

## HISTORY

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

1. The earliest museum in the world was discovered in the excavations at the city of $\qquad$ .(Delhi, Harappa, Ur, Kolkata))
2. Dnyaneshwar, Saint Tukaram, Saint Namdev, Saint Eknath)
3. The arts of painting and sculpting are $\qquad$ . (visual arts,
performing arts, folk arts, classical arts)
4. The first English newspaper in India was started by $\qquad$ (James
Augustus Hickey, John Marshall, Allen Hume)
Q1. B. Identify the wrong pair, correct it and rewrite:
a. 1. Kootiyattam - Sanskrit theatre, Kerala
5. Ramman - Dance form in West Bengal
6. Ramlila - Traditional Performance of the Ramayana in U.P.
7. Kalbelia - Folk songs and dances of Rajasthan
b 1. Kutub Minar - Mehrauli
8. Gol Gumbaz - Vijapur
9. Chhatrapati Shivaji Maharaj Railway station - Delhi
10. Taj Mahal - Agra
c 1. Prabhakar- Acharya P. K Atre
11. Darpan - Balshastri Jambhekar
12. Deenbandhu - Krishnarao Bhalekar
13. Kesari - Bal Gangadhar Tilak
d 1. Maharaja Sayajirao University - Delhi
14. Banaras Hindu University - Varanasi
15. Aligarh Muslim University - Aligarh
16. Jiyaji University - Gwalior

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

3)


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

1. Vishwakosh
2. Marco Polo
3. Electronic or Digital Journalism

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

1. Bakhar is an important type of historical document.
2. Major Dhyan Chand is called Wizard of Hockey.
3. It is essential to study the history of technology.

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

1. What did Rene Descartes insisted upon?
2. Write about the importance of Tarabai Shinde in writing feminist historiography.
3. What are the ways to preserve and conserve oral sources.
4. 

Q4. Read the passage and answer the questions based on it.
Bhilar is a village near Mahabaleshwar, which boasts of natural beauty and sweetness of strawberry. It is also known as the 'Village of books'. Every household in this village maintains a library of its own for the tourists to enjoy. Maharashtra State Government has implemented this scheme with a view to accelerate the 'Reading Culture' movement for the reader-tourists to enjoy the beauty of Marathi literature enriched by the works of old and new authors and saints. It includes various types of texts like biographies, autobiographies, fiction, poetry, literature by women, literature on sports, literature for kids, etc. If you go to Mahabaleshwar, make it a point to visit Bhilar as well.

1. What is the speciality of Bhilar Village? (1)
2. Why is Bhilar village known as Village of Books? (1)
3. What types of books are there in Village of Books? (2)
4. 

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

1. Differentiate between Classical and Folk Art.
2. Identify the given picture and write about his contribution.

3. Complete the following table (answer in detail the information given below) :

|  | Newspaper | Radio | Television |
| :---: | :--- | :--- | :--- |
| Background/ <br> Beginning |  |  |  |
| Nature of <br> information/ <br> Programmes |  |  |  |
| Functions |  |  |  |

## POLITICAL SCIENCE

Q6. Fill in the blanks in the given statements choosing the correct alternative from the brackets.

1. Dr. Rajendrasinh Rana had brought about $\qquad$ in Rajasthan (White revolution, Water revolution, Green revolution, Consumer revolution)
2. In democracy $\qquad$ participate in elections and get political power. (courts, political party, social organizations, none of the above)
3. Social support received by political party is called $\qquad$ (democracy, people's rule, mass base, public relation)
4. Article $\qquad$ of Indian Constitution created the independent body of Election Commission. (301, 324, 351, 370)

## Q7. Explain with reason whether the statements are true or false.

 (any 2)1. Sometimes, the Election Commission has to conduct mid-term elections.
2. Regional parties have no influence on National Politics.
3. Communalism does not cause much harm to the nation.

Q8. A. Explain the concept. (any 2)

1. Decentralization of Democracy
2. Left-extremists-Naxalism
3. Consumer movement

Q8. B. Do as directed/instructed.
Complete the following concept maps. (any 2)


## Q9. Answer following in brief. (any 2)

1. What is representation?
2. Which issues were taken up by the women's movement after independence?
3. Which factors are required for the success of democracy in India?

4. Vishwakosh
5. Marco Polo
6. Electronic or Digital Journalism

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# Shakur Educational Irust's (Regd.) <br> THAKUR VIDYA MANDIR HIGH SCHOOL \& JR.COLLEGE <br> II PRELIMINARY EXAMINATION 2018-2019 <br> Subject : ENGLISH <br> Std: X Div: 

Name: $\qquad$
Roll No: $\qquad$
Marks:100
Date: 27/11/2018
Time: 3hrs
Section I: Language Study

## Q1.A1 Do as directed:

(8)

1. This is an interesting story.(Identify and name the kind of sentence)
2. Their teamwork and perseverance were extremely impressive. (Name the Parts of Speech of the underlined words)
3. I have been living in this city since last several years (Spot the error and correct the sentence)
4. He contributed notably in bringing up the school. ('played a major role' / 'got ready')
(Replace the underline word with the appropriate phrase to retain the proper meaning)
5. My car is making a funny noise (Pick out the verb and state its Tense)
6. Pick the synonym of ' convinced' from the bracket. (happy/ angry/ persuaded)
7. Write the homophone for the word 'story' and frame a sentence.
8. Find out two hidden words from the word: 'intergovernmental'.

