SECTION –A: READING

Q1. Read the passage given below and answer the questions that follow:

1. One of the greatest advances in modern technology has been the invention of computers. They are widely used in industries and in universities. Now there is hardly any sphere of human life where computers have not been pressed into service of man. We are heading fast towards the day when a computer will be as much part of man's daily life as a telephone or a calculator.

2. Computers are capable of doing extremely complicated work in all branches of learning. They can solve the most complex mathematical problems or put thousands of unrelated facts in order. These machines can be put to varied uses. For instances, they can provide information on the best way to prevent traffic jams. This whole process by which machines can be used to work for us has been called 'automation'. In the future automation may enable human beings to enjoy more leisure than they do today. The coming of automation is bound to have important social consequences.

3. Some years ago an expert on automation, Sir Leon Bagrit, pointed out that it was a mistake to believe that these machines could 'think'. There is no possibility that human beings will be 'controlled by machines'. Though computers are capable of learning from their mistakes and improving on their performances , they need detailed instructions from human beings to operate. They can never, as it were, lead independent lives or ' rule the world' by making decisions of their own.

4. Sir Leon Bagrit said that in future , computers would be developed which would be small enough to carry in the pocket. Ordinary people would then be able to use them to obtain valuable information. computers could be plugged into national network and be used like radios. For instance, people going on holiday could be informed about weather conditions.
Car drivers can be given alternative routes when there are traffic jams. It will also be possible to make tiny translating machines. This will enable people who do not share a common language to talk to each other without any difficulty or to read foreign publications.

(a)	What is the greatest advancement in modern technology?	1mark
(b)	Write one use of computers?	1mark
(c)	Explain automation.	1mark
(d)	Why can't computers lead independent lives or rule the world?	1mark
(e)	How would computers as translating machines help people?	1mark
(f)	How can computers help people going on holiday ?	1mark

(g) What was the prediction of Sir Leon about computers in the future?   2 marks

(h) What complicated works are computers capable of doing? (any two).   2marks

Q2. Write a short story in about 200-250 words taking the idea's from the outline given below

and also give it a suitable heading.   (10 marks)

Jasmine, Ali and 2 other friends decided to go on a picnic to a beach. They were very excited.

They packed their bags. They reached beach. They saw a small boy crying………….

Q3. Fill in the blanks choosing the right options from the given words--   4 marks

Reading a novel or a short story (a)………… the second language could dramatically (b)………….

physiological responses to emotions such (c)………… smiling (d) ……….. frowning.

_____

   (a) (i) of   (ii) in   (iii) from   (iv) at
(b) (i) reduce   (ii) reduces   (iii) reduced   (iv) reducing
(c) (i) like   (ii) similar to (iii) as   (iv) alike
(d) (i) or   (ii) from   (iii) of   (iv) as

Q4. Change into reported speech:

Grand mother said to Golu, "I am not feeling well today".   (1 mark)

Q5. Read the extract and answer the questions: (3 marks)

'oh, oh, oh, oh….' Patol Babu began giving the exclamation a different inflection each time he uttered it.

After doing it a number of times, he made an astonishing discovery.

(a) Why did Patol Babu repeat the word, 'oh' over and over again?

(b) What 'astonishing discovery' did he make?

(c) What does the word uttered mean?

Q6. Answer the following questions in 30-40 words: 6 marks

(a) How does 'The Writer's Inspiration Bureau' work?

(b) How does Decius Brutus interpret Calpurnia's dream?

(c) Why were the mariners angry with the Ancient Mariner ?

Q7.Answer one of the following questions in 100-150 words: 6 marks

There were many reasons for Helen Keller's embittered childhood. What were they and how were they

overcome?

OR

Imagine Ozymandias comes back to life. As Ozymandias, write this diary .

