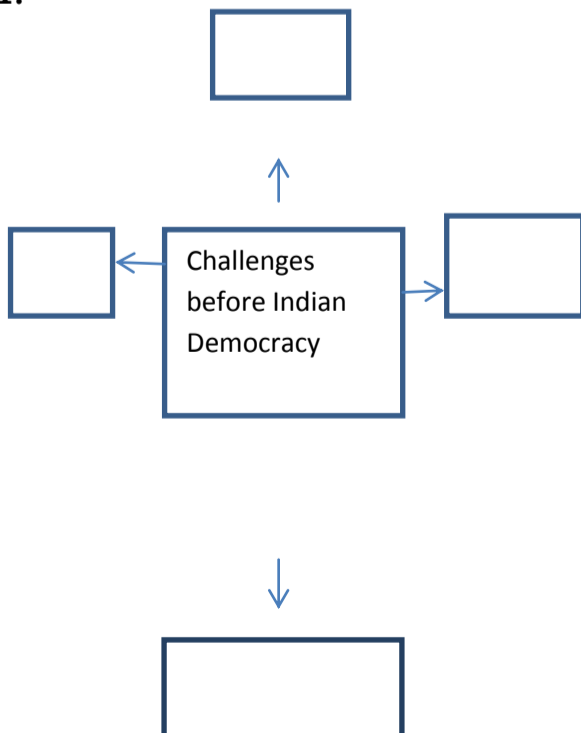
**Q8. A. Explain the concept. (any 2)** (4)

1. Journey from ballot box to EVM machine
2. Tribal movement
3. Corruption

**Q8. B. Do as directed/instructed.**

**Complete the following concept maps. (any 2)** (4)

1.

```
            ┌──────┐
            │      │
            └──────┘
               ↑
┌──────┐   ┌─────────────┐   ┌──────┐
│      │ ← │ Challenges  │ → │      │
└──────┘   │ before Indian│   └──────┘
           │ Democracy    │
           └─────────────┘
               ↓
            ┌──────┐
            │      │
            └──────┘
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2.

```
                ┌──────┐
                │      │
                └──────┘
                   ↑
┌──────┐   ┌──────────────┐   ┌──────┐
│      │ ← │  Important    │ → │      │
└──────┘   │ movements in  │   └──────┘
           │    India      │
           └──────────────┘
                   ↓
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**3.**

```
                    ┌──────────────┐
                    │              │
                    └──────────────┘
                           ↑
┌──────────────┐    ┌──────────────┐    ┌──────────────┐
│              │ ←──│National Parties│──→ │              │
└──────────────┘    │              │    └──────────────┘
                    └──────────────┘
                           ↓
                    ┌──────────────┐
                    │              │
                    └──────────────┘
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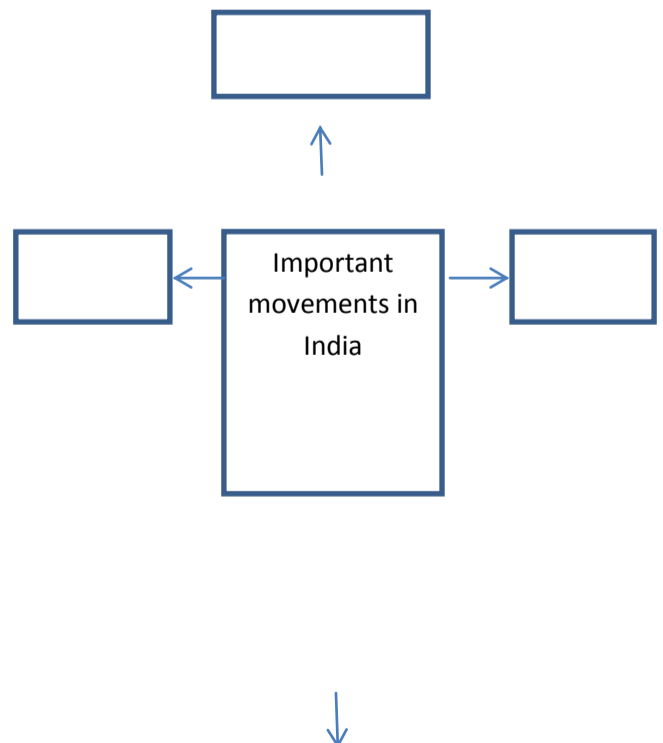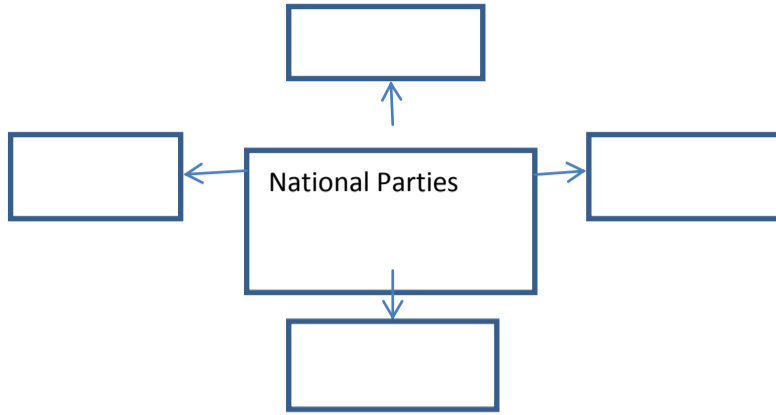
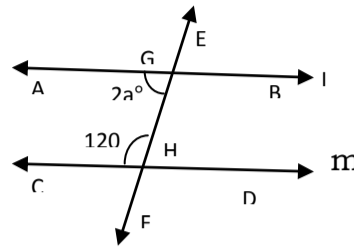**Q9. Answer following in brief.  (any 2)**                                      **(4)**

1.  What are the effects of criminalization of politics?
2.  Explain the activities/role/functions of environmental movement.
3.  What are the major characteristics of political parties?
4.  Explain the functions of the Election Commission.