## A2.Do as directed:

## (8)

1. I refuse to accept that all the laws and constitutions, police and judges are unable to protect our children.
( Identify the Main and the Subordinate Clause and state its kind)
2. His team had selected a site in Thumba. (Rewrite beginning with the underlined part)
3. Mumbai is one of the most developed city in Maharashtra. (Change to the Positive degree of comparison)
4. We must keep our surroundings clean if we want good health (Pick out the Modal Auxiliary and state is function)

## Q1.B Do as directed:

(4)

1. They vary in type but they include forests, mountains etc.
( Identify whether the given sentence is Simple, Compound or Complex)
2. I like to eat fruits rather than eating sweets.( Pick out the Infinitives/ Gerund/ Participle)

## Section II: Textual Passages

(Reading Skills, Grammar and Vocabulary)

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

## A1 Complete the following web:

 (2)

Smita bit her lip in self- reproach. She had been so excited at seeing the announcement that she had not remembered
that her brother was very ill. She had seen how the doctors had shaken their heads gravely and spoken words that neither she nor even her parents could understand. But somewhere deep inside Smita had known the frightening truth - that Anant was going to die. The word cancer had hung in the air - her brother was dying of cancer even though she pretended that all would be well and they would return together, a small family of four, to their home in Gaganpur. And he was only fifteen and the best table-tennis player in the school and the fastest runner. He was learning to play the sitar; they were both taking sitar lessons, but Anant was better than her as in many other things. He was already able to compose his own tunes to the astonishment of their guru. Then cancer had struck and they had come to Bombay so that he could be treated at the cancer hospital in the city.
A2 Complete the following:
(2)
i) Smita bit
ii) Somewhere deep inside Smita had --------------------------------------.
iii) Anant was dying ------------------------------------------------
iv) Anant was better than Smita in

A3 Pick out the words from the passage which mean :
(2)
i) Find fault with or blame oneself ii) great surprise

A4i) He was learning to play the sitar. (Change to Future Perfect Continuous Tense)
(1)
ii) He was already able to compose his own tunes. (Frame 'Wh' Question to get the underlined part as answer) (1)
A5. Describe Anant's life before he was struck by cancer.
(2)

Q2. B Read the following passage and do the activities: (10)
B1 Match the following:
(2)

| A | B |
| :--- | :--- |
| 1. Flowers | a. Open up with a pearl |
| 2. Trees | b. Shine across the infinite sky |
| 3. Oysters | c. Turns into fruits |
| 4. Stars | d. Dance with unhindered passion |

We saw an army of ants lugging a fly which was at least ten times the ant's size. The ants organized themselves around the fly, lifted it on frail feelers and carried it to quite a distance. Their teamwork and perseverance were impressive. What if we too are consistent, organized, focused ... Spider webs are delicate, yet very strong. A rainbow colours the entire sky. Oysters take in a grain of sand they open up with a pearl. Innumerable stars shine across the infinite sky. Clouds take new shapes with every passing moment. The wind makes trees dance with unhindered passion. Water, without hint of ego, changes its form according to the dictates of the sun and the wind. When we see a caterpillar turn into a butterfly, a flower turn into a fruit, we experience the alchemy of nature... we touch it and become gold ourselves.

B2. State the special features of the following:
(2)
i) ants:-
ii) spider webs :-.
iii) wind :-
iv) water:-

B3i) Give the antonyms of - a) experience b) organized (1)
ii) Pick out from the extract two Abstract Nouns.
(1)

B4i) The ants organized themselves around the fly.( Add a Question Tag)
(1)
ii) Trees dance with unhindered passion.(Underline the verb and state whether Transitive or Intransitive) (1)
B5. 'An Oyster turns a grain of sand into a pearl.' What lesson do we learn from this example?

## Section III: Poetry

Q3 A. Read the extract and do the following activities: (5)
A1 State whether the given statements are True or False:
(2)
i) The poet once wrote some lines when he was extremely stressed out.
ii) The poet's servant was as slender as the poet.
iii) While reading his own composition, the poet felt very sorrowful.
iv) The poet assumed that the lines he had composed were exceedingly good.

I wrote some lines once on a time
In wondrous merry mood,
And thought, as usual, men would say
They were exceeding good.
They were so queer, so very queer,
I laughed as I would die;
Albeit, in the general way,
A sober man am I.
I called my servant, and he came;
How kind it was of him
To mind a slender man like me,
He of the might limb.
A2i) Pick out an expression from the extract that indicates funny moments.
ii) What is the rhyme scheme of the extract?
(1)

A3 Name and explain the Figure of Speech:
In wondrous merry mood
Q3B Read the following poem and write an appreciation of it with the help of the given points in paragraph format.
(10)
$\quad$ The Will to Win
If you want a thing bad enough
to go out and fight for it,
work day and night for it
give up your time and your peace and your sleep for it
If all that you dream
and scheme is about it and life
seems useless and worthless without it

If you gladly sweat for, fret for and plan for it and lose all your terror of the opposition for it.

