THAKUR VIDYA MANDIR HIGH SCHOOL& JR.COLLEGE

IV Prelimnary Exam 2016- 2017

Subject: HISTORY OF ARTS.

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

Marks: 40   Date: 09/02/2017
Time:1hr15mins.

Q1. Fill in the blanks
(5)

1. The Vesar style temples are geographically in _____ India.

2. The _____ is a distinct feature of the temples in South India.

3. Emperor Shah Jahan Built the Taj Mahal in memory of his beloved queen_____.

4. The cave painting Padmapani Bodhisattva is at _____.

5. The Elephanta Caves are near to _____ city.

Q 2. Match the pairs
(5)

A	B
1) Elephanta	a) Mount-Abu
2) Suntemple	b) Padmapani Bodhisattva.
3) Bibi-ka Magbura.	c) Trimurti.
4) Dilwara temple.	d) Aurangazeb
5) Ajanta Temple.	e) Konark.

Q3. State whether the following statements are True or False.
(5)

1. Taj Mahal is built by Aurangzeb.

2. Kailashnath temple is at Ellora.

3. Nagar style temple are found mostly in South India.

4. Gangavataran sculpture is at Mahabalipuram

5. Dravidian style temple are found in Central India.

**Q4. Answer in Short.
(10)**

1. Who Built Taj-Mahal?

2. What is Viman?

3. Name two Buddhist Sects?

4. What is Chaitya?

5. What is Vihara?

**Q5. Answer in Brief
(10)**

1. What is Gopur?

2. Write the names of Famous nagar style temples.

3. Which section of the society was attracted towards Buddhism? Why?

4. Write the names of famous Dravidian style temples.

5. Which work was commissions by Jahangir in Kashmir?

**Q.6. Answer in brief (Any-2)
(10)**

1. Nagar temples.

2. Elephanta Caves

3. The sculpture of two Monkey.

Thakur Educational Trust's (Regd)

THAKUR VIDYA MANDIR HIGH SCHOOL & JR.COLLEGE

II Terminal Exam 2016- 2017

Subject: Physical & Health Education.

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

Marks: 80   Date: 08/02/2016   Time:2hrs 30mins.

QI. A Select the correct alternative and re write the sentence   (5)

1) The Paschimttasana helps to stretch the back and _____muscles.

a) throat   b) thigh   c) body   d) hand

2) The Ushtrasama is very beneficial for people suffering from _____.

a) Asthama   b)Cancer   c) thyroid   d) T.B.

3) In Vipareet Karani impure _____ from the lower body flows easily..

a) throat   b) Mind   c) blood   d) Oxygen.

4) Shavasana is performed to give rest to the _____.

a) leg   2) throat 3) mind 4) blood.

5) The practice of contracting your _____ while performing 'Ujjayi' is like a hurdle race.

a) body   b)throat   c) mind   d) back.

  Q1 B) Match the Following: -   (5)

                   A   B

1) Aim of Physical Education   a) Mixed exercise

2) Cardiovascular fitness   b) Energy and strength

3) Muscle strength   c) Oblique's

4)Muscular endurance   d) Sportsmanship and discipline .

5) Diet exercise   e) Bajarang -Dand

                                               .

Q1. C) State Whether the following statements are "True or False "   **(5)**

1) Vitamins minerals and Certain type of proteins increase immunity to diseases.

2) A banana fistful of roasted grams (chana) peanuts and jaggery are not enough to provide nutrition.

3) The best thing is to use lots of water to cook rice.

4) Tasty and palatable food helps to secretes digestive juices in proper quantities which helps digestion.

5) It is good to wash vegetable after cutting and chopping as water soluble vitamins are not lost.

Q1. D) Answer the following in one sentence: **(5)**

1) What is agility?

2) Define well -being?

3) Write two benefits of exercise?

4) Effects of environment on a child?

5) A health person?

Q.2) Answer the following questions in Short (Any four)   **(12)**

1) Blisters   2) Comminuted fracture   3) Laxation   4) Faulty bio -mechanics

5) Malnutrition   6) Balanced diet

Q3) Answer the following questions in short: (Any Four)   **(12)**

1) Mention the proportion of a) Carbohydrates   b) Proteins c) Fats required in our daily diet.

2) First-aid for soft tissue injuries.

3) First aid for skin tear or loss of skin.

4) List the warm-up exercises advised for a shot -putter.

5) What are the donts for a sprinter?

Q4) Answer the following questions in brief :- (any three)   **(12)**

1) List the benefits gained from 'Suryanamaskaar'.

2) How is 'BMI' determined and write the formula of BMI?

3) Write the Benefits we gain from 'Yoga'?

4) what is a 'Y' balance and the benefits gained?

Q5) Answer the following question in brief (Any three) (12)

1) Why do we need to strengthen our muscles?

2) Explain how muscles and organs get energy?

3) 10×4 metres shuttle rum:

4) What is a Pranayama and what benefits gained?

Q6) Identify the Asanas and write the benefits gained (Any two) (12)

Picture

QI) Attempt any five sub-questions (5)

1) Find the common difference of the given A.P.10, 14,18, 22, ………….

2) Write down the given quadratic equation in the form of, $ax^2 + bx + c = 0$.

  $x^2 - 3x = -5$

3) If $3x + 4y = 11$ and $4x + 3y = 10$, find $x + y$

4) If $x \propto y$, find the constant of variation when $x = 1$ and $y = 2$.

5) Namdeorao purchased a towel at ₹ 80 from Khadi Bhavan. Its MRP was ₹ 90. Find the amount of rebate.

6) Find the Central Sales Tax paid for a tin of oil with printed price of ₹ 1,400 at the rate of 2%

QII) Attempt any four sub -questions (8)

1) Determine whether the given sequence is an A.P. or not, 11,16,21,26,………

2) Express the following information in mathematical form using two variables (Use the variables x and y)

   i) The sum of the two numbers is 57.

   ii) The difference of two numbers is 40.

3) If 'y' varies inversely as $'x'. if\ x = 6$ and $y = 9,$ find the constant of variation and the equation of variation.

