

Atomic Energy Central School No. 4, Rawatbhata

Periodic Test-II (2019-2020)

English

Class: VII

Max Marks 40

Time: 90min

SECTION A: READING

Q1. Read the following passage and answer the questions given:

An Autobiography of Jawaharlal Nehru

1. In May 1905, when I was fifteen, we set sail for England. Father, Mother and I all went together. On a May day towards the end of the month, we reached London. While I was in the train from Dover to London, I read about the great sea victory at Tushima. I was in high spirits because the very next day happened to be Derby Day and we went to see the race. I remember meeting M.A. Ansari soon after our arrival at London. He was then a smart and clever young man with a record of brilliant academic achievement behind him. He was a surgeon at that time in a hospital in London.
 2. I was a little fortunate in finding a vacancy at Harrow, for I was slightly above the usual age for entry, being 15. My family returned to India after some months.
 3. Never before had I been left among strangers all by myself and I felt lonely and homesick, but not for long. I managed to fit myself to some extent in the life at school. Work and play kept me busy. I was never an exact fit. Always I had a feeling that I was not one of them, and the others must have felt the same way about me. I was left a little to myself. But on the whole I took my full share in the games, without in any way shining at them. I believe, it was recognized that I was no shirker.
 4. To begin with, I was put in a lower grade because of my poor knowledge of Latin, but I was pushed higher up soon. In many subjects probably, and especially in general knowledge I was ahead of those of my age.
- i) Fill in the blanks with appropriate answers. (2)
- a) Nehru went from Dover to London by _____.
- b) Nehru considered himself fortunate in finding a vacancy at Harrow because _____.
- ii) Answer the following questions. (3x2=6)
- (a) Why was Nehru in a high spirit after reaching London?
- (b) What did Nehru do so that he would not feel lonely and homesick?
- (c) In which subject was he ahead of his age?
- iii) Find words from the paragraphs given in the brackets that mean the following: (2 Marks)
- a) One who does operations : (Para 1).
- b) A person whom you do not know (Para 3).

SECTION B: WRITING

- Q2 Read the following telephonic conversation: (4)
- Sumit : Hello is this 244356?
- Megha : Yes, whom do you want to speak to?
- Sumit : Can I speak to Vishesh?
- Megha: He is not at home. You can leave the message; I will pass on to him.
- Sumit: Tell him there is no maths tuition today. He has to reach school by 4.30 P.M. for football match. Thanks. Bye.
- Megha : Bye
- Now Megha has to go out and may not meet Vishesh so she decides to leave the message for him. Write this message in not more than 50 words.
- Q3 Imagine you are Chinmay / Chitwan of A.E.C.S. No 4, Rawatbhata. You have been asked to speak at the farewell function of your teacher, Mr. B.M. Sharma who is going to retire this month. Use the information given below to write the speech (75 to 100 words). (6)
- Mr. B.M. Sharma-good teacher- classes taught – excellent subject knowledge-30 years of service – devoted to the institution – contribution – adored by children – efficient, quiet, kind, helpful-staff members considered him delightful companion.

SECTION C: GRAMMAR

- Q4 Fill in the blanks with suitable words from the brackets. (6)
- a) Friends ,we must have_____ tickets with us.(a/an/the)
- b) The thief's _____ was caught yesterday.(partner/accomplice/ companion)
- c) Run four kilometers a day to preserve your health. Run a lot more to_____ it. (shut/destroy/subtract)
- d) Cotton is _____ than iron. (light/lighter/lightest)
- e) He just walked _____ us. (past/through/on)
- f) Summer is very pleasant in Mt Abu. This year I have decided to go_____. (here /there/everywhere)
- Q5 Change into reported speech (2)
- i) Sapna said to me, "You are my best friend."
- ii) The teacher said to the student, " Are going to watch the movie with your mother?"

SECTION D: LITERATURE

Q7 Read the lines from the poem and choose the correct option for each question:

(3)

"Fall?" scoffed Dad.

A climber like me?

Child's play, this is?

You wait and see?"

He got out the ladder

From the garden shed

It slipped. He landed

In the flower bed.