If you simply go after that thing that you want with all of your capacity, strength and sagacity, faith, hope and confidence and stern for tenacity

If neither cold poverty, famish or gout
or sickness or pain of body and brain can keep you away from the thing that you want,

If dogged and grim you be size and beget it, with the help of GOD you'll get it!

You may use the following points to write the appreciation of 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.

## -2-

## Section IV: Non-Textual Passages

Q4. A. Read the passage and do the activities:
A1. Answer in a word or a phrase :
(2)
i) Whom did Barbara address?
ii) What comes to an end after graduation day?
iii) What does the word democracy signify?
iv) In what must one never get involved?

Barbara O'Neal an ex- student of the Washington School, had the honour of addressing the graduating class of June 1951 of her school.

In her inaugural address she said, "After the graduation day, your carefree days will be over. You will remember what the school has taught. It has not only taught the basic fundamentals and skills to mould the students but something much greater, the principle of democracy and freedom. This principle of democracy is not found in any text books, but acquired in everyday's life in school.

The word 'democracy' signifies here a sense of brotherhood. There are students of different race, colour, creed with no discrimination in the school. Here the principle of brotherhood is practiced without a second thought. This school is the best example of democracy based on human equality and brotherhood. A Negro got elected as the President of the students body on his merits and no body had any objection about his colour, race and creed.

This principle of brotherhood is God's gift to us. After graduation, some students go for higher education, some go into business and others join army. Wherever they are, one should not forget the principle of democracy taught in the school. They must never get involved in a group which practices discrimination on grounds of race, colour or creed; so that we may live in a peaceful world.

So after graduation, the students should cherish the ideal of unity and brotherhood imbibed during the three final years. They must bear in mind that democracy is on trial and that they are the jury."

A2. Pick out from the extract the four things what the school teaches.
(2)

A3 i) Find the word from the extract which mean: i) to bear in mind ii) to stand as a symbol or sign (1)
ii) Form Nouns from : i) great ii) high
(1)

A4i) This is God's gift to us.(Change to Interrogative sentence)
(1)
ii) This principle of democracy is not found in any text book. (Identify the Subject and Predicate) (1)

A5. Explain in brief the life of a student after the Graduation day.
(2)

## Q4B. Write a brief summary of the above extract and suggest a suitable title .

(5)

## Section V: Writing Skill

## Q5A. Letter writing: (Formal / Informal)

(5)

A Read the following rules put up at a bus stop and attempt any 1 of the following letters with the
help of the given information.

> Do not try to catch a running bus. Do not hang or jump out of a moving bus
A1. Write a letter to your friend describing your experience in an over- OR

A2. Write a letter to the manager of the bus depot complaining about the scarcity of buses and the lack of a queue system

## Q5B. Dialogue writing / Interview questions:

(5)

B1. Write a dialogue between your elder brother/ sister discussing about how to increase the confidence in you and prepare for the Board Exams.

## OR

B2 As a reporter from the 'Times of India'you have got an opportunity to interview a
famous singer from India. Write 10 interview questions that you would ask him/her using the following points:
*Formative years * Gurus * Practice * Singers imitated * Path breaking song *
Preferred genres of music

* Favourite singers * Diet maintained.

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

A1. Read the following extract and prepare a flow chart to point out all the important events in the life of

Jawaharlal Nehru.
Jawaharlal Nehru was born on November 14,1889. He went to England at the age of 16 and was educated at the Harrow School and at the University of Cambridge. Returning to India in 1912, he practiced law for some years and in 1919 joined the Indian National Congress, the principle nationalist organization in India. It was led by Mohandas Karamchand Gandhi at that time. Nehru soon became a leader of the Nationalist Movement and was imprisoned nine times by the British administration for his activities that were pro-Independence for India. He served as a President of the Congress Party from 1929 to 1931, a position he held six times. In August 1947, following the final withdrawal of the British and the establishment of India as a self-governing dominion within the Commonwealth, Nehru was elected Prime Minister.

## OR

A2. Transfer the given information into a paragraph

| Name of the city | New Delhi |
| :--- | :--- |
| Area | $1,483 s \mathrm{sq} . \mathrm{km}$ |


| Neighbouring States | U.P and Haryana |
| :--- | :--- |
| Literacy rate | $81.7 \%$ (Males- 87.3\%, Females -74.7\% |
| Languages spoken | Hindi, Panjabi, Urdu, English |
| Famous for | Roshanara Festival, Shalimar Baagh, Qutub Minaar, Mango <br> Festivals <br> Winter Carnival and Garden Tourism |

## Q6 View and Counterview / Speech

(5)

B1. Write a paragraph expressing your Counterview with examples to the given View points.
View: 'Success means earning a lot of money'.