# BEST OF LUCK

*Thakur Educational Trust's (Regd.)*

# THAKUR VIDYA MANDIR HIGH SCHOOL & JR. COLLEGE

**I Preliminary Exam 2018-19**

**Subject : Mathematics – II**

Date : 03/10/2018                     Marks : 40

Std : X                                         Time : 2 hrs.

**Q.IA. Attempt any 4 sub-questions from the following.        [4]**

1) If A-B-C and $l(AC) = 11, l(BC) = 6.5$ then find $l(AB)$
2) In the figure, line $l \parallel line\ m$ and *line EF*
   is the transversal with respect
   to given information find the value of a.



3) In Δ XYZ, $\angle$ X = 65°, $\angle$ Y = 75° then find $\angle$Z.
4) Find the value of $\sin^2 30 + \cos^2 45$.
5) Quadrilateral ABCD is a parallelogram. If $\angle$A = 3x and $\angle$C = 120⁰ then find the value of x.
6) The length of the longest chord of the circle is 17 cm, find the radius of the circle.
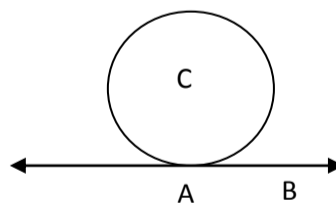
**Q.IB. Solve the following questions.( Any 2)        [4]**

1) Find the volume of sphere of radius 3.5cm.
2) Write the equation of  X-axis & Y-axis.
3) Radius of a circle is 34cm and the distance of the chord from the centre is
   30cm, find the length of the chord.

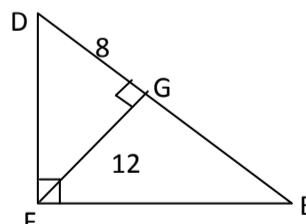**Q.IIA. Choose the correct alternatives.        [4]**

1) Sides of two similar triangles are in the ratio, 3:5. Area of these triangles
   are in the ratio.

 A) 25:9        B) 3:5        C) 9:25        D) 5:3

2) If two sides of the right angled are 3 and 4, then the length of the third
   side is .

A) 5          B) $\sqrt{7}$        C) 5 or $\sqrt{7}$        D) none of these.

3) Number of circles than can be drawn through three collinear points is.

   A) 1        B) 0        C) 2        D) 3.

4) The distance between the points P(-1,1) and Q(5, -7) is

   A) 11      B) 10        C) 5        D) 7.

**Q.IIB. Solve the following questions (any 2).        [4]**

1) In the adjoining figure, the radius of a circle with centre C
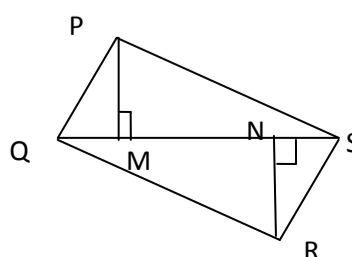   is 6cm. line AB is a tangent at A.