1. The father was dead sure of his

a) managerial skills b) climbing skills c) artistic skills d) artful skills

2 .Father brought _____ from the shed.

a) a rope b) food c) a ladder d) all the above

3 .Dad's climbing trial was

a) a mockery b) cancelled c) dangerous d) a failure

Q8 Answer any three of the following questions:

(3x2=6)

a) What do we need to enjoy a meadow?

b) What happens to the volunteer who swallows four drops of the new invention? What is the name of the invention?

c) Why does Maya think that Mr. Nath is a crook? Who does she say the Sunday visitor is?

d) Why did Chandini refuse to join the group of wild goats?

Q9 Answer in a short paragraph.

(3)

What are the three main ways of putting out a fire? Why should you not pour water on an electrical or oil fire?

परमाणु ऊर्जा केन्द्रीय विद्यालय क्रं. 4 रावतभाटा

आवधिक परीक्षा 2019-20

विषय: हिन्दी

कक्षा: 7 वीं

पूर्णांक 40

- प्र.1. निम्नलिखित गद्यांश को पढ़कर प्रश्नों के उत्तर दीजिए— 4
- दोनों नवागन्तुकों ने पहले से रहने वालों में वैसा ही कुतूहल जगाया जैसा नववधू के आगमन पर परिवार में स्वाभाविक है। लक्का कबूतर नाचना छोड़कर चल पड़े। बड़े खरगोश सभ्य सभासदों के समान क्रम से बैठकर गंभीर भाव से निरीक्षण करने लगे। उस दिन मेरे चिड़ियाघर में मानो भूचाल आ गया।
- प्र.1. दोनों नवागन्तुक कौन थे?
- प्र.2. चिड़ियाघर में भूचाल कैसे आया?
- प्र.3. गद्यांश के पाठ का नाम बताइए।
- प्र.2. निम्नलिखित पद्यांश को पढ़कर प्रश्नों के उत्तर दीजिए— 4
- “जब किसी ढब से निकल तिनका गया,
तब “समझ” ने यों मुझे ताने दिए।
एँठता तू किसलिए इतना रहा,
एक तिनका है बहुत तेरे लिए।”
- प्र.1. आँख से तिनका निकलने के बाद व्यक्ति को क्या समझ आ गया?
- प्र.2. पाठ का नाम व रचयिता का नाम बताइए।
- प्र.3. “जब किसी ढब से निकल तिनका गया” वाक्य को सामान्य वाक्य में बदलिए।
- प्र.3. निम्नलिखित प्रश्नों में से किन्हीं 5 के उत्तर दीजिए— 10
- प्र.1. मास्टर जी की आवाज़ अब कम ऊँची थी। वे रेलगाड़ी के बारे में बता रहे थे। मास्टर जी की आवाज़ धीमी क्यों हो गई होगी?
- प्र.2. “एक तिनका” कविता में किस घटना की चर्चा की गई है, जिससे घमण्ड नहीं करने का सन्देश मिलता है?
- प्र.3. खानपान के मामले में स्थानीयता का क्या अर्थ है?
- प्र.4. खानपान के बदलाव को लेकर लेखक चिंतित क्यों है?
- प्र.5. मोर—मोरनी के नाम किस आधार पर रखे गए?
- प्र.6. बसन्त ऋतु में नीलकंठ के लिए जालीघर में बंद रहना असहनीय क्यों हो जाता था?
- प्र.7. “तरुवर फल नहीं खात है, सतवर पियत न पान।” अर्थ बताइए।
- प्र.4. अपने प्रधानाचार्य को छात्रवृत्ति प्राप्त करने हेतु पत्र लिखिए।
- या
- अपनी दिनचर्या का वर्णन करते हुए अपने पिताजी को पत्र लिखिए। 6