- Success is achieving goals
- Having friends
- Sharing skills
- Realization of dreams
- Doing our work well.


## OR

B2. Read the following notice and write a speech on the topic 'What can I do for India.'
" Ask not what my country can do for me; ask what I can do for my country."

## Section VI: Creative Writing

## Q7. Expansion of idea / Report writing

(5)

A1 Expand any one of the following idea:

1. Well begun is Half done
2. Reduce, Reuse, Recycle

## OR

A2 Write a Newspaper Report based on the following outline of a news. Suggest a suitable head line.
"Narendra Singh- broke record- long jump- regional meet- jubilant crowd- cheered -
Singh - overjoyed-
Wished to make it national- talked to the press after the feat."

## Q7B. Developing a story:

(5)

Develop a story beginning with the given sentence. Give a suitable Title.
' One night as I got up around 3.00 am to drink some water I
heard. $\qquad$


Q1) Choose the correct option
(4)
1)In India ,thorny vegetation is found in the state of $\qquad$
(1) Maharashtra
2) Goa
3) Rajasthan
4) Kerala
2)Brazil has nearly $\qquad$ $\%$ of worlds total population
(1) 2.41
2)2.78
3)5.6
(4) 98.2
3) Dispersed settlement in Indian is found in $\qquad$
a)Near the rivers $\quad$ b) Industrial region c)Near the transport route d)Hilly areas
4) The economy of Brazil is mainly dependent on the $\qquad$ activities there .
a) Primary
b) Secondary
c ) tertiary
d)quaternary

## Q2) Indentify odd man out

(4)
1)Forest type of Brazil
a)Evergreen forest b)Thorny bush type vegetation c)Deciduous forest d)The Himalayan forest
2) With reference to flora in India
a) Deodar
b) Orchid
c) Anjan
d) Banyan
3)with reference to fauna in Brazil
a) Anaconda
b) Tamairin
c)Red Panda
d)Lion
4)with reference to India
a)Mangrove forest b)Mediterranean forest c)Thorny bush type vegetation d)Equatorial forest

Q3) Differentiate between (any 2)
(4)
1)Communication in Brazil and India .
2)Forest of Brazil and India.
3)Water transport in Amazon and Ganga river.

Q4A)Mark the following on the map of Brazil .
(4)
1)Any two states with low density of population.
2)River Amazon.
3) Any two states with 51 to 60 percent of urban population.
4)Port Vitoria .

Q4B)Read the map and answer the following question .
(4)
1)Calculate the difference between the two longitudinal extremes of mainland India. Is in more than Brazil?
2) Which longitude in India is called the Indian Standard time (ISI ).
3) What is the difference between this (IST) and (GMT ).
4)How many local times are there in India.

## Q5) Give Geographical Reason (Any 3)

(6)
1)There is mixed economy in Brazil and India.
2)Urbanization is increasing rapidly in India .
3)Population is an important resources.
4)There are no west flowing rivers in Brazil .

Q6A)With the help of given statistical data, Prepare a double line graph and answer the following question :
(6)

| Year | 1995 | 2000 | 2005 | 2010 | 2015 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Brazil | 20 | 50 | 48 | 45 | 60 |
| India | 20 | 25 | 40 | 60 | 130 |

1)In which country did more international tourist arrive in the year 2000 ?
2)What was the number of international tourist in the year 2015 in both the countries? What was the difference between them?
3)What could be the reason of increase in tourist in India after the year 2010

OR
Q6B)Study the following graph and answer the following questions :
(6)
1)In which year the value of exports to Brazil exceeded the imports from Brazil?
2)In which year the trade with Brazil was most favourable ?
3)Comment upon the balance of trade in the year 2013?
4) From which year the value of exports to Brazil have exceeded the value of imports from

Brazil?
5)Write a note on the trade between Brazil and India .

Q7)Answer in Brief (Any 2)
(8)
1)Write in brief correlation between physiographic and internal waterways.
2)What are similarities and difference in the fishing activities in Brazil and India.
3)Correlate wildlife and natural vegetation in India and Brazil .

ALL THE BEST

# Thakus Educational Tust's (Rey.) <br> THAKUR VIDYA MANDIR HIGH SCHOOL \& JR. COLLEGE <br> II Preliminary Exam 2018-19 <br> Subject : Mathematics - II 

Date : 04/12/2018
Marks : 20
Std : X
Time : 2 hrs.
Q.IA. Solve any 4 of the following. [4]

1) On a number line, point $A, B, C$ are such that $d(A, B)=11$, $d(B, C)=13, d(A, C)=24 .$, which of the point is between other two?
2) Line $A B$ || line $C D$ and line EF is the transversal if $\mathrm{m} \angle \mathrm{AEF}=83^{\circ}$
Find $m \angle C F E$