   If d(A,B)=6, then find d(B,C)



2) In the adjoining fig $\angle$ DFE = 90°,
   FG ⊥ ED If DG = 8,
   FG = 12 find EG.



3) In the triangle ABC line PQ ∥ side BC ,A-P-B & A-Q-C , AP =2.4cm,        PB =7.2cm QC =
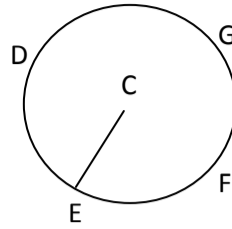   5.4cm; then find AQ.

**Q.IIIA.  Solve the following questions (any 2).        [4]**

1) Draw a circle of radius 4.2cm. Take any point K on it. Draw a tangent to the circle
   without using centre of the circle.
2) In fig PM=10cm A($\triangle$ PQS) = 100sq.cm.
   A($\triangle$ QRS = 110sq.cm then find NR.

3) In fig points G, D, E, F are concyclic points of a circle with centre C.
$\angle$ ECF=70°, m(are DGF) = 200°
find m(arc DE) and m(arc DEF)



**Q.IIIB. Solve the following questions (any 2)** **(4)**
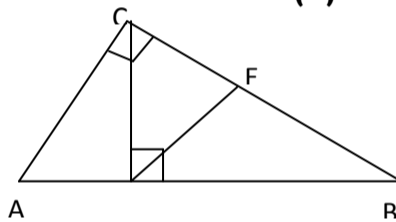
1) In $\triangle$ PQR, seg. PM is the median. If PM =9 and PQ$^2$+PR$^2$ = 290. Find QR.

2) Draw an angle of 125° and bisect it.

3) If the points $\left(\frac{2}{5},\frac{1}{3}\right)$ $\left(\frac{1}{2},k\right)$ and $\left(\frac{4}{5},0\right)$ are collinear then find value of k.

**Q.IVA. Solve any three of the following** **(9)**

1) Prove the ratio of the area of similar triangles is equal to ratio of square of their corresponding sides.

2) Prove that the sum of the square of the diagonals of a parallelogram is equal to the sum of squares of its sides.

3) Draw a tangent to the circle with centre 'O' and radius 3.3cm from a point A such that d(O, A)=7.5cm. Measure the length of tangent segments.

4)The centre of a circle is $(2x-1, 3x+1)$. Find $x$. If the circle passes through (3, -1) and length of diameter is 20units.

**Q.V. Solve any one of the following.** **(4)**

1) In $\triangle$ ABC $\angle$ACB = 90°
seg CD $\perp$ seg AB seg DE $\perp$ seg CB
Show that : CD$^2$ × AC = AD × AB × DE



2) In $\triangle$ ABC if D is a point on BC such that $\frac{BD}{DC} = \frac{AB}{AC}$ prove that AD is bisector of $\angle$ BAC.

**Q.VI. Solve any one of the following:** **(3)**

1) The dimensions of the model of a multistorey building are 1m by 60 cm by 1.20 m. If the scale factor is 1:50, find the actual dimensions of the building.
Also find : the floor area of a room of the building, if the floor area of the corresponding room in the model is 50 sq.cm.

2) Pranali and Prasad started walking to the East and to the North Respectively, from the same point and at the same speed. After 2 hours distance between them was 15 $\sqrt{2}$ km. Find their speed per hour.

**ALL THE BEST**

**Q 1) A) Solve any _four_ from the following sub-question.**                                    **(4)**

1.  Write in Roster form 'Set of negative integer'.

2.  Write the surd $\sqrt{48}$ in the simplest form.

3.  Write the polynomial $x^4 - 5x^2 + 7$ in coefficient form.

4.  Find the ratio of circumference of a circle with radius 'r' to its area.

5.  Mr. Sachin invested 8% of Rs.1,00,000 in shares. What amount did he invest in shares?

**Q 1) B) Solve any _two_ from the following sub-question.**                                    **(4)**

1.  Find the median of the data 30, 25, 32, 23, 42, 36, 40, 33, 21, 43.

2.  If $\frac{a}{3} = \frac{b}{2}$ then find the value of the ratio $\frac{5a+3b}{7a-2b}$