4) The marked price of a book is ₹ 45. It is sold at a discount of 15%. Find the discount allowed on the book

   and its selling price.

5) Solve the given simultaneous equation. $x + y = 0; x - y = 2$

QIII) Attempt any three sub-questions (9)

1) Solve the quadratic equation by factorization method. $x^2 - 6x - 7 = 0$

2) $m \propto n$ and $n = 7$ when $m = 154$. Find the value of m when $n = 14$.

3) The total printed price of an article purchased from Khadi Emporium is ₹ 3,360. The Bhandar gave a total

   rebate of ₹ 504. Find the percentage of rebate.

4) Solve the given simultaneous equations. $7m + 5n = 56; 7m = 42 - 3n$

QIV) Attempt any two sub -questions (8)

1) Find the sum of the first 90 terms of an A.P. Whose first term is 5 and the 90th term is 625.

2) Solve the given quadratic equation by formula method. $3x^2 + 7x + 2 = 0$

3) Paras Enterprises purchased pipes for ₹ 8,600 and sold those to George for ₹ 9,300. Find M-VAT at the rate of 5% paid by invoice method.

QV) Attempt any two sub -questions (10)

1) In an A.P 7th term is 0(zero). Then show that 15th is twice the 11th term.

2) A salesman was appointed on a fixed monthly salary of ₹ 6,000 with 4% incentive on the excess of sale over ₹ 48,000. If he sold goods worth ₹ 50,000, find the monthly income of the salesman.

3) Mr. A. P. Deshpande (45 yrs) serving in a company earns Rs 23,700 per month (excluding travelling allowance). He deposited Rs 2,300 per month towards Provident Fund. He brought N. S. C. of Rs 10,000 and donated Rs 6,000 to CM's relief fund. Find the income tax he has to pay for the F,Y. 2012 – 13.

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

Q.1. Attempt any 5 sub-questions from the following.   **[5]**
1) State Pythagoras theorem.
2) Δ MPL ~ Δ NQL, $\dfrac{MP}{NQ} = \dfrac{2}{3}$, LM = 6, find LN

3) Explain SAS test for similarity of two triangles.

4) The edge of a cube is 3.5 cm , find its volume.

5) The radius of a circle is 10 cm., find the length of largest chord of the circle
6) If cos A = 1, what is the value of sec A?

Q.2. Attempt any 4 sub-questions from the following.   **[8]**
1) Draw a Seg AB of length 6.3 cm. & bisect it.
2) Diagonal of square is 16 cm. Find its side.

3) Find the distance between the centers of the circles with radii 8 cm. and 12 cm.

If, i) they are touching externally

    ii) they are touching internally.

4) The length, breadth and height of a wooden box are 25cm, 15cm, and 10cm respectively. Find surface area of its vertical faces.

5) Find the value of cos 45^0 X sin45 ^{0} + sin30^0 X cos 60^0 .

Q.3. Attempt any 3 sub-questions from the following.   **[9]**

1) In isosceles triangle ABC , AB=AC = 5 . If the median AD = 3 then find BC.

2) Three circles having centers A,B and C are touching each other externally. If AB = 5cm , BC = 5 cm , AC = 4 cm the find the radii of the circles.
3) Construct circumcircle of Δ PQR in which QR = 6 cm., PR = 8 cm., and $\angle$QRP = 60°

4) Volume of a cone is 1256 cm^3 and radius is 10 cm. Find its height. ($\prod$ = 3.14)

Q.4. Attempt any 2 sub-questions from the following.   **(8)**
1) Below is given frequency distribution of marks (out of 100) obtained by the students.

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of Students	3	5	7	10	12	15	12	6	2	8

Calculate the mean marks scored by a student using ' Assumed Mean method

2)Prove that the perpendicular drawn from the centre of the circle to a chord , bisects the chord.

3) Prove that The ratio of areas of two similar triangles is equal to the ratio of square of their corresponding sides.

Q.5. Attempt any 2 sub-questions from the following.   [10]
1) The volume of the cone is 1232 cm3 and its perpendicular height is 24 cm. Find its total surface area.
2) Construct a circle with centre O and radius 4cm. Through point T draw the tangent segments to the circle.
3) In the figure centre of the circle is point "0"
Diameter PQ bisects the chord AB at point T.
If PQ = 30 , OT = 9 find (i) AB (ii) PB (iii) BQ

ALL THE BEST

(**SECTION I:** Reading Skills, Vocabulary and Grammar)

Q1**A. Read the following passage and do the given activities: (10)**

 A1.   Choose the correct alternative and rewrite the sentences:
(2)

     i)   ---------- reforms have led to the opening up of the economy.

         1) social   2) economic   3) socio- economic

     ii)   ------------------ continues to be an acute problem.

1) supply of electricity   2)   supply of water   3) supply of textiles

iii) ------- are living below the poverty line

1) one- third   2) half   3) one- fourth

iv) --------- of carbon emissions has India committed to reduce.

1) 12 per cent   2) 20-25 per cent   3) 90 per cent

While the economic reforms since 1991 have led to the opening up of the economy in terms of liberalization, privatization and internationalization and impressive strides have been made in sectors such as telecom, civil aviation and financial markets, the all-important energy sector has not been able to keep pace with the rate of economic development. The yawning gap of 12 per cent between demand and supply of electricity continues to be an acute problem.

India is faced with the challenge of sustaining its rapid economic growth of 8-9 per cent in order to lift out of poverty one-third of its people who are living below the official poverty line while at the same time dealing with the threat of climate change and global warming. India has committed itself to reducing its carbon emissions by 20-25 per cent by 2020 starting with 2005as the base year.

Power shortages could be the single biggest factor to derail the country from its high-growth trajectory. Around 53 per cent of our electricity is generated from burning coal. Around 25 per cent of our power supply comes from hydel resources, which are location – specific and cannot be seen to provide dramatically more than what they do right now. This leaves us with nuclear power and renewable sources of energy – the sun, the wind and biomass.