3) Complete the following statements.
i) Every rectangle is a $\qquad$ _.
ii) Every $\qquad$ is a rhombus.
4) Prasad has constructed triangle ABC and has found the point of intersection of bisector of $\angle \mathrm{A}$ and $\angle \mathrm{B}$, then he is going to draw $\qquad$ of $\triangle \mathrm{ABC}$. Complete the statement.
5) Write the equation of the line parallel to the X -axis at a distance 4.5 units from it and below the X -axis.
6) Find the value of $\sin 30^{\circ} \cos 60^{\circ}+\cos 30^{\circ} \mathrm{x} \sin 60^{\circ}$
Q.IB. Solve 2 out of 3 sub questions.
[4]
7) Construct $\triangle \mathrm{PQR}$, in which $\mathrm{QR}=5 \mathrm{~cm}, \mathrm{~m} \angle \mathrm{Q}=50^{\circ}, \mathrm{PQ}+\mathrm{PR}=9 \mathrm{~cm}$
8) Equal parts of triangles in each are marked with the same sign. Observe the figures and complete the statement.

$\Delta \mathrm{ABC} \cong \Delta_{\text {_ }} \quad$ test $)$

$\Delta \mathrm{PQR} \cong \Delta$
(By $\qquad$
9) Total surface area of a box of cuboid shape is $392 \mathrm{sq} . \mathrm{cm}$. its breadth is 8 cm and height is 5 cm . What is the length of the box?
Q.IIA. Chose the correct alternative.
10) $\angle \mathrm{MNP}=90^{\circ}$, seg NQ Wypotenuse MP. MQ $=4, \mathrm{NQ}=6$ then what is the length of seg PQ?
A) 3
B) 15 C) 2
D) 9
11) Which of the following is not a fundamental trigonometric identity?
A) $\sin ^{2} \theta+\cos ^{2} \theta=1$
B) $1+\cot ^{2} \theta=\operatorname{cosec}^{2} \theta$
C) $1+\sec ^{2} \theta=\operatorname{cosec}^{2} \theta$
D) $1+\tan ^{2} \theta=\sec ^{2} \theta$
12) Chords AB and CD of a circle intersect inside the circle at point E . If $\mathrm{AE}=7.2 . \mathrm{EB}=10 . \mathrm{CE}=8$, find ED .
A) 9.2
B) 10.2
C) 9
D) 10 .
13) If $d(O, M)=7 \mathrm{~cm}$, then we can draw at the most $\qquad$ tangent segment from the point M to the circle with centre O and radius 4 cm .
A) 3
B) 7
C) 2
D) 1 .
Q.IIB. Solve the following questions (any 2).
14) In $\triangle A B C$, seg BD bisect $\angle \mathrm{ABC}$. if $\mathrm{AB}=x-1, \mathrm{BC}=x+4$.
$\mathrm{AD}=x-3$ and $D C=x+1$ then find value of $x$.

15) Determine whether points $A(-4,4), K\left[-2, \frac{5}{2}\right]$. N $(4,-2)$ are collinear.
16) The measure of a central angle of a circle is $150^{\circ}$ and radius of the circle is 21 cm . Find the length of the arc and area of the sector associated with the central angle.

Q.IIIA. Complete the following activities (any 2).
17) If point $(-4,6)$ divides the line segment. AB with $A(-6,10)$ and $B(r, s)$ in the ratio $2: 1$ complete the following activity to find co-ordinates of $B$.
By section formula
$-4=\frac{2 \times r+1 \times \square}{\square+\square}$

$-4 \times \square=2 \mathrm{r}+\square$
$2 \mathrm{r}=\square$
$\mathrm{r}=\square$
Co-ordinates of B are ( $\square$, $\square$ )
and $\quad 6=\frac{2 \times s+1 \times \square}{\square+\square}$
$6=\frac{2 s+\square}{\square}$
$6 \mathrm{x} \square=2 \mathrm{~s}+$
$2 \mathrm{~s}=\square$
$\mathrm{s}=\square$
18) Complete the following activity to prove

$$
\begin{aligned}
\sec ^{2} \theta+\operatorname{cosec}^{2} \theta & =\sin ^{2} \theta \times \operatorname{cosec}^{2} \theta \\
\sin ^{2} \theta+\operatorname{cosec}^{2} \theta & =\frac{1}{\square^{2} \theta}+\frac{1}{\square^{2} \theta} \\
& =\frac{\square^{2} \theta+\square^{2} \theta}{\square^{2} \theta \times \square^{2} \theta} \\
& =\frac{1}{\square^{2} \theta \times \square^{2}} \\
& =\frac{1}{\square^{2} \theta}+\frac{1}{\square^{2} \theta}
\end{aligned}
$$

$$
=\sin ^{2} \theta \times \operatorname{cosec}^{2} \theta
$$

3) Complete the following activity to find how many solid cylinders of radius 10 cm and height 6 cm can be made by melting a solid sphere of radius 30 cm .
Radius of a Sphere, $r=30 \mathrm{~cm}$
Radius of a cylinder. $\mathrm{R}=10 \mathrm{~cm}$
Height of a cylinder. $\mathrm{H}=6 \mathrm{~cm}$.
Number of Cylinders formed = ?
Number of Cylinder formed $=\frac{\text { Volume of } \square}{\text { Volume of } \square}$