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1. Name the part of brain that controls (i) voluntary actions and (ii) involuntary actions?   (1)
2. Explain why ?
   (i) Convex mirrors are used as rear view mirrors.
   (ii) The refractive index of glass is different in different colour components of light.   (1+1=2)
3. (a) Why is pre-natal sex determination ethically wrong?
   (b) Why is mother not be considered responsible for giving birth to a female child?   (2)
4. A 10 V storage battery of negligible internal resistance is connected across a 50 Ohms resister. How much heat energy is produced in the resister in 1 hr? What is the source of energy?   (2)
5. How is baking soda and washing soda prepared? Write equations for their preparations. Give one use of each.   (3)
6. List three problems which arise due to construction of big dams. Suggest a solution to these problems. (3)
7. How does a solenoid behave like a magnet? Can you determine the north and south poles of a current carrying   solenoid with the help of a bar magnet? Explain.

   OR

   The equivalent resistances of n resistances each of resistance R are Rs and Rp in series and parallel combinations respectively. Prove that $Rs – Rp = (n^2 – 1) \frac{R}{n}$ (3)

8. What do you mean by roasting and calcination? Give reactions of both taking examples of ores of zinc.(3)
9. What is atmospheric refraction? Use this phenomenon to explain the following natural events
   (i) Twinkling of stars.
   (ii) Advanced sun-rise and delayed sun-set. Draw diagrams to illustrate your answer   (1+2+2=5)
10. A compound C (molecular formula C_2H_4O2) reacts with Na metal to form a compound R and evolves a gas which burns with a pop sound. Compound C on treatment with an alcohol A in the presence of an acid forms a sweet smelling compound S molecular formula, $C_3H_6O_2$). On addition of NaOH to C, R and water are produced. S on treatment with NaOH solution gives back R and A. Identify C, R, A,S and write down the eactions involved.   (5)
11. (a) Why did Mendel choose garden pea for his experiments? Write two reasons. (b) Mendel, in one of his experiments with pea plants, crossed a variety having round seeds with one having wrinkled seeds. Write Mendel's observations giving reasons of F_1 and F_2 progeny for this cross. List any two contrasting visible characters of garden pea, other than roundness of pea plants, that Mendel used for his experiments. (2+3=5)
12. How you find plane mirror, concave mirror convex mirror from a given set of mirrors
    (i) by touching the mirror
    (ii) by observing image of your face by changing the distance between your face and the mirror. (2)
13. A student is studying the properties of ethanoic acid in his school laboratory. List two physical and two chemical properties he is likely to record.   (2)
14. A student has set up the apparatus for the experiment to show that CO_2 is released during respiration.
    (i) What type of seed would he/she use?
    (ii) What would he/she observe after two hours of setting the apparatus?
    (iii) Write the purpose of keeping a small test tube containing KOH inside conical flask.
    (iv) What would happen if a cotton plug is used in place of a rubber cork at the mouth of the test tube? (2)

Name of the student :   Class/Sec : X /   Roll No. -

Time : $1\frac{1}{2}$ Hours   Maximum Marks : **40**

NOTE : -   Each question of **SECTION - A** carry **1** mark ; Each question of **SECTION - B** carry **2** marks ; Each question of **SECTION - C** carry **3** marks ; and each question of **SECTION - D** carry **4** marks ;

SECTION - A

1. Obtain all other zeros of polynomial x^2 - 6x + 4, if one of its zero is $(3 - \sqrt{5})$.

2. If (8x + 4) , (6x − 2), and (2x + 7) are in A.P, find x.

3. Find the distance between the points $(\cos\theta , - \sin\theta)$ and $(- \cos\theta , \sin\theta)$

SECTION - B

4.   Four horses are tied at each corner of a Quadrilateral grass field with ropes of 14 meter each. If sides of the field are 17m , 20m, 23m and 18m , find the area grazed by them.

5. Find the value of k   so that the equations kx + 4y = k - 4 ; 16x + ky = k , have no solutions.

6.   If two vertices of Δ ABC are A (- 4 , 2) and B (4 , - 1) and co-ordinate of centroid is G(3 , 7). Find the co-ordinate of vertex C.