3.  If $(x-2)$ is a factor of $x^3 - mx^2 + 10x - 20$ then find the value of $m$.

**Q 2) A) Choose the correct alternative.**                                    **(4)**

1.  To solve $x + y = 3$ ; $3x - 2y - 4 = 0$ by determinant method find D.
    a) 5                      b) 1                      c) -5                      d) -1

2.  Which of the following quadratic equation has root 3, 5?
    a)      $x^2 + 8x - 15 = 0$                b)      $x^2 + 3x + 5 = 0$
    c)      $x^2 - 8x + 15 = 0$                d)      $x^2 - 15x + 8 = 0$

3.  Which number cannot represent a probability?
    a) $\frac{2}{3}$                b) 1.5                c) 15%                d) 0.7

4.  A die is rolled. What is the probability that the number on the upper surface is a multiple of 4?
    a) $\frac{2}{3}$                b) $\frac{1}{3}$                c) $\frac{1}{2}$                d) $\frac{1}{6}$

**Q 2) B) Solve any _two_ from the following sub-question.**                                    **(4)**

1.  Solve the given equation by Cramer's method : $4m - 2n = -4$ ; $4m + 3n = 16$

2.  Solve the given quadratic equation by factorization method : $x^2 = 2(11x - 48)$

3.  Write the sample space 'S' number of sample points, event X and Y using set form and n(X) and n(Y)
    i)      A die is thrown
            X is the event of getting an even number.
            Y is the event of getting a prime number.

**Q 3) A) Solve any _two_ from the following sub-question.**                                    **(4)**

1.  Form the quadratic equation if the roots are $2 - \sqrt{5}$ , $2 + \sqrt{5}$

2.  Solve the given simultaneous equation $5x + 2y = -3$ ; $x + 5y = 4$

3.  State whether '$k$' is the root of the given quadratic equation $y^2 - (k-4)y - 4k = 0$

**Q 3) B) Solve any _two_ from the following sub-question.**                                    **(4)**

1.  Compare the quadratic equation $2x^2 + 16 = -5\sqrt{3}\,x$ with $ax^2 + bx + c = 0$ also find the discriminant and write the nature of the root.

2.  Find the value of '$k$' if one root of the quadratic equation $kx^2 - 20x + 34 = 0$ is $5 - 2\sqrt{2}$, find the rational number '$k$'.

3.  A coin is tossed three times then find the probability of the events
    i) Getting exactly one tail.
    ii) Getting head on the middle coin.

**Q 4) Solve any _four_ from the following sub-question.**                                    **(9)**

1. Following table gives age group wise distribution of people suffering from 'Dengue' in certain city. Find mean by Step Deviation Method.

| Age (in years) | 7 - 11 | 11 – 15 | 15 – 19 | 19 – 23 | 23 – 27 | 27 – 31 | 31 – 35 | 35 - 39 |
|---|---|---|---|---|---|---|---|---|
| No of people | 5 | 9 | 13 | 21 | 16 | 15 | 12 | 9 |

2. Find '$k$' if the roots of the quadratic equation $x^2 + kx + 40 = 0$ are in the ratio 2 : 5.

3. Solve the given simultaneous equation: $\dfrac{10}{x+y} + \dfrac{2}{x-y} = 4$ ; $\dfrac{15}{x+y} - \dfrac{5}{x-y} = -2$

4. A box contains 30 tickets, bearing only one number from 1 to 30 on each. If one ticket is drawn randomly, find the probability of an event that ticket drawn bears.
   i)   An odd number.
   ii)  A complete square number

**Q 5) Solve any _one_ from the following sub-question.** (4)
   1. If the cost of banana is increased by Re. 1 per dozen, one can get 2 dozen less for Rs. 840. Find the original cost of one dozen of banana.
   2. The entry ticket for an exhibition is Rs. 5 for children and Rs. 15 for adults. A group of 13 person visited this exhibition and paid Rs. 115 to buy entry ticket. Find the number of children and adults in the said group.

**Q 6) Solve the following.** (3)
   1. Solve the given quadratic equation by formula method : $9s^2 - 4 = -6s$

# ALL THE BEST

**Thakur Educational Trust's (Regd.)**

**THAKUR VIDYA MANDIR HIGH SCHOOL & JR. COLLEGE**

I  Preliminary Re-Examination 2018- 2019

Subject:  Algebra.