A2. Observe the Pie- chart, read the passage and answer the questions given below. (2)
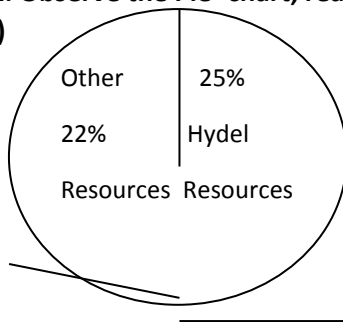
i)   How much per cent of our electricity is generated from coal?

ii) How much accounts for electricity from hydel resources?

iii) What about the remaining 22%

iv) What are we left with?

A3.   i) Write the words from the passage that mean:1) curved rising path 2) important developments   **(1)**

ii) Pick out the **antonyms** for the following words from the passage:1) richness   2) retain **(1)**

A4. i) The yawning gap of 12 per cent between demand and supply of electricity continues to be an acute problem. (Pick out the Prepositions)
(1)

ii) India is faced with the challenges of sustaining its rapid economic growth

(Rewrite beginning with Challenges -----)

(1) **A5.** What other means could be adopted, according to you, to deal with the problem of energy crisis

in India?
(2)

Q1B. **Read the following passage and do the given activities.** **(10)**

B1 Name two types of cameras mentioned in the following passage.
(2)

What equipment are you using currently? I am using the Canon Mark II DS. It has a lighter, quicker and brighter view finder. Digital cameras are easy to use even if you don't think it is ethical photography if an operator or an Art Director has to clean up your photographs. Even though I use a digital camera, my effort is always that the Art Director should have to do the least amount of work on it.

What is your take on digital retouching? I don't think it is correct work ethic, but it is surely developing into a different genre of art. Now the expectations from the young budding photographers have increased. They have to be technically sound and only then can you bend your grammar of lighting. For instance, the contrast in digital photography is more and this should be known by the photographers.

Digital media has some pros, though. For instance, it reduces uncertainty and offers more storage. But I feel that to reach the quality of say, Kodachrome, digital cameras need to go through another generation of refining. The midtones and the grey tones are also not well defined in digital cameras.

B 2. **Give reasons for the following:**
(2)

i) Gautam uses the Canon Mark II DS.

ii) Gautam uses the Digital cameras.

B3. i) Pick out two words from the passage with a prefix attached to them.
(1)

ii) Give the noun forms of: 1) reduce 2) technical

(1)

-1-

B4. i) Digital cameras are easy to use. (Add a Question Tag)
(1)

ii) It reduces uncertainty and offers more storage. (Rewrite using 'not only …. But also….)
(1)

B5. What according to you is the quality that keeps Gautam active and motivated?
(2)

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

A1. Fill in the blanks with suitable words from the passage
(2)

i) The Cowboy knew nothing about ……………………… .

ii) He saw himself as a ……………

iii) He wrote down the ………..things that he intended to accomplish.

iv) He made a …………… to leave the ranch**.**

What made Cowboy a success? Was it because he was a hard worker? That helped. Was it because he was smarter than everyone else? No. He knew nothing about the telephone business when he started. So what was it? I believe it was because he knew the **Ya Gotta' for Success: He was focused on success.** He knew that's what he wanted and he went after it.

He took responsibility. He took responsibility for where he was, who he was and what he was (a ranch hand). Then he took **action** to make it different. **He made a decision** to leave the ranch in Bartlesville Oklahoma and to look for opportunities to become a success. **He changed**. There was no way that he could keep doing the things that he had been doing and receive different results. And he was **willing** to do what was necessary to make success happen for him. **He had vision and goals**. He saw himself as a success. He also had written down specific goals. He wrote down the four things that he intended to accomplish and put them on the wall in front of him. He saw those goals everyday and focused on their accomplishment.

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

┌─────────────────────────────────┐
│ The Cowboy concentrated on: │
└─────────────────────────────────┘

i). He always ……….. on success.

ii). He chased success with full ……….

iii). He took …….. to make it different.

iv). He was **……** to do what was necessary to make success happen.

A3. **Fill in the gaps with appropriate words from the passage:**
(2)

i) Showing quick intelligence : _m_rt_ _

ii) Bring to its conclusion : a _ _o _ _ l_s_

iii) Being essential : _ec_ _ s_a_ _

iv) Of a special or particular kind : s_ _c_ _ i_

A4 i) It was because he knew the Ya Gotta' for Success.(Identify and name the clauses)
(1)

ii) He had written down specific goals.

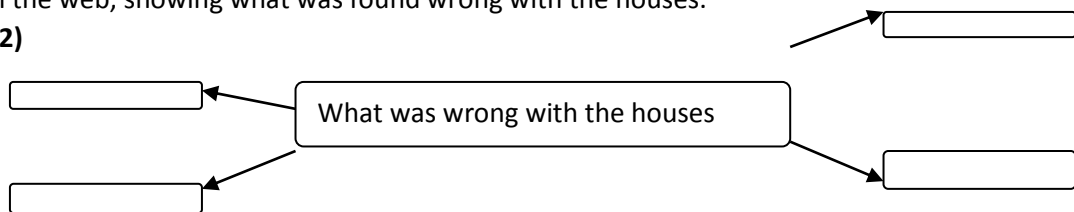(Rewrite the sentence using the Past Perfect Continuous Tense of the verb)
(1)

A5. What according to you is the secret of Cowboys success**?** Explain**.**
(2)

Q2B. **Read the following passage and do the given activities:** **(10)**

B1. Fill in the web, showing what was found wrong with the houses.
(2)

For the fifth day in succession I sat out on the wearisome search for a house. My husband had been very ill and the doctor was insistent that we must give up living in the town. It was essential for him to breathe the pure air of the country, if he was to get strong again. So I was feverishly house hunting of course. I had seen innumerable houses, but there was something wrong with all of them. Some were too large, some too small. Some were surrounded by too much land and some had so little garden that it was practically non-existent, some would never have been repaired since they were built; roof-tiles were missing, walls and ceilings were cracked, woodwork was rotting, paint peeling. It would require a fortune to make them habitable. Some were so ugly outside that I made no attempt to look through the interior. I was sure that one house was

haunted, could feel a ghostly presence following me from room to room and feel the swish of skirts that I could

not see. I have never been afraid of ghosts but I did not want to share my home with one. I have heard too

many tales of the tricks that spirit occupants of houses can get up to, if they are attended by the living owners. It would be uncomfortable to be on bad terms with a companion who was alive, but intolerable with a dead one. The morning of the fifth day brought no better result and I was so disappointed that I very nearly give up looking at anything more that week. However, something impelled me to go on after lunch, and I found exactly what I wanted.