- प्र.5. निम्नलिखित प्रश्नों के उत्तर दीजिए— प्र.1.
मुहावरों के अर्थ बताकर वाक्यों में प्रयोग कीजिए— 2
(क) साँस रुक जाना (ख) दाँतों तले उंगली दबाना
- प्र.2. निम्न शब्दों का अर्थ बताकर वाक्यों में प्रयोग कीजिए— 2
(क) कहा-सुनी (ख) घास-फूस
- प्र.3. दिए गए शब्दों के संधि विग्रह कीजिए— 2
(क) सिंहासन (ख) नील + आभ
- प्र.6. निम्नलिखित में से 5 प्रश्नों के उत्तर दीजिए— 10
- प्र.1. भीमसेन के पुत्रों के नाम बताइए।
- प्र.2. खेत रहना मुहावरे का अर्थ बताइये।
- प्र.3. अर्जुन के रथ के सारथी कौन थे?
- प्र.4. तेरहवें वर्ष के बाद पांडव कहां रहने लगे?
- प्र.5. अभिमन्यु के पिता का नाम बताइए?
- प्र.6. कीचक का वध किसने किया?
- प्र.7. भीमसेन ने नाम बदलकर क्या रखा और उसका क्या कार्य था?
-

ATOMIC ENERGY CENTRAL SCHOOL NO.4 RAWATBHATA

CLASS 07 - MATHEMATICS

PERIODIC TEST-II 2019-2020

Time Allowed: 1 hour and 30 minutes

Maximum Marks: 40

General Instructions:

...

Section A

1. What is 60% of Rs. 120. [1]
2. Find the additive inverse of $\frac{-4}{9}$? [1]
3. Find the area of parallelogram of base 8cm, height 7cm and breadth 6cm. [1]

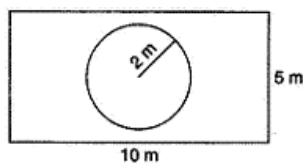
Section B

4. Rs. 10000 is invested at 5% interest rate p.a., find the interest at the end of the year. [2]
5. Add the rational numbers [2]
 - a. $-\frac{7}{27}$ and $\frac{11}{18}$
 - b. $\frac{7}{-18}$ and $\frac{8}{27}$
6. What is the area of a circle whose radius = 3.5 cm? [2]

Section C

7. Radhika invested Rs.5,000 for 2 years at 11 % per annum. Find the simple interest and the amount received by him at the end of 2 years. [3]
8. The product of two rational numbers is 18. If one of the numbers is -12, find the other. [3]
9. Verify [3]
$$\left[\frac{-3}{5} \times \frac{12}{13} \right] \times \frac{7}{8} = \frac{-3}{5} \times \left[\frac{12}{13} \times \frac{7}{8} \right]$$
10. A picture is painted on a cardboard 8 cm long and 5 cm wide such that there is a margin of 1.5 cm along each of its sides. Find the total area of the margin. [3]
11. The adjoining figure represents a rectangular lawn with a circular flower bed in the middle. [3]

Find.



- i. the area of the whole land
- ii. the area of the flower bed.
- iii. the area of the lawn excluding the area of the flower bed.
- iv. the circumference of the flower bed.

Section D

12. Narayan secured 45% marks in English, 60% in Mathematics and 69% in Hindi. If the maximum marks in these subjects are 60, 80 and 100 respectively, find his aggregate percentage. [4]
13. Express $\frac{3}{4}$ as a rational number with [4]

- a. numerator 12
- b. denominator 32
- c. numerator 81
- d. denominator 64

14. Construct $\triangle ABC$ such that $AB = 3.5$ cm, $BC = 6$ cm and $AC = 6.5$ cm. Measure the three angles. **[4]**
15. The area of a rectangular field is 3016 sq. m. and its length is 58 m. A boy runs around a field **[4]**
at the rate 8 km/hr. How long will he take to go 6 times around it.

ATOMIC ENERGY CENTRAL SCHOOL NO.4
RAWATBHATA

CLASS 07 - SCIENCE
Periodic test- II (2019- 19)

Time Allowed: 1 hour and 30 minutes

Maximum Marks: 40

General Instructions:

All questions are compulsory.

Draw labeled diagrams wherever necessary to draw..