SECTION - C

7. Express all other trigonometric ratios in terms of sec A.

8. Evaluate $\dfrac{\sin 30^0 + \tan 45^0 - cosec\ 60^0}{\sec 30^0 + \cos 60^0 + \cot\ 45^0}$

9. State and prove "Pythagoras theorem".

10. For what value of x , the polynomial $x^5 + 2x^4 + x^3 - 2x^2 - 7x + 5$, is divisible by $x^3 - 2x + 1$

11. If two vertices of an equilateral triangle are (3, 4) and (- 2 , 3). Find the third vertex.

SECTION - D

12. A boy is standing on the ground and flying a kite with 300 m of string at an elevation of 30^0. Another boy standing in front of him is also flying his kite at an elevation of 60^0. Both kites meet in the sky. Find (a) The length of the string the second boy must have. (b) Distance between them. (c) Height of the kites when they meet.

13. Construct a circle of radius 3 cm. construct a pair of tangents from an exterior point A such that the points of contact subtend 135^0 at the center of the circle.

14. Prove that $\dfrac{\cot A}{1 - \tan A} + \dfrac{\tan A}{1 - \cot A} = 1 + \tan A + \cot A$

15. A solid cone is cut by a plane parallel to its base and upper portion is removed. If volume of the remaining part is $\dfrac{98}{125}$ of the volume of the given cone. Find the ratio of the line-segments into which the altitude of cone is divided by the plane.

Atomic Energy Central School No.4 Rawatbhata

Periodic TEST – III (2018-19)

Time-1:30 hours   Class: X, Social Science   Max Marks -40

General Instructions:

1)All question are compulsory.

2)Write neat and clean.

3)Attach the maps inside your answer book.

1. When the non-cooperation –Khilafat Movement began?   (1)

2. Classify resources on the basis of origin.   (1)

3. Give any two examples of inform sectors of credit.   (1)

4. A Challenge is not just any problem but an opportunity for progress analyses the statement.   (1)

5. What is the role of Mahatma Gandhi to broke the salt law?   (3)

6. Discuss the main causes of land degradation in india.   (3)

7. Describe the advantage of Self Help Group, for the poor.   (3)

8. Explain the chief characteristics of democracy.   (3)

9. Explain the effects of the Great depression of 1929 on the Indian economy.   (5)

10. Describe any five major functions of political parties performed in a democracy.   (5)

11. What is Globalization ? Describe the role of LIBERALISATION POLICY IN INDIAN ECONAMY   (5)

12. WHY are the means transportation and Communication called the lifelines of a nation and its economy?   (5)

13. Locate and mark the following in map of India.   (4)

(a) Champaran ,(b) Nagpur, (c) Narora , (d) Bokaro steel plant.

पूर्णांक - 40	कक्षा - दसवीं, विषय - हिन्दी	कालांश - 1.30 घंटा

खंड-क

1.निम्नलिखिक गद्यांश को पढ़कर दिए गए प्रश्नों के उत्तर लिखिए-

लक्ष्य लेकर चलना जीवन की सफलता का लक्षण है। एक बार जब मनुष्य अपना कोई लक्ष्य निर्धारित कर लेगा तब वह उसे पूरा करने के लिए प्रयत्न भी अवश्य करेगा और तब तक प्रयत्न करता रहेगा, जब तक वह पूर्ण रूप में या आंशिक रूप में उस लक्ष्य तक पहुँच नहीं जाता। लक्ष्य निर्धारण मनुष्य को योजनाबद्ध रूप में कार्य करना सिखाता है। जिस यात्री का कोई गन्तव्य स्थान निश्चित नहीं होगा, बह रेलगाड़ी में बैठकर व्यर्थ ही इधर से उधर और उधर से इधर भटकता रहेगा। खेल के मैदान मं यदि खिलाड़ियों के सामने गोल नहीं होगा, तो वे दौड़ते-भागते थककर चूर हो जाएँगे, किन्तु खेल का कोई परिणाम न निकल सकेगा। लक्ष्य-हीन जीवन जंगल में भटकने के समान है।

1. जीवन की सफलता कैसे संभव है?   1
2. लक्ष्य-निर्धारण मनुष्य को किस प्रकार के कार्य करने की सीख देता है?   1
3. अनिवार्य का समानार्थक है-   1
4. बिना लक्ष्य के व्यक्ति की स्थिति हो जाती है-   1