B2. **Answer in just a word or a phrase:**
(2) i). For how long had the writer been house hunting?

ii). What was necessary for the writers husband?

iii). What sound did the writer hear in one of the houses?

iv). What does the extract describe?

B3. **Match the column:**
(2)

A	B
i) innumerable	a) search
ii) ghostly	b) garden
iii) wearisome	c) houses
iv) non-existence	d) presence

B4. i) Something impelled me to go on. (Rewrite beginning with ' I was…..')
(1)

ii) The writer found <u>exactly what she wanted</u>.

(Frame a Wh-question to get the underlined part as the answer)
(1)

B5. Describe the writer's opinion that some houses she saw had never been properly looked after.
(2)

(Section II: Poetry)

Q3.A Read the following extract and do the given activities.   (5)

A1. Find how the poet describes the following:
(2)

i) The rain --------------------.   ii) The birds ------------- .

iii) The sky -------------------.   iv) The grass ------------- .

There was a roaring in the wind all night;

The rain came heavily and fell in floods;

But now the sun is rising calm and bright,

The birds are singing in the distant woods;

Over his own sweet voice the stock dove broods;

The jay makes answer as the Magpie chatters;

And all the air is filled with pleasant noise of waters.

All things that love the sun are out of doors;

The sky rejoices in the morning's birth;

The grass is bright with raindrops – on the moors

The hare is running races in her mirth;

And with her feet she from the plashy earth

Raises a mist; that, glittering in the sun,

Runs with her all the way, wherever she doth run.

A2. **Fill in the blanks with the correct words from the bracket:** **(2)**

i) Mist is ------------- in the sun. (melting/ glittering)

ii) The stock dove broods over its own --------- voice. (sweet/ harsh)

iii) The air is filled with ------------noise of waters. (pleasant/ plashy)

iv) ----- runs with the hare all the way. (mist/ raindrops)

A3. **Name and explain the figure of speech:** **(1)**

'The sky rejoices in the morning's birth' - The figure of speech is ------------- because--------

(Complete the given sentence)

Q3B. **Read the following extract and do the given activities.** **(5)**

B1. State whether the following statements are true or false: **(2)**

i) The poet wishes that all Indians remain united.

ii) The poet salutes to our freedom..

iii) The poet wishes to learn to bear the lamp of peace.

iv) The mark of time on India has not been so frightening

Let us salute Republic day – let us salute its rising sun,

And let us greet our Motherland and bow before her feet and say

Mother! Your millions meet and swear on this, our proud Republic Day,

That we shall sink all differences and see all bickering is done-

We shall arise to dream like one, to toil like one, to build like one.

O Mother! Teach our hands to bear

The lamp of peace your hands have borne

Through centuries of stress and strife.

May your chaste image make us dare

To bare the mark which Time has worn,

Black mask of death to frighten life!

B2. i) Two words from the extract that refer to situations of disagreement are:
(1)

　　1) B_ _ _ _ _ _ _ G　　　　2) S _ _ _ _ E

　　ii) What is the rhyme scheme of the first verse?
　　　(1)

B3. **Match the sentence with the figure of speech.**
(1)

A	B
i) Let us salute Republic day – let us salute its rising sun	a)Transferred Epithet
ii) Black mask of death to frighten life	b) Repetition
	c) Antithesis

(Section III :Rapid Reading)

Q4A. **Read the following extract and do the given activities:** **(5)**

A1. Name any two complaints made by the mother regarding the house**:**
(1)

　　　The task of furnishing those huge, echoing rooms daunted Mother.

　　　"Is a slightly smaller house not available?" she asked father. "We don't have enough Curtains for this place. And the furniture seems a little inadequate. Why did they have to plan the kitchen at such a distance from the dining room? It is like doing a route march. And who is going to help me keep this place clean and dusted? Her misgivings and objections were undoubtedly valid. But, seeing our crestfallen faces, she sighed and gave in. We made extravagant promises to help in the household chores. Keep our rooms tidy. Put away our toys and books. She smiled with amused disbelief, her mind already working out how many meters of curtain- cloth would be needed and so on.

-3-

A2. i) Name the extravagant promises made by the children.
(1)

ii) What daunted mother in the new house?
   (1)

A3.   What was the cause of mother's misgivings and objections?
(2)

(Section IV: Writing Skills)

Q5A.   Letter Writing – Informal or Formal.
(5)

A1.   Look at the following news and write a letter to the forest officer, Osmanapura Station Road, Marathwada region, Aurangabad 431001, to make strong action to increase the number of birds.

> 15 Indian species of birds endangered amongst many other reasons loss of wet lands are the main. The human pressure on the ecosystem and the construction is largely responsible. Urbanization and modernization results into loss of birds.

OR

A2.   Your friend wrote a letter to you about Diwali Celebration. Here is an extract:

> "We had fun – such fireworks! Bombs and sparkles! Such lovely Rangoli designs! We went visiting friends and relatives"

Write to your friend describing how you celebrated Diwali.

Q5B.   Report Writing /Dialogue Writing
(5)

B1.   Your parent has been called by your Class teacher to discuss about your behaviour. Write a dialogue between them.

OR

B2.   Write a Report on the 'Sports Festival' of your School**.**

Q6A.   Information Transfer: (Verbal to Non-Verbal/ Non-Verbal to Verbal)
(5)

A1.   Read the given information and fill the table provided.