(Substituting formulae)
Q.IIIB. Solve the following questions (any 2)
4) $\triangle \mathrm{LMN}-\triangle \mathrm{PQR}, 9 \times \mathrm{A}(\triangle \mathrm{PQR}=16 \times \mathrm{A}(\triangle \mathrm{LMN})$ If $\mathrm{QR}=28 \mathrm{~cm}$, then find MN.
5) The circle with centres $P \& Q$ touch each other at R. A line passing through $R$ meets the circle at A \& B respectively. Prove that seg AP || seg BQ.

6) In Isosceles right angled triangle $A B C$, hypotenuse $A C=8 \mathrm{~cm}$, find the length of side AB \&side BC .

## Q.IVA. Solve any three of the following

(9)

1) Prove that in a right angled triangle Hypotenuse side square is equal to sum of the square of remaining two sides.
2) Show that $A(4,-1), B(6,0)$. $C 17,-2)$ and $D(5,-3)$ are vertices of a square.
3) $\Delta \mathrm{RST} \sim \Delta \mathrm{XYZ}$, In $\Delta \mathrm{RST}, \mathrm{RS}=4.2 \mathrm{~cm}, \angle \mathrm{RST}=55^{\circ}, \mathrm{ST}=5.4 \mathrm{~cm}$. Construction $\Delta \mathrm{RST}$ and $\Delta \mathrm{XYZ}$ such that $\frac{R S}{X Y}=\frac{3}{5}$
4)In the given fig, PT touches a circle with centre $O$ at $R$.

Diameter SQ when produced meets PT at P. If $\angle \mathrm{SPR}=x^{\circ}$ And $\angle \mathrm{QRP}=y^{\circ}$, show that $x^{\circ}+2 y^{\circ}=90^{\circ}$

## Q.V. Solve any two of the following

(4)

1) Smaller diagonal BD of a parallelogram ABCD is perpendicular to the sides $A B \& C D=4 A B^{2}$
2) $\frac{\operatorname{cosec} A}{\operatorname{cosec} A-1}+\frac{\operatorname{cosec} A}{\operatorname{cosec} A+1}=2 \sec ^{2} A$

## Q.VI. Solve any two of the following

(3)

1) Draw a circle of radius 3 cm and centre $P$. Take a point $Q$ on a circle. Take another point $R$ such that $Q-P-R$ and $d(Q, R)=10 \mathrm{~cm}$. Draw tangents to the circle from point $R$.
2) The diameter of the base of a right cylinder bucket is 28 cm its height is 30 cm . It is full of sand. If the sand in the bucket is poured on the ground, a cone of height 14 cm is formed. Find the area of the base of sand cone formed.

## Thakus Educational Trust (Regh.)

THAKUR VIDYA MANDIR HIGH SCHOOL \& JR. COLLEGE
II - Preliminary Examination 2018-19
Subject: Mathematics - I
Std : X
Marks: 40
Date: 03/12/2018
Time : 2 hrs.

## Q 1) A) Solve any four of the following:

(4)
i. Multiply and find the product $\left(\frac{3}{2}+\sqrt{5}\right)\left(\frac{3}{2}-\sqrt{5}\right)$
ii. $(2,-1,0,5,6)$ is the coefficient form of the polynomial. Represent it in index form.
iii. Compare the following pair of ratios. $\frac{\sqrt{13}}{\sqrt{8}}, \frac{\sqrt{7}}{\sqrt{5}}$
iv. Solve the following simultaneous equation: $x+y=4 ; 2 x-5 y=1$
v. Alka spends $90 \%$ of the money that she receives every month, and saves Rs. 120, how much money does she get monthly?
vi. Observe the table and answer the questions:

| Class <br> Interval | Frequency (No. of <br> Students) |
| :---: | ---: |
| $0-10$ |  |
| $10-20$ | 02 |
| $20-30$ | 12 |
|  | Total $\mathrm{N}=34$ |

a) How many students obtained marks less than 10 ?
b) How many students obtained marks less than 30 ?

## Q 1) B) Solve any two of the following:

(4)
i. Observe the given Venn diagram and write the following sets.

1) $A$

ii. Divide $(2+2$ swer in the form of
Dividend $=$ Divisor x Quotient + Remainder.
iii. Represent $\sqrt{2}$ on the number line.