2. निम्नलिखित पद्यांश को पढ़कर दिए गए प्रश्नों के उत्तर लिखिएः-

स्वातंत्र्य जाति की लगन, व्यक्ति की धुन है,
बाहरी वस्तु यह नहीं, भीतरी गुण है।
नत हुए बिना जो असिघात सहती है,
स्वाधीन जगत में वही जाति रहती है।
वीरत्व छोड़ पर का मत चरण गहो रे
जो पड़े आन, खुद सब आग सहो रे
स्वर में पावक यदि नहीं, वृथा वंदन है,
वीरता नहीं, तो सभी विनय क्रंदन है।
सर पर जिसके असिघात, रक्त चंदन है,
भ्रामरी उसी का करती अभिनंदन है।
दानवी रक्ती से सभी पाप धुलते हैं,
ऊँची मनुष्यता के पथ भी खुलते हैं।

क. स्वतंत्रता भीतरी गुण क्यों है?   1
ख. विनय और क्रंदन में किसका फ़र्क है?   1
ग. पावक का समानार्थक होगा-   1
घ. काव्यांश का संदेश है-   1

खंड-ख

1.निम्नलिखित प्रश्नों का निर्देशानुसार उत्तर दीजिए-

1. जैसे ही सूर्योदय हुआ, फूल खिल उठे।(सरल वाक्य मे परिवर्तित कीजिए)   1

2. लाभ वाला काम करो।(मिश्र वाक्य में परिवर्तित कीजिए)   1

2. निर्देशानुसार वाच्य परिवर्तन कीजिए-

    1. आज गुरूजी ने हमें कहानी सुनाई।(कर्मवाच्य में परिवर्तित कीजिए)   1

    2. वृद्ध व्यक्ति चल नहीं सकता। (भाववाच्य में परिवर्तित कीजिए)   1

3. रेखांकित पदों का पद परिचय दीजिए-

    1. <u>तुम</u> कहाँ जा रहे हो।   2. मोहन विद्यालय <u>जा रहा था</u> ।   1+1

4. निम्नलिखित प्रश्नों के उत्तर दीजिए-

    1. निम्न काव्य पंक्तियों में कौन-सा रस निहीत है?   1

        तुम्हारी यह दंतुरित मुस्कान

        मृतक में भी डाल देगी जान

    2. शोक किस रस का स्थायी भाव है?   1

खंड-ग

3. निम्नलिखित में से किन्ही तीन प्रश्नों के उत्तर संक्षेप में लिखिए-   2x3=6

  क) लक्ष्मण ने वीर योद्धा की क्या-क्या विशेषताएँ बताइए?

  ख) संगतकार और मुख्य गायक के संबंध पर प्रकाश डालिए?

  ग) कन्यादान पाठ के आधार पर माँ ने बेटी को क्या-क्या सीख दी?

  घ) घाया मत छूना कविता में दुख के कौन-कौन से कारण बताए गए हैं?

4.निम्नलिखित में से किन्हीं तीन प्रश्नों के उत्तर दीजिएः-   2x3=6

क) काशी में हो रहे कौन-से परिवर्तन बिस्मिल्ला खाँ को ब्यथित करते थे?

ख) लेखिका के पिता को इंदौर छोड़कर अजमेर क्यों आना पड़ा?

ग) लेखक ने फादर बुल्के को मानवीय करूणा की दिव्य चमक क्यों कहा है?

घ) सेनानी न होते हुए भी चश्मे वाले को लोग कैप्टन क्यों कहते थे?

5. निम्नलिखित में से किसी एक प्रश्न का उत्तर दीजिए-   2

जितेन नार्ग की गाइड की भूमिका के बारे में विचार करते हुए लिखिए कि एक कुशल गाइड़ में क्या गुण हेते हैं?

अथवा

रानी एलिजाबेथ के दरजी की परेशानी का क्या कारण था?

खंड-घ

6..किसी गारमेंट्स के मालिक की ओर से कपड़ों की सेल का विज्ञापन 25-50 शब्दों में तैयार कीजिए   5

7. आप अपने विद्यालय के छात्र-छात्राओं के साथ समाज सेवा के लिए जाना चाहते है। इस कार्य हेतु अनुमति माँगते हुए अपने पिता को पत्र लिखिए   5