The boys and girls in the age group between 12-16 years would like to spend their vacation doing various activities. 40% of the boys and 20% of the girls would like to spend their time watching TV, 40% of the girls would love to visit their relatives. 35% of the boys would like to go for hobby classes, 20% would love visiting their relatives whereas 30% of the girls will join hobby classes. 10% of the girls and 5% of the boys will sit down to prepare for their forthcoming exams.
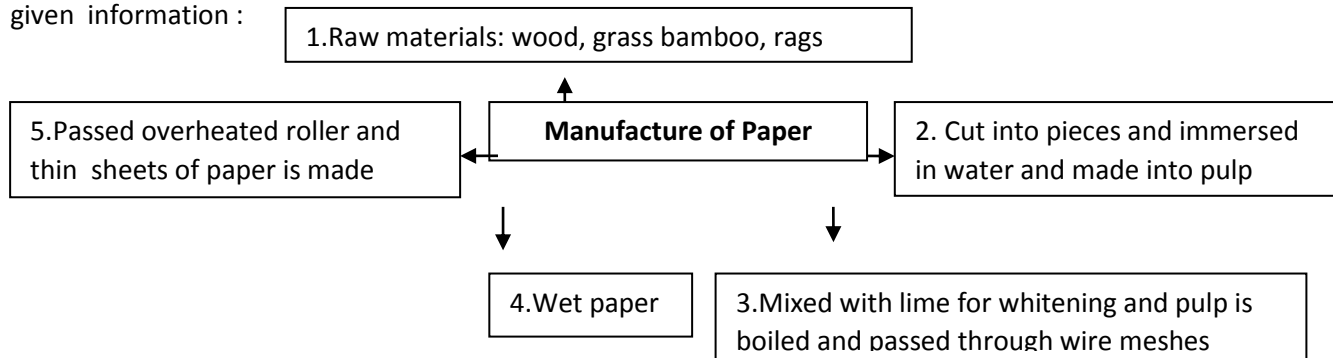
Options	Visiting Relatives	Hobby Classes	Watching TV	Preparing for Exams
Boys				

Girls				

<div align="center">**OR**</div>

A2. Observe the following web-diagram carefully and convert into a paragraph. Add more point to the

given information :

1.Raw materials: wood, grass bamboo, rags

5.Passed overheated roller and thin sheets of paper is made	**Manufacture of Paper**	2. Cut into pieces and immersed in water and made into pulp

4.Wet paper	3.Mixed with lime for whitening and pulp is boiled and passed through wire meshes

Q6B.   Speech or View and Counterview:
(5)

B1. You are soon going to complete your secondary education and it's time for you to step out into the world. You are nostalgic and would like to express your gratitude to your school Principal and teachers. Write a speech to be delivered on the auspicious occasion of your farewell.

<div align="center">**OR**</div>

B2. We notice children become tense during exams. They are told by their parents that exams are a part of growing up. Give your views and counterview on the same

Q7A. Expansion of ideas/ Developing a Story (Attempt any one of the following)
(5)

A1.   Expand any *one* of the given two ideas:

i) Don't put off for tomorrow what can be accomplished today.

ii) Pollution – the bane of machine age

<div align="center">**OR**</div>

A2. Develop a story wherein any one of the above given topics is the moral. Give suitable title.

<div align="center">******ALL THE BEST******</div>

Thakur Educational Trust's (Regd.)
Thakur Vidya Mandir High School & Junior College
I Preliminary Exam 2016-2017

Std. : **X**   Sub. : **Algebra**   Marks :
40 Date : **05/12/2016**   Time :
2 hrs.

Q.1. Attempt any 5 sub-questions from the following.
    [5]

1) For the given sequence, find the next two terms. 1,2,4,7,11........

2) Find t_n of the A.P. 3,6,9.....

3) Find the value of the given determinant.

$$\begin{vmatrix} 5 & 2 \\ 7 & 4 \end{vmatrix}$$

4) Find $x + y$ from the given simultaneous equation.

$12x + 13y = 29 \text{ and } 13x + 12y = 21$

5) Write the class mark of the class 60-69.

6) A die is thrown. Find the sample space 'S' and n(s).

Q.2. Attempt any 4 sub-questions from the following.
    [8]

1) State whether the following sequence is an A.P. or not 1,3,6,10,15...

2) Solve the given quadratic equation by factorization method
   $x^2 - 13x - 30 = 0.$

3) Find Dx and Dy of the given simultaneous equations.

   $3x - 2y = 3 \text{ and } 2x + y = 16.$

4) If one root of the quadratic equation $x^2 - 7x + k = 0$ is 3, then find the value
   of k.

5) For a certain frequency distribution, the values of Median and Mode are 95.75
   and 95.5 respectively. Find the value of Mean.

Q.3. Attempt any 3 sub-questions from the following.
[9]

1) Solve the given quadratic equation by using formula method i)
   $m^2 - 3m - 10 = 0.$

2) The first and last terms of an A.P. are 13 and 216 respectively. The common difference is 7. How many terms are there in that A.P.? Also, find the sum of all the terms in it.

3) Draw the histogram and hence draw frequency curve from the following frequency distribution.

Daily Sale of a Store(₹).	0-1000	1000-2000	2000-3000	3000-4000
No. of days in a Month.	5	15	5	3

4) Two digit number are formed from digits 0,1,2,3,4 where digits are not repeated find the probability for each of the events that.
   i) The number formed is an Even number.
   ii) The number formed is greater than 40.
   iii) The number formed is Prime number.

Q.4. Attempt any 2 sub-questions from the following.

[8]

1) A farmer borrows ₹ 1000 and agrees to repay with a total interest of ₹ 140 in 12 installments, each installment being less than the preceding installment by ₹ 10. What should be the first and the last installment?

2) Solve the following simultaneous equation. $\frac{27}{x-2} + \frac{31}{y+3} = 85$; $\frac{31}{x-2} + \frac{27}{y+3} = 89$

3) Draw a pie diagram to represent the world population from the following data after finding the value of 'a'.

Country of % of world	India	China	Russia	USA	Others	Total
Population	12	16	a	a	52	100

Q.5. Attempt any 2 sub-questions from the following.