Name: _____ STD: X Div: _____ Roll No: _____

Marks: 40                 Date: 10/10/2018                 Time: 2 hrs

**Q 1) A) Solve any _four_ from the following sub-question.** (4)

6. Write the given rational number in decimal form $\frac{23}{7}$.

7. Write the given set using Rule Method. A = {1, 4, 9, 16, 25}

8. Write the polynomial in index form (5, 0, 0, 0,-1).

9. Find the ratio of the first quantity to the second quantity in the reduced form
5 litres, 2500 ml.

10. Find mean of the given observation : 10, 7, 5, 3, 9, 6, 9.

**Q 1) B) Solve any _two_ from the following sub-question.** (4)

4. The following 10 observations are arranged in the desending order as follows:
2, 3, 5, 9, x + 1, x + 3, 14, 16, 19, 20. If the median of the data is 11, find the value of x.

5. Simplyfy $2\sqrt{48} - \sqrt{75} - \frac{1}{\sqrt{3}}$

6. If n(A) = 15, n(A  B) = 29 , n( A  B)=7 then n(B)=?

**Q 2) A) Choose the correct alternative.** (4)

5. For drawing the graph of $4x + 5y = 19$, if x = 1, what is the value of y.
   b)  4           b) 3           c) 2           d) -3

6. Which of the following is not a quadratic equation?
   b)      $x^2 + 4x = 11 + x^2$           b)      $x^2 = 4x$
   c)      $5x^2 = 10$           d)      $2x - x^2 = x^2 + 8$

7. What is the probability of the event that a number chosen from 1 to 100 is a prime number?
   b) $\frac{1}{5}$           b) $\frac{6}{25}$           c) $\frac{1}{4}$           d) $\frac{13}{50}$

8. Different expenditure incurred on the construction of a building were shown by a pie diagram. The expenditure Rs. 45,000 on cement was shown by a sector of central angle of 75 . What was the total expenditure of the construction.
   b)  Rs. 2,16,000      b) Rs. 3,60,000      c) Rs. 4,50,000      d) Rs. 7,50,000

**Q 2) B) Solve any _two_ from the following sub-question.** (4)

4. Solve the given equation by Cramer's method : $3x + 2y + 11 = 0$  ;   $7x - 4y = 0$

5. Form quadratic equation if roots are $\frac{1}{2} \ and -\frac{1}{2}$

6. Write the sample space 'S' number of sample points, event A and B using set form and n(A) and n(B)
   ii)      If two coins are tossed.
            Event A: of getting at least one tail turns up.
            Event B: of getting at the most one tail turns up.

**Q 3) A) Solve any _two_ from the following sub-question.** (4)

4. Solve the given quadratic equation by factorization method (2y + 3) = 81

5. Solve the given simultaneous equation $\frac{1}{3}x + 2y = \frac{10}{3}$  ;   $x + \frac{1}{4}y = \frac{11}{4}$

6. Find whether the value against the given quadratic equation are roots or not $2m^2 - 5m = 0,$           $m = 2 \ or \ \frac{5}{2}$

**Q 3) B) Solve any _two_ from the following sub-question.** (4)

4. Compare the quadratic equation $\sqrt{3}x^2 + \sqrt{2}x - 2\sqrt{3} = 0$ with $ax^2 + bx + c = 0$ also find the discriminant and write the nature of the root.

5. Find the value of '$k$' if one root of the quadratic equation $kx^2 - 20x + 34 = 0$ is $5 - 2\sqrt{2}$, find the rational number '$k$'.

6. A box contains 20 cards marked with numbers 0 to 19. One card is drawn from the box at random. What is the probability that number on the card is:

    iii) Getting Even no.

    iv) Getting Prime no.

**Q 4) Solve any _four_ from the following sub-question.** (9)

5. Solve the given simultaneous equation:
$$\frac{1}{3x+y} + \frac{1}{3x-y} = \frac{3}{4} \quad ; \quad \frac{1}{2(3x+y)} - \frac{1}{2(3x-y)} = -\frac{1}{8}$$

6. The sum of the squares of two consecutive even natural number is 244. Find the number.

7. A two digit number is to be formed from the digits 0,1,2,3,4. Repetition is allowed. Find the probability that the number formed is:

    a) Prime Number.