Section A

1. In insects, air enters the body through [1]
 - a) Spiracles
 - b) Skin
 - c) Gills
 - d) Lungs
2. The absorption of nutrients and exchange of respiratory gases between blood and tissues takes place in [1]
 - a) capillaries
 - b) veins
 - c) heart
 - d) arteries
3. Which part of a plant is not involved in vegetative propagation? [1]
 - a) Stem
 - b) Root
 - c) seeds
 - d) Leaves
4. Early time people used such type of clocks and this is used in Jantar Mantar. Name it. [1]
 - a) Waterclock
 - b) Sundial
 - c) Sand clock
 - d) pendulum clock
5. MCB in electric circuit stands for [1]
 - a) Minimum current breaker
 - b) Molar current breaker
 - c) Miniature circuit breaker
 - d) Maximum current breaker
6. Fill in the blanks: [1]

During heavy exercise, we get cramps in the legs due to the accumulation of _____.
7. Fill in the blanks: [1]

In plants, water is transported through _____.
8. State true or false: [1]

Potato reproduces from seeds.
9. State true or false: [1]

Faster vehicle has a higher speed.
10. State true or false: [1]

CFLs consume more electricity than an ordinary bulb.

Section B

11. What is transpiration? Why it is useful to plants? [2]
12. What are the advantages of vegetative propagation? [2]
13. A simple pendulum takes 15 seconds to complete 5 oscillations. What is the time period of pendulum? [2]
14. Explain the reasons of excessive currents in our houses. [2]

Section C

15. Explain the mechanism of breathing in human beings. [3]
16. What is the difference between arteries and veins? [3]
17. What is pollination? Explain various types of pollination. [3]
18. What is an electromagnet? Write its uses. [3]

Section D

19. Describe any two methods of asexual reproduction in plants with labeled diagrams. [5]
20. (a) Enlist the factors which determine the amount of heat generated in a wire when current is passed through it. [5]
(b) Why CFLs are preferred over incandescent electric bulbs nowadays?

ATOMIC ENERGY CENTRAL SCHOOL NO.4 RAWATBHATA

CLASS 07 - SOCIAL SCIENCE

PERIODIC TEST-II 2019-2020

Time Allowed: 1 hour and 30 minutes

Maximum Marks: 40

General Instructions:

...

Section A

1. What was special with the Surat hundis? [1]
2. Who were specialised artisans? [1]
3. Which type of grassland is the Prairies? [1]
4. Where do you find a dense network of roads? [1]
5. What do you mean by social advertisements? [1]

Section B

6. Why was the Mughal emperor Jahangir hostile to the Sikh community? How did the Sikh movement gain momentum? [3]
7. How was Hampi in its heyday in the 15-16th centuries? When did it fall into ruin? [3]
8. Where did branding come from? [3]
9. What role do advertisements play in our lives? [3]
10. How is tourism an important activity in the Ganga-Brahmaputra basin? [3]

Section C

11. What do you know about the people of the rainforest? [4]
12. How settlements became a necessity? What are its different types? [4]
13. Give a brief account of the tribal people found in different parts of the subcontinent. [4]
14. Write a brief note on new religious developments in north India. [4]
15. On the outline map of india mark and name the following [4]
 1. Any four places where major indian tribes lived

परमाणु ऊर्जा केन्द्रीय विद्यालय-4, रावतभाटा
आवधिक परीक्षा-2, 2019

कक्षा - सातवीं

समय - 1 घंटा

विषय - संस्कृत

पूर्णांक - 40

प्र.1 अ) निम्नलिखित संस्कृत गद्यांश का हिन्दी में अनुवाद कीजिए:- 5

इयम् महती आवश्यकता वर्तते यत् एकः देशः अपरेण देशेन सह निर्मलेन हृदयेन बन्धुतायाः व्यवहारं कुर्यात्। विश्वस्य जनेषु इयं भावना आवश्यकी। ततः विकसिताविकसितयोः देशयोः मध्ये स्वस्था स्पर्धा भविष्यति। सर्वे देशाः ज्ञानविज्ञानयोः क्षेत्रे मैत्रीभावनया सहयोगेन च समृद्धिं प्राप्तुं समर्थाः भविष्यन्ति।

अथवा

पुरा एकस्मिन् वृक्षे एका चटका प्रतिवसति स्म। कालेन तस्याः सततिः जाता। एकदा कश्चित् प्रमत्तः गजः तस्य वृक्षस्य अधः आगत्ये तस्य शाखां शुण्डेन अत्रोटयतः। चटकायाः नीडं भुवि अपतत्। तेन अण्डानि विशीर्णानि। अथ सा चटका व्यलपत्।