Q 2) A) Choose the correct alternative from the option \& complete the sentences: (4)
i. Rate of GST on essential commodities is $\qquad$
(a) $5 \%$
(b) $12 \%$
(c) $0 \%$
(d) $18 \%$
ii. To draw the graph for the equation $2 x-6 y=3$. If $\mathrm{y}=0$ then $\mathrm{x}=$ $\qquad$
(a) $\frac{3}{2}$
(b) $\frac{2}{3}$
(c) $\frac{-3}{2}$
(d) $\frac{-2}{3}$
iii. For an given A.P. $\mathrm{t}_{7}=4, \mathrm{~d}=-4$, then $\mathrm{a}=$ $\qquad$
(a) 6
(b) 7
(c) 20
(d) 28
iv. A die is rolled. Then the probability that the number appearing on upper face is less than 3 , will be $\qquad$
(a) $\frac{1}{6}$
(b) $\frac{1}{3}$
(c) $\frac{1}{2}$
(d) 0

Q 2) B) Solve any two of the following:
(4)
i. If for an A.P. the first term is 3 and common difference is 6 then find $\mathrm{S}_{n}$ and hence find $\mathrm{S}_{10}$
ii. Verify whether the following equations is quadratic or not

$$
\left((x-2)^{2}+1=2 x-3\right.
$$

iii. If $\mathrm{x}=5 \& \mathrm{y}=-3$ for certain simultaneous equation and the determinant $D=5$, then find the values of determinants $D_{x}$ and $D_{y}$.

## Q 3) A) Complete any two of the following activities:

(4)
i. Complete the following table to draw graph of the equation.

$$
x-y=4
$$

| $x$ | $\ldots .$. | -1 | $\ldots$. | -2 |
| :---: | :---: | :---: | :---: | :---: |
| $y$ | 0 | $\ldots .$. | -4 | $\ldots .$. |

ii. If $x=5$ is the root of equation $k x^{2}-14 x-5=0$, then find the value of ' $k$ ' by completing the following activity.

One of the roots of equation $k x^{2}-\square x-5=0$ is


$$
\text { Now let } \mathrm{x}=\quad \text { is the equation }
$$


$\mathrm{k} \quad{ }^{2}-14 \mathrm{x} \quad-5=0$

$$
25 \mathrm{k}-70-5=0
$$


$25 \mathrm{k}-2=0$
$\mathrm{k}=$
$\mathrm{k}=\square$
iii. Complete the following activity to find how many natural numbers are between 1 to 140 are divisible by 4 .

Between 1 to 140 natural numbers divisible
by 4
$4,8, \ldots \ldots \ldots . .136$

$\mathrm{a}=\quad, \mathrm{d}=$ formula $=$
$\mathrm{n}=$
Ans. Natural numbers between 1 to 140 are divisible by 4
Q 3) B) Solve any two of the following:
(4)
i. The total value(with GST) of a remote controlled toy car is Rs. 1770. Rate of GST is $18 \%$ on toys. Find the taxable value, CGST \& SGST for the toy car.
ii. Joseph kept 26 card in a cap, bearing one English alphabet on each card. One card is drawn at random. What is the probability that the card drawn is a vowel card?
iii. Electricity used by some families shown in the following table. Find the mode for use of electricity.

| Use of Electricity <br> (unit) | $0-20$ | $20-$ <br> 40 | $40-$ <br> 60 | $60-$ <br> 80 | $80-$ <br> 100 | $100-$ <br> 120 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of families | 13 | 50 | 70 | 100 | 80 | 17 |

Q 4) Solve any three of the following:
(9)
i. A rectangular play ground is 420 sq.m. if its length is increased by 7 m and breadth is decreased by 5 m ., the area remains the same. Find the length and breadth of the playground.
ii. Mangal started doing physical exercise 10 mins for the first day. She will increase the time of exercise by 5 mins per day, till she reaches 45 mins per day. How many days are required to reach 45 mins?
iii. Solve the simultaneous equation

$$
\frac{1}{3 x}-\frac{1}{4 y}+1=0 ; \frac{1}{5 x}+\frac{1}{2 y}=\frac{4}{15}
$$

iv. Solve : $144 y^{4}-337 y^{2}+144=0$

## Q 5) Solve any one of the following:

(4)
i. A man riding on a bicycle covers a distance of 60 km in a direction of wind and comes back to his original position in 8 hrs . if the speed of the wind is $10 \mathrm{~km} / \mathrm{hr}$, find the speed of the bicycle.
ii. If $m$ times the $m^{\text {th }}$ term of an AP is equal to $n$ times its $n^{\text {th }}$ term then show that the $(m+n)^{\text {th }}$ term of the AP is zero

## Q 6) Solve any one of the following:

Area under crops in a certain village is given below. Represent it by pie diagram.

| Crop | Jowar | Wheat | Sugarcane | Vegetables |
| :---: | :--- | :--- | :--- | :--- |
| Area in hectare | 8000 | 6000 | 2000 | 2000 |

ii. A game of chance consists of spinning an arrow which comes to rest pointing at one of the number $1,2,3,4,5,6,7,8$ and these are equally likely outcomes. What is the probability that it will point at:
a) An odd number
b) A number greater than 2
c) A number less than 9

## ALL THE BEST

| Shakut Educational Stust's (Regd.) |  |  |
| :---: | :---: | :---: |
| THAKUR VIDYA MANDIR HIGH SCHOOL \& JR.COLLEGE |  |  |
| II Preliminary Exam 2018-2019 |  |  |
|  | Subject: Science \& Tec |  |
| Name: | STD: | Roll No: |
| Marks: 40 | Date: 05/12/2018 | Time:2hrs |

Q1) A) Attempt the following Questions.