    b) Multiple of 4

    c) Multiple of 11

8. Following table gives frequency distribution of trees planted by different housing societies in a particular locality. Find mean number of trees planted by housing society by using Step Deviation Method

| NO. of Trees | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 |
|---|---|---|---|---|---|---|
| No. of Societies | 2 | 7 | 9 | 8 | 6 | 4 |

**Q 5) Solve any _one_ from the following sub-question.** (4)

3. Find m, if the quadratic equation $(m - 12)x^2 + 2(m - 12)x + 2 = 0$ has real & equal roots.

4. Sharad bought a table and a fan together for Rs. 5,000. After some time he sold the table at a gain of 25% and a fan at a gain of 20%. Thus he gained 23% on the whole. Find the cost of fan & a table.

**Q 6) Solve the following.** (3)

2. If    and    are the roots of the quadratic equation $y^2 - 2y - 7 = 0$ find the value of:

    i)                                    ii)

# ALL THE BEST

**Thakur Educational Trust's (Regd.)**

THAKUR   VIDYA   MANDIR   HIGH   SCHOOL & JR.COLLEGE

I  PRELIMINARY EXAMINATION 2018- 2019

Subject :Science

Name: _____ Std: X   Div: _____        Roll No:___

Marks: 40                         Date: 24/09/2018                    Time: 2hrs

**Q1) A) Solve the following Questions.**                                    **(5)**

1) According to Kepler's third law $T^2 \propto r^n$, where n =_____.

2) Write the name and symbol of the element from the description.

i) The atom having the smallest size.

3) Say true or false.

i) The digestion of food is a Chemical decomposition process.

4) Name the quantity Expressed in Ohm.

5) 1 Calorie = _____ joules.

  **B) Multiple choice question.**                                          **(5)**

1) The density of water  is maximum at _____.

a) $0\,^{\circ}C$     b) - $4\,^{\circ}C$        c) $100\,^{\circ}C$       d) $4^{0}C$

2) _____ of light is responsible for twinkling of stars.

a) Reflection       b) Internal reflection  c) Dispersion         d) Refraction

3) The number of electrons in the outermost shell of  alkali metals is.

a) 1                   b) 2            c) 3                       d) 7.

4) Carbon dioxide _____.

a)  turns  lime water milky    b) is odourless              c) is colourless   d) All the three.

5) At the time of short circuit, the current in the circuit _____.

a) increases       b) decreases    c) remains the same   d) increases in step.


**Q2) Answer the following   (any 5)**                                      **(10)**

1) Define Centripetal Force. State Kepler's First and Second law.

2) Tungsten metal is used to make a solenoid type coil in an electric bulb.

3) Explain the role of Latent heat in the change of State of a substances?

4) State the laws of refraction?

5) It is recommended to use air tight container for storing oil for long time.

6) Elements belonging to same group shows same valency.

7) Atomic radius goes on increasing down a group


**Q3)  Answer the following Questions (any 5)**                             **(15)**

1) Write a note on Dispersion of light..

2) Explain the anomalous behaviour of water.

3) Give Demerits of Mendeleev's Periodic table.

4) Explain the construction & working of electric motor.

5) Explain the term a) Endothermic reaction b) displacement reaction c) Combination reaction.

6) Explain any 3 factors affecting the rate of Chemical reaction.

7) Give the 3 rules regarding the refraction of light.


**Q4) Attempt the following (any 1)**                                                    **(5)**

1) Read the following paragraph and answer the questions.

   If heat is exchanged between a hot and cold object, the temperature of the cold object goes on increasing due to gain of energy and the temperature of the hot object goes on decreasing due to loss of energy.

   The change in temperature continues till the temperature of both the objects attain the same value. In this process, the cold object gains heat energy and the hot object loses heat energy. If the system of both the objects is isolated from the environment by keeping it inside a heat resistant box (meaning that energy exchange takes place between the two object only), then no energy can flow from inside the box or come into the box.


i) Heat is transferred from where to where?

ii) Which principle do we learn about from this process?

iii) How will you state the principle briefly?

iv)  Which property of the substance is measured using this principle?


2) Explain the Construction & working of electric generator (AC) with a neat diagram.


**\*\*\*\*ALL THE BEST\*\*\*\***

Q1) A) a) Find the odd one out:                                            (2)

1) Iron, Gold, Copper, Silver.

2) Fragmentation, binary fission, regeneration, spore formation.

B) Match the following:                                            (3)

| Column A | Column B |
|----------|----------|
| a)Mg | i) 2,8,5 |
| b) P | ii) 2,8,2 |
| c) Cl | iii) 2,8,4 |
| | iv) 2,8,7 |

QI)B) Choose the correct alternative  & rewrite the statement.                (5)

1) Which of the following options is correct according to the reactivity of metals?