आ) निम्नलिखित संस्कृत पद्यांश का हिन्दी में अनुवाद कीजिए:- 5

न चौरहार्यं न च राजहार्यं, न भ्रातृभाज्यं न च भारकारि
व्यये कृते वर्धत एव नित्यं, विद्याधनम् सर्व प्रधानम्

अथवा

केयूराः न विभूषयन्ति पुरुषं हारा न चन्द्रोज्ज्वला
न स्नानं न विलेपनं न कुसुमं नालंकृता मूर्धजाः
वाण्येका समलंकरोति पुरुषं या संस्कृता धार्यते
क्षीयन्ते अखिल भूषणानि सततं वाग्भूषणं भूषणम्

प्र.2 निम्नलिखित प्रश्नों में से पाँच प्रश्नों के उत्तर एक पद में लिखिए:- 5

1. दर्शनीयाः पुत्री कति वर्षीया आसीत्?
2. मक्षिकायाः मित्रम् कः आसीत्?
3. कः पशु?
4. दर्शनायाः पुत्री कथं नृत्यति?
5. वृक्षे का प्रतिवसति स्म?

प्र.3 सन्धि विच्छेदं पूरा कीजिए-

4

1. कार्यार्थम् -+ अर्थम्
2. करिष्यत्येषा - करिष्यति +
3. ग्रामं प्रति - ग्रामम् +
4. स्वोदरपूर्तिः -+ उदरपूर्ति

प्र.4 समानार्थक पदों का मिलान कीजिए-

5

| | |
|-----------|------------|
| आश्चर्येण | पठनस्य |
| उल्लासेन | समयः |
| परिवारस्य | प्रसन्नतया |

अध्ययनस्य विस्मयेन

कालः कुटुम्बस्य

प्र.5 विलोमपद चुनकर लिखिए:-

3

अधुना मित्रतायाः लघुचेतसाम् गृहीत्वा दुखिनः दानवाः

शत्रुतायाः, पुरा, मानवाः, उदारचरितानम्, सुखिनः, अपहाय

प्र.6 कोष्ठक से उचित पद चुनकर रिक्त स्थान की पूर्ति कीजिए:-

2

1.नमः।(हरिं/हरयेः)
2. परितः कृषिकक्षेत्राणि सन्ति।(ग्रामस्य/ग्रामम्)
3.नमः। (अम्बायाः/अम्बायै)
4.उपरि अभिनेता अभिनयं करोति। (मञ्चस्य/मञ्चम्)

प्र.7 उपयुक्त कथन के सामने आम और अनुपयुक्त कथन के सामने न लिखिए:-4

1. विद्या राजसु पूज्यते।
2. विद्याधनं सर्वधनेषु प्रधानम्।
3. विदेशगमने विद्या बन्धुजनः न भवति।
4. सर्वं विहाय विद्याधिकारं कुरु।

प्र.8 'नदी' अथवा 'मति' शब्द के रूप द्वितीय अथवा तृतीया विभक्ति के तीनों वचनों में लिखिए |

3

प्र.9. 'वस' धातु के रूप वर्तमान काल में तीनों पुरुष और तीनों वचनों में लिखिए।

4

Solution
Class 07 - Mathematics
PERIODIC TEST-II 2019-2020

Section A

- 60% of Rs. 120
 $= \frac{60}{100} \times Rs.120 = 0.60 \times Rs.120 = Rs.72.00$
- Since $\frac{-4}{9} + \frac{4}{9} = 0$
Hence, the required number number is $\frac{4}{9}$.
- Area of a parallelogram = $base \times height = 8 \times 7 = 56sq\ cm.$

Section B

- Principal = Rs. 10,000 Rate = 5% Time = 1 year
Simple Interest = $\frac{P \times R \times T}{100} = \frac{10000 \times 5 \times 1}{100}$
S.I. = Rs 500
Rs. 500 is the interest at the end of the year.