[10]

1) If the sum of 'p' terms of an A.P. is equal to the sum of 'q' terms, then show that the sum of 'p+q' terms is Zero.

2) The weight of a bucket is 15kg, when it is filled with water up to $\frac{3^{th}}{5}$ of its capacity and the weight is 19kg, if it is filled with water upto $\frac{4^{th}}{5}$ of its capacity. Find the total weight of the bucket, if it is completely filled with water.

3) Draw the graphs of $2x = y + 2 \ and \ 4x + 3y = 24$ on the same graph paper. find the area of the triangle formed by these lines and the X-axis.

All the Best

Q.1. Attempt any 5 sub-questions from the following. **[5]**

1) If Δ PQR ~ Δ XYZ, and PQ : XY = 3:4 , then find A(Δ PQR) : A (Δ XYZ)

2) Find the slope of line whose inclination is 60 .

3) If Sec A = 2 , what is the value Cos A.

4) In triangle ABC AD is the bisector of $\angle$BAC . B-D-C . If BD = 6.3 cm , DC = 4.2 cm find AB:AC .

5) Quadrilateral ABCD is a cyclic Quadrilateral . $\angle$ BAD =70 , what is measure of $\angle$BCD ?

6) In triangle XYZ $\angle$Y = 90 , $\angle$ Z = 30 $\angle$X = 60 . If YZ = 9 cm find XZ.

Q.2. Attempt any 4 sub-questions from the following. **[8]**

1)) Draw an $\angle$ABC of measure 110º and bisect it.

2) Find the volume of a cylinder with radius 21 cm. and height 8 cm. ($\prod$ = $\underline{22}$)

3) As shown in figure given below, m (arc PMQ) = 120º.

Find m$\angle$PQS and m$\angle$PQR.

7
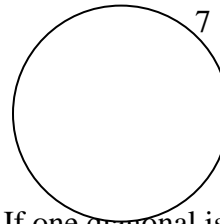
4)) Adjacent sides of a Parallelogram are 11 cm. and 17 cm. If one diagonal is 26 cm., find its other diagonal.

5) The slope of the line joining the points P (4,k) and Q (-3 , -2) is – 2/7 . Find the value of k

Q.3. Attempt any 3 sub-questions from the following. **[9]**

1) The equation of a line is 3x-4y + 12 = 0. It intersect the X- axis in point A and the Y axis in point B. Find the coordinate of points A and B.

2) Show that: (sec θ + tan θ) (1 – sin θ) = cos θ

3) A road roller of diameter 0.9 m and length 1.8 m is used to press the ground. Find the area of ground pressed by it in 500 revolutions . (Given: $\prod$ = 3.14)

4) In a cyclic quadrilateral if one pair of opposite side is congruent then show that the other squares of the remaining two sides.

Q.4. Attempt any 2 sub-questions from the following. **[8]**

1) Construct Circumcircle of ΔABC such that BC= 8 cm., m$\angle$BAC = 40° and altitude AD of length 3 cm.

2) A tree breaks due to storm and the broken part bends so that the top of the tree touches the ground making an angle of 60° with the ground. The distance from the foot of the tree to the point where the top touches is 20 meters. Find the height of the tree.

3) In ΔPQR Seg XY // Side QR

M and N are midpoints of Seg PY and Side PR

Respectively. Prove that : 1) ΔPXM ~ ΔPQN

2) Seg XM // Seg QN

Q.5. Attempt any 2 sub-questions from the following. **[10]**

1) In the Cyclic quadrilateral show that the sum of the products of the opposite sides is equal to the product of the diagonal.
2) In equilateral triangle ABC , the side BC is trisected at D . Prove that : $9AD^2 = 7AB^2$
3) In the adjoining fig PR = 6 cm
And PQ = 8 cm . Semicircles are drawn
 taking sides PR , PQ and QR as
diameters as shown in the figure .
Find the area of the shaded portion

ALL THE BEST

Thakur Educational Trust's (Regd)

THAKUR VIDYA MANDIR HIGH SCHOOL & JR.COLLEGE

II Preliminary Exam 2016 - 2017

Subject: Science & Technology I .

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

Marks: 40   Date: 2/12/2016
Time:2hrs

Q1) A) a) Fill in the blanks   **(3)**

1) The value of frequency of AC in India is _____.

2) An optical device used by watch repairs is _____.

3) The d-lock elements are known as _____ elements.

B) State True Or False and correct the false statement.   **(2)**

1) Salts of strong acid and weak base have pH less than 7.

2) Ecosystem can get severely disturbed due to natural disaster.

QIB) Choose the correct alternative and rewrite the statements.   **(5)**

1)The _____ is used to determine potential difference.

a) ammeter   b) voltmeter   c)rheostat   d) galvanometer.

2) The relation between   i and r in refraction experiment is _____.

a) $\angle i = \angle r$.   b) $\angle i < \angle r$ c) $\angle i > \angle r$ d) $\underline{\angle r}$ = constant

$$\angle i$$

3) To increase the effective resistance, the resistors are connected in _____.

a) series   b) parallel   c) series and parallel   d) none of these.

4) Curd contains _____ acid.

a) Tartaric   b) Citric c) Lactic d) Formic.

5) Hydrogen ions do not exist independently. Which ions are formed when they combine with water?

a) HCO_2 b) OH^- c) NH_4^+ d) H_3O^+

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

1) Give the use of magnetism in medical sciences.

2) Write the molecular formula and give one use for :   i) Baking soda   ii) Bleaching powder

3) Explain the causes and remedies for Myopia.

4) Complete the given reactions. What type of a reaction are they?

  i) HCl + NaOH $\longrightarrow$ _____ +_____

  ii) $2Mg + O_2$ $\longrightarrow$ _____ + _____

5) What is the speed of light in diamond if absolute refractive index is 2.4 and velocity of light in vaccum is

   3×10^5 m/s?

6) State Mendeleev's periodic law. Give the names of the following after they were discovered:

   i) Eka-aluminium _____   ii) Eka-boron _____

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

1) Draw a ray diagram of a convex lens when the object is at $2F_1$.

2) Find the expression for resistivity of a material and hence define it .