a) Zn < Al < Fe < Cu   b) Zn > Al > Fe > Cu   c) Cu < Fe < Zn < Al   d) Cu < Fe < Al < Zn.

2) Some acetic acid is treated with $NaHCO_3$. The resulting solution will be _____.

a) colourless   b) blue   c) green   d) turbid

3) Through which process does the exchange of respiratory gases occur in the cells of a plant?

a) Osmosis     b) Diffusion   c) Glycolysis     d) Exhalations

4)  Fermentation is a type of _____

a) aerobic respiration        b) anaerobic respiration

c) endothermic reaction     d) none of these.

5) Which gas is liberated when acetic acid reacts with sodium metal?

a) $H_2$    b) $O_2$   c) $CO_2$   d) $NH_3$

Q2) Answer the following (any 5)                                     (10)

1) Why do our hands and throat itch when we eat certain food stuffs like yam, colocasia etc?

2) Write the functions of the following in a reproductive system:

3) how do we smell?

4) Write the IUPAC name for :

i)               H    H    H    H              ii)     H    H    H    H    H

                 |

        H-- C-- C--   C--  C-- H          H-- C-- C--   C--  C-- C H

        H    H    Br   H                      H    H    OH  H    H

5) What is E-waste?

6) Explain the terms :  i) Galvanizing    ii) Anodizing.

Q7) Answer the following (any 5)                                              (15)

1) With reference to alkynes, answer the following questions?

   i) Nature of bonds     ii) Their general formula     iii) One example of alkynes with molecular formula.

2) Write an experiment to show that chlorophyll is necessary for photosynthesis.
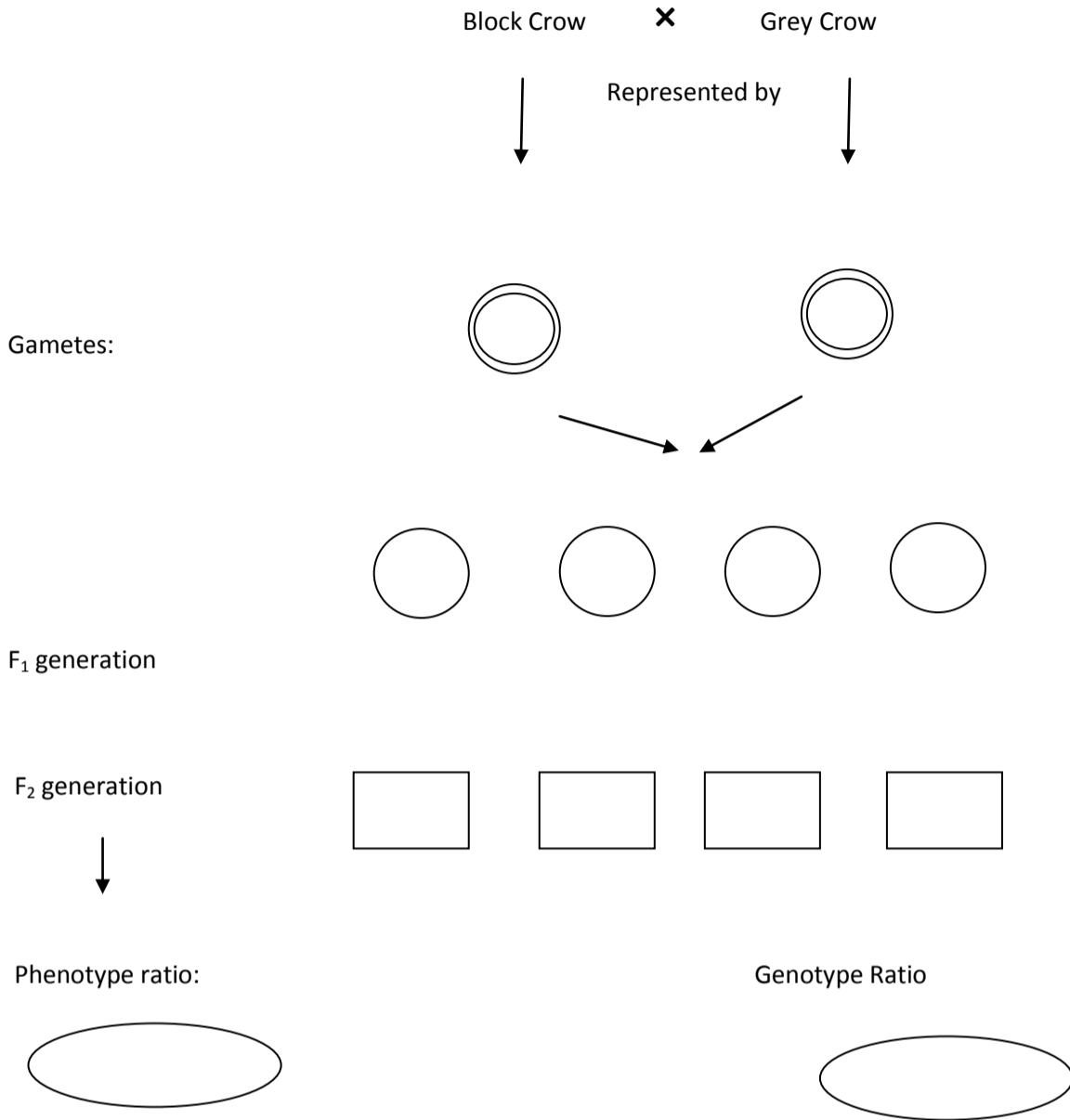
3) Explain the combustion reaction of methane.