1. $-\frac{7}{27}$ and $\frac{11}{18}$
LCM of 27 and 18 is 54

$$\text{So, } \frac{(-14+33)}{54} = \frac{19}{54}$$

$$\text{Answer is } \frac{19}{54}.$$

2. $\frac{7}{-18}$ and $\frac{8}{27}$

LCM of 18 and 27 is 54

$$\text{So, } \frac{(-21+16)}{54} = \frac{-5}{54}$$

$$\text{Answer is } \frac{-5}{54}.$$

- Area of circle = πr^2
 $= \frac{22}{7} \times 3.5 \times 3.5$
 $= 22 \times 0.5 \times 3.5$
 $= 11 \times 3.5$
 $= 38.5\ sq.cm.$

Section C

- Principal (P) = Rs.5,000
Number of years (n) = 2 years
Rate of interest (r) = 11%
Simple Interest = $\frac{P \times R \times T}{100}$
Simple Interest = $\frac{5000 \times 11 \times 2}{100}$
Simple Interest = 1100
I = Rs.1,100
Amount (A) = P + I
 $= 5000 + 1100$
A = Rs.6,100

- Let x be the other number.

$$\text{So, } -12x = 18$$

$$x = \frac{18}{-12}$$

$$= \frac{18 \times (-1)}{-12 \times (-1)}$$

$$= \frac{-18}{12}$$

$$\text{i.e. } \frac{-3}{2}$$

So, the other rational number is $\frac{-3}{2}$.

9. L.H.S.

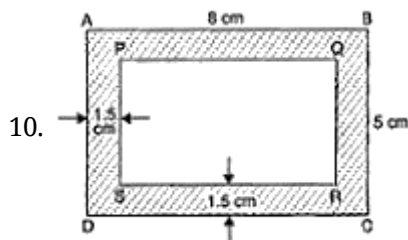
$$\begin{aligned} & \left[\frac{-3}{5} \times \frac{12}{13} \right] \times \frac{7}{8} \\ &= \frac{-36}{65} \times \frac{7}{8} \\ &= \frac{-9}{65} \times \frac{7}{2} \\ &= \frac{-63}{130} \end{aligned}$$

R.H.S.

$$\begin{aligned} & \frac{-3}{5} \times \left[\frac{12}{13} \times \frac{7}{8} \right] \\ &= \frac{-3}{5} \times \frac{84}{104} \\ &= \frac{-3}{5} \times \frac{21}{26} \\ &= \frac{-63}{130} \end{aligned}$$

Therefore, L.H.S = R.H.S.

Hence, verified.



Area of the rectangle

$$\begin{aligned} \text{ABCD} &= l \times b \\ &= 8 \text{ cm} \times 5 \text{ cm} \\ &= 40 \text{ cm}^2 \end{aligned}$$

Area of the rectangle

$$\begin{aligned} \text{PQRS} &= l \times b \\ &= \{8 - (1.5 + 1.5)\} \text{ cm} \times \{5 - (1.5 + 1.5)\} \\ &= 5 \text{ cm} \times 2 \text{ cm} \\ &= 10 \text{ cm}^2 \end{aligned}$$

∴ Total area of the margin

$$\begin{aligned} &= \text{Area of the rectangle ABCD} - \text{Area of the rectangle PQRS} \\ &= 40 \text{ cm}^2 - 10 \text{ cm}^2 = 30 \text{ cm}^2. \end{aligned}$$

11. i. Area of the whole land = $l \times b$

$$\begin{aligned} &= 10 \text{ m} \times 5 \text{ m} \\ &= 50 \text{ m}^2 \end{aligned}$$

ii. Radius (r) of the flower bed = 2 m

$$\therefore \text{Area of flower bed } \pi r^2 = \frac{22}{7} (2)^2 \text{ m}^2 = \frac{88}{7} \text{ m}^2 = 12.56 \text{ m}^2$$

iii. Area of the lawn excluding the area of the flower bed

$$\begin{aligned} &= \text{Area of the whole land} - \text{Area of the flower bed} \\ &= 50 \text{ m}^2 - \frac{88}{7} \text{ m}^2 \\ &= \left(50 - \frac{88}{7}\right) \text{ m}^2 \\ &= \frac{262}{7} \text{ m}^2 \\ &= 37.44 \text{ m}^2 \end{aligned}$$

iv. The circumference of the flower bed = $2\pi r$

$$\begin{aligned} &= 2 \times \frac{22}{7} \times 2 \text{ m} \\ &= \frac{88}{7} \text{ m} = 12.56 \text{ m} \end{aligned}$$