3) Explain the construction and working of Electric motor

4) What is soil pollution? State its effects.

5) Name the following:

   i)Indicator which is pink in base.   ii) Sodium salt of carboxylic acid. iii) Mixture of several indicator.

  iv) Substance used to make water soft and potable. v) A device used to observe planets.

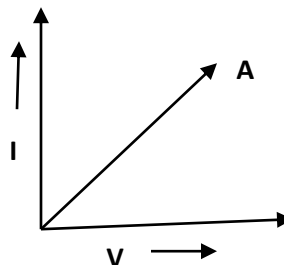 vi) The hard substance formed when POP is mixed with water.

6) Look at the graph and answer the questions.

i) What is the variation between V and I?

ii) V/I What do we observe. ....

iii) What is the quantity V/I called?

iv) State the units of V and I.

v) Which law does it represent?

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

1) Look at the figure and answer the questions:

i) Name the phenomenon observed in the given diagram.

ii) Mention the colours having minimum and maximum refractive index.

iii) Which colour travels with maximum speed?

iv) Which colour travels with minimum speed?

v) Name a natural phenomenon which show this.
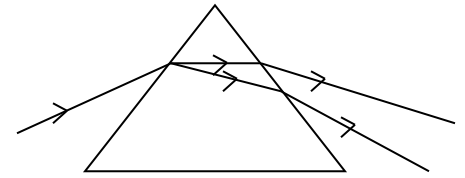
2) State and prove Joule's law of heating effect .

****ALL THE BEST****

Thakur Educational Trust's (Regd)

THAKUR VIDYA MANDIR HIGH SCHOOL & JR.COLLEGE

II Preliminary Exam 2016 - 2017

Subject: Science & Technology II.

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

Marks: 40   Date: 6/12/2016
Time:2hrs

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

1) Homologous organ, Embryo, Analogous organ, vestigeal organ.

2) Sun, Coal, Wind, Tides.

B) Match the following: (3)

Column A	Column B
a) Dominant	i) can express only when alone.
b) Recessive	ii) consists of 2 similar genes.
c) Homozygous	iii) Consists of 2 different genes.
	iv) expresses inspite of presence of other gene.

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

1) Spirogyra reproduces through_____.

a) Regeneration   b) Budding   c) Fragmentation   d) Sporogenesis.

2) Ganong's Light Screen experiment is done to show that _____ is necessary for photosynthesis.

a) Sunlight   b) water c) carbon dioxide   d) chlorophyll.

3) During aerobic respiration_____ molecules of ATP are released.

a) 2   b) 28   c) 38   d) 22.

4) _____ is amphoteric in nature.

a) Na_2O b) CaO c) MgO   d) Al_2O_3

5) During digestion carbohydrates are broken down into _____.

a) glycol   b) amino acids   c) glucose d) fatty acids.

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

1) Give Reason :Translocation is needed in all higher plants.

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

   a) Ovaries   b) Seminal Vesicles   and Prostrate Glands.

3) Give the functional group and one example of:

   i) Ketones   ii) Carboxylic acids.

4) Ionic compounds have high melting and boiling point.

5) How do we taste food?

6) Name the laws laid down by the government of India to control pollution?

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

1) Explain the Chemical control in animals.

2) Write a short note on : Importance of variation.

3) Explain how exchange of gases takes place in plants?

4) Draw a neat labelled diagram of the Female Reproduction System.

5) What is allotropy? Name the allotropes of carbon. Give one use of each.

6) Explain the following terms:

i) Thermic Reaction   ii) Electroplating   iii) Galvanizing

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

1) Explain the Sexual reproduction in plants.

2) Read the following paragraph and answer the questions**:**

After fertilization the flower has served its purpose. The petals, stamens, style and stigma wither and fall off. The calyx may either fall off or may remain intact in a dried and shrivelled form. The ovary becomes the fruit and the ovule forms the seed. When the fruits is ripe, the seed inside are released one by one grow into new plants.

Questions:

1) Which parts wither and fall off?

2) Which part develops into the fruit?

3) What are units present in the calyx called?

4) How do new plants grow?

5) Name the female reproductive organ of the flower.

****ALL THE BEST****

QI) A) Fill in the blanks (3)

1) A large area of India is covered by the_____.
2) The wool of _____ breed of sheep is considered of superior quality.
3) Jalandhar is a leading centre of _____.

B) Match the following (3)

A	B
1) Ujjain	a) Aravalli Mountain
2) Gurushikar.	b) Rich In Minerals
3) Chota Nagpur Plateau region	c) Ancient cultural capital of the Malwa
	d) Western Ghat.

QII) A) Give geographical reasons for the following (Any-2) (4)

1) Regionalization is very essential.
2) Forest areas is less in Punjab-Haryana Plain.
3) Agro based industries are found in the Ganga Plains.

B) Write short notes on (Any-2) (4)

1) Malabar coast.

2) Physiographic aspects of Punjab-Haryana Plain.

3) Major sources of irrigation on central highlands of India.

QIII) A Draw a simple line graph representing population of India. **(2)**

Years	Population (in millions)
1901	238
1911	252
1921	251
1931	278
1941	318
1951	361

B) Observe the following map and answer the following questions.
(2)

1) Which landforms are there on the north-western boundary of the Central Highlands?

2) Which plateau lies in the southern western part of Central Highland?

3) Which is the easternmost plateau in this region?

4) Which hill range lies to the south of the Vindhya Range?

C) Mark the following on the outline map of India with a suitable Index.
(2)

1) Nanda Devi Peak.

2) Aravalli mountain.

3) Vindhya Range.

4) Maharashtra plateau.

QIV) Answer the following questions in detail (Any-2)   **(8)**

1) Why wool industry has developed in Rajasthan?

2) Give a brief description of distribution of Industries in Ganga plain.

3) Write in detail on economic development in the Deccan Plateau.

ECONOMICS

QV) Fill in the blanks   **(2)**

   1) Tertiary sector is also known as _____.
   2) An economic problem mainly arises due to _____ of resources.