4) Explain the terms : i) Cloning ii) Meiosis

5) In the extraction of Aluminium:

a) Write the equation for the action of heat on aluminium hydroxide.

b) Why is it necessary to replace the anodes from time to time?

6) Complete the table in connection to Mendel's monohybrid cross.

Block Crow    ✕    Grey Crow

Represented by

Gametes:

$F_1$ generation

$F_2$ generation

Phenotype ratio:

Genotype Ratio

Q8) Attempt the following (any 1)          (5)

1) Explain the process of cellular respiration.

2) You are given the following metals:

   Mg, Ca, Na, Zn, Al

  Write their reaction with water and hence arrange them in the decreasing order of their reactivity.

****ALL THE BEST****

**Q1) A) Solve the following Questions.**                                          **(5)**

1)Identify the Co-relation:

a)  Peripatus : Connecting links ::Appendix:

2) Fill in the blanks;

a) Implantation of embryo occurs in_____.

b) For Formation of plasma membrane _____molecules are necessary.

3) Say true or false.

i) 86  highly sensitive biodiversity spots are reported all over the world.

4) Name the Following.

a) The function of testis.

**B) Multiple choice question.**                                               **(5)**

1)Which phase shows a notch in the cytoplasm in between the central region?

a) Prophase          b) Metaphase          c) Anaphase              d) Cytokinesis

2) What is binary fission?

a) Meiotic division b)Mitotic division  c) Both Meiosis and Mitosis  d) Type of sexual reproduction
3) What is Yeast?

a) Bacteria          b) Protista            c) Fungus                  d)Sponge.

4) In which phase do the spindle fibres disappear.

a) Prophase          b) Metaphase          c) Anaphase              d) Telophase.

5) What Kind of Fission is shown by paramoecium.

a)Simple Binary Fission                         b) Transverse Binary Fission

c) Longitudinal Binary Fission                    d) Multiple Binary Fission        .

**Q2) Answer the following   (any 5)**                                   **(10)**

1) Write a note on Darwin's theory of natural selection.

2) Explain Budding in unicellular and multicellular organisms.

3) Distinguish between Glycolysis and TCA cycle.

4) Write a note on Sacred Groves.

5) It is absolutely necessary to control the fission reaction in nuclear power plants.

6) Give reason:Hormonal secreted by ovary of female reproductive system.

7) What is meant by Carbon dating.


**Q3)  Answer the following Questions (any 5)**                                              **(15)**

1) Write evolutionary  history of modern man.

2) Explain the concept of IVF.

3) Explain Krebs cycle with reaction.

4) Write  the types and examples of biodiversity.

5) What are the advantages  and limitations of solar energy?

6) Write a note on electrical energy generation and environment.

7) How are the hereditary changes responsible for evolution?


**Q4) Attempt the following (any 1)**                                              **(5)**

1)  Explain Sexual reproduction in plants with a suitable diagram.
2)  With the help of suitable diagrams .Explain the five stages of Prophase I of meiosis.




**\*\*\*\*ALL THE BEST\*\*\*\***