Section D

12. Marks obtained in English = 45% of 60 = $\frac{45}{100} \times 60 = 27$

Marks obtained in Mathematics = 60% of 80 = $\frac{60}{100} \times 80 = 48$

$$\text{Marks obtained in Hindi} = 69\% \text{ of } 100 = \frac{69}{100} \times 100 = 69$$

$$\text{Total marks obtained} = 27 + 48 + 69 = 144$$

$$\text{Total maximum marks} = 60 + 80 + 100 = 240$$

$$\text{Aggregate percentage} = \frac{144}{240} \times 100 = 60\%$$

$$13. \text{ a. } \frac{3}{4} = \frac{12}{16}$$

$$= \frac{3 \times 4}{4 \times 4} = \frac{12}{16}$$

$$\text{b. } \frac{3}{4} = \frac{24}{32}$$

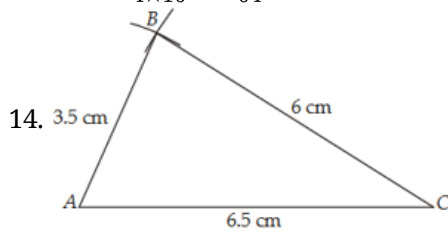
$$= \frac{3 \times 8}{4 \times 8} = \frac{24}{32}$$

$$\text{c. } \frac{3}{4} = \frac{81}{108}$$

$$= \frac{3 \times 27}{4 \times 27} = \frac{81}{108}$$

$$\text{d. } \frac{3}{4} = \frac{48}{64}$$

$$= \frac{3 \times 16}{4 \times 16} = \frac{48}{64}$$



$\triangle ABC$ is the required triangle. On measurement, $\angle A = 65^\circ$, $\angle B = 85^\circ$ and $\angle C = 30^\circ$.

$$15. \text{ Area of field} = 3016 \text{ sq. m}$$

$$\text{Length of the field} = 58 \text{ m}$$

$$\Rightarrow \text{Breadth of the field} = \text{Area/Length} = 3016/58 = 52 \text{ m}$$

$$\therefore \text{Perimeter of field} = 2(l + b) = 2(58 + 52) = 220 \text{ m}$$

$$\text{Distance covered to go 6 times, around the field} = 220 \times 6 = 1320 \text{ m}$$

$$\therefore 8000 \text{ m is covered in} = 1 \text{ hr}$$

$$\therefore 1 \text{ m is covered in} = \frac{1}{8000} \text{ hr.}$$

$$\therefore 1320 \text{ m is covered in} = \frac{1}{8000} \times 1320 \text{ hr} = 9\frac{9}{10} \text{ minutes}$$

Thus, he will take $9\frac{9}{10}$ minutes.

Solution
Class 07 - Science
Periodic test- II (2019- 19)

Section A

1. **(a)** Spiracles

Explanation: Air enters the respiratory systems of insects through a series of external openings called spiracles.

2. **(a)** capillaries

Explanation: capillaries

3. **(c)** seeds

Explanation: The seeds contain only the genetic material of the parent plant. Therefore, propagation via asexual seeds is asexual **reproduction** but not **vegetative propagation**.

4. **(b)** Sundial

Explanation: A sundial is a device that measures time by using a light spot or shadow cast by the position of the Sun on a reference scale. It consists of a flat plate (the *dial*) and a gnomon which casts a shadow onto the dial. The Jantar Mantar is an sundial, consisting a gigantic triangular gnomon with the hypotenuse parallel to the Earth's axis.

5. **(c)** Miniature circuit breaker

Explanation: MCB is electric circuit stands for miniature circuit breaker used to break circuit in case of excess of current.

6. Lactic acid

7. Xylem

8. False

9. True

10. False

Section B

11. Plants absorb mineral nutrients and water from the soil. Not all the water absorbed is utilised by the plant. The water evaporates through the stomata present on the surface of the leaves by the process of transpiration.

Transpiration is necessary for