1) Complete the analogy:

Citric acid: Aspergillus niger :: Itaconic acid: $\qquad$ .
2) Fill in the blanks.
a) Evolution means $\qquad$ .
3) Say true or false.
i) Paddy fields are frequenly attacked by frogs..
4) Find the odd one out.

Progesterone, Estrogen, Testosterone, Insulin.
5) Complete the following.


## QIB) Multiple choice question.

1)What kind of fission is shown by Paramoecium?
a) Simple Binary Fission
b)Transverse Binary Fission
c)Longitudinal Binary Fission
d) Multiple Fission.
2) The Spindle fibres start appearing from $\qquad$ stage of Karyokinesis.
a) Prophase
b)Metaphase
c) Anaphase
d) Telophase
3)What is the meaning of Sporogenesis?
a)Formation of Spores
b) Release of Spores
c) Formation of Sporangium
d) Release of Sporangium
4)Bat is included in which class?
a) Amphibia
b) Reptilia
c) Aves
d)Mammalia.
5) Which of the Following animal shows Bilateral Symmetry?
a) Starfish
b)Jellyfish
c) Earthworm
d)Sponge .

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

1) Identify the animal in the following diagram. How can this be an evidence regarding evolution?

2)Explain the concept of IVF.
2) The construction of Turbine is different for different types of power plants .
3) Body temperature of reptiles is not constant.
5)Which precautions are necessary for proper decomposition of domestic waste?
4) Physical problems arising due to excessive use of mobile phones.
5) Complete the following chart.


Q3) Answer the following Questions (any 5)
a) What do these structure represent?
b) What is the peculiarity of these four structures?
2) Explain the Glycolysis in detail?
3)

a) Which energy is produced?
b) What is this power plant based on?
c) Is this energy generation eco- friendly? Why?
4)Observe the following picture of animals and write their any two characteristics?

5)Complete the following conceptual picture with respect to uses.

6) Explain the importance of Good communication with others.
7) Which different methods are used for transportation of patients?Why?

## Q4) Attempt the following (any 1) <br> 1)


a) Name the reproductive system.
b) Label the part A, B and give the functions of it.
2) Sketch and label diagram showing parts of a flower and answer the following questions.
a) Write the function of petals.
b) Which is the main Whorl of a flower?
c) Which part of flower contain ovoules.


## Q1) A) Attempt the following Questions.

(5)

1) Name the following :
a) A type of satellite used for telecasting programmes.
b) The force with which the earth attracts the given object.
ii) Fill in the blanks.
a) In Galvanizing a thin layer of $\qquad$ is applied to prevent Corrosion of iron.
iii) Say true or false.
i) Electron configuration of $\mathbf{K}$ is $2,8,8,2$.
2) Find the odd one out.

Boron, Silicon, Neon, Polonium.

## QIB) Multiple choice question.

(5)

1) For the normal eye, the distance of distinct vision is $\qquad$ .
a) 15 cm ,
b) 20 cm ,
c) 25 m ,
d) 25 cm
2) In which book of the modern periodic table are the non-metals found?
a) S- block
b) P- block
c) d - block
d) f - block
3) Alternative current is $\qquad$ -.
a) In forward direction b) in reverse direction c) in one direction d) oscillation.
4) If an opaque object lies in the path of light a $\qquad$ is formed.
a) design
b) rainbow
c) shadow
d) image.
5) The unit of heat is $\qquad$ in SI units.
$\begin{array}{lll}\text { a) calories } & \text { b)Joule c)fahreneit d)ampere . }\end{array}$
Q2) Answer the following (any 5) (any 6)
(10)
6) Distinguish between mass and weight.
7) Explain Mirage with an example
8) It takes time for pieces of Shahabab tile to disappear in HCl , but its Powder disappears rapidly .
9) In practice the unit kwh is used for the measured of electrical energy rather than joule.
10) Explain :- In Cold regions in winter, the rocks cracks due to anomalous expansion of water.
11) Generally the ionic Compounds have high melting point.
12) Why are geostationary satellites not useful for studies of Polar regions?

## Q3) Answer the following Questions (any 5)

(15)

1) Give the Demerits of Mendeleev's periodic table.
2) Explain Bayer's process of extraction of Aluminium.
3) Explain the working of an astronomical telescope using refraction of light.
4) Draw ray diagram for a Convex lens when the object is at $f_{1}$.
5) Explain the role of latent heat in the change of state of a Substances ?
6) Explain the term Combination reaction, Balanced equation, Displacement reaction.
7) Show how Kepler's law is useful by Newton to arrive at the inverse square law of gravity?

Q4) Attempt the following (any 1)
(5)
3) Explain the Construction and working of electric Generator Ac.
4) Explain hydraulic separation method and draw an appropriate diagram for it.