QVI) Answer the following in one or two sentences (Any-3) **(6)**

1) How does inflation affects moral values?
2) What is meant by food adulteration?
3) Explain the term mixed economy.
4) Explain the term 'How to produce'.
5) Write any two duties of a consumer.

QVII) Answer the following questions in detail (Any-1) **(4)**

1) Explain the fiscal measures to contral inflation.
2) Explain any five rights of the consumers.

**** ALL THE BEST****

QI A) Complete the following by statements choosing the correct alternative from the brackets. **(3)**

1) Under the leadership of _____, Dharasana Satyagraha took place.(Sarojini Naidu, Kasturba Gandhi, Madam Cama)
2) _____ is called the father of atomic energy.(Neil Bohr, Walten,Rutherford)
3) Stalin broke the _____ treaty and establish his power on Poland.(Yalta, Warsaw, NATO)

B) Match the columns **(3)**

A	B
1) Dr. A.P.J Abdul Kalam	a) German Thinker
2) Kemal Pasha	b) The father of Missiles programme in India

3) Karl Marx 　　　　　　　　　　c) People's Party

　　　　　　　　　　　　　　　　d) French Thinker

QII) Answer the following in 25 to 30 words (any-2) (4)

1) Write about the foreign policy of Bismarck.
2) What are the advantages of artificial satellite?
3) Which programme was planned by the revolutionaries for the achievement of Independence?

QIII) Give Reasons for the following in 25-30 words (any -2) (4)

1) All round development of Russia did not take place.

2) Militarism increased in Europe.

3) The League of Nations was unable to stop the warring countries.

QIV) Answer the following in 30- 40 words (any-2) (6)

1) How did America destabilize Japan?
2) Write the functions of the Secretary General of United Nations Organization.
3) Write a short note on Warsaw treaty.

Q V) Answer the following in 60-80 words (any -2) (8)

1) Write the uses of computer in various fields.
2) Write the information about the Independence Movement with reference to:
   a) Quit India Movement.
   b) The Azad Hind Sena.
3) Write about Kemal Pasha's development policy in Turkey.

QVI) Fill in the blanks in the given statements choosing the suitable alternative from the given brackets: (3)

1) Citizen have to accept some restrictions on their personal liberty for _____purposes. (equality, political security, justice)
2) The claim that we are superior to others creates _____. (equality, conflict, inequality, mutual understanding)
3) Political parties play an important role in creating _____ government. (responsible, strong, weak, independent)

QVII) Answer the following questions in one sentence each (any three) (3)

1) Which great leader did Tarabai shinde's family follow?
2) What is the core of democracy?
3) On what basis, do we find the division as superior-subordinate made, in the society?
4) How many types of political parties are there in India? What are they?
5) For what reason is the government required to take extra caution about the

   security of the people?

QVIII) State giving reasons if the following statements are True or False   (any-2)   (4)

1) The Indirect democracy is the democracy based on the direct participation of the citizens.
2) In many countries, even after the introduction of democracy women did not have the right to vote.
3) We find a completely homogenous society in India.

QIX) Answer the following questions in 25 to 30 words (any-1)   (2)

1) State the challenges of inequality and explain any one in detail.
2) 'People feel affiliated with political parties'. Explain.

**** ALLTHE BEST****

कक्षा -दशमी   दिनाङ्कः- **01/12/2016**

गुणा ः - 80   विषयः- संस्कृतम्   अवधिः - **2.45 होरा**

नाम -_____विभागः_____कमसंख्या _____

<div style="text-align:center">प्रथमः विभागः - गद्यम्</div>

प्रश्न 1. संवादांशं पठित्वा निर्दिष्टाः कृतीः कुरूत ।

अ.1अवबोधनम् । (केऽपि 2 कृती कुरूत)   2

i. पूर्णवाक्येन उत्तरं लिखत ।

वीररसस्य प्रधानः गुणः कः ?

ii. वाक्यं पुनर्लिखित्वा सत्यम् वा असत्यम् इति लिखत ।

आचार्या अदितेः शुभाशंसनं करोति ।

iii. उचितं कारणं चित्वा वाक्यं पुनर्लिखत ।

आचार्या वीररसविषये एव प्रतिपादनं करोति यतः .... ।

1 वीररसः सर्वेषु रसेषु प्रधानः ।

2 अदितिः तां वीररसविषये एव पृच्छति ।

अदितिः-	कति रसाः ? कानि च तेषां नामानि ?
आचार्या -	शृङ्गारहास्यरौद्रकरूणवीरादभुतबीभत्सभयानकाः तथैव शान्त इति नवरसाः ख्याताः ।अस्मिन् शास्त्रे सर्वरसानां देवताः वर्णाश्च वर्णिताः ।
अदितिः-	आचार्ये अधुना विशेषेण वीररसविषये कथयतु भवती ।
आचार्या-	आम् ।उत्साहः वीररसस्य प्रधानगुणः ।स इतरानपि उत्साहयति ।अन्यः गुणः अध्यवसायःनाम दृढनिश्चयः दृढयत्नश्च ।अपरः गुणः निश्चला बुद्धिः ।स्थैर्यधैर्यवीर्य गर्वोत्साहपराकमदि प्रभावात्मकैरभिनयैः रसनिष्पतिः कर्तव्या ।एष रसः रसिकान् प्रेरयति ।
अदितिः -	आचार्ये एतत्सर्व मनसि अवधार्येवाभिनयं करिष्ये ।अनुगृहीताहं खलु ।
आचार्या -	विजयिनी विनयिनी भव ।

अ.2. शब्दज्ञानम् । (काः अपि 3 कृतीः कुरूत)   3

i. सन्धि विच्छेदं कुरूत ।

इतरानपि = ... + ... ।

ii. पर्यायशब्दौ लिखत

a बुद्धिः =........... ।   b सम्प्रति =........... ।

iii. समूहेतरं पदं चिनुत ।

आम्   एव   एषः   अध ।

iv. विशेषणं लिखत 1 अदितिः........... ।2 गुणः .... ।

1 ब. स्वमतप्रकटनम् ।अभिव्यक्तिः   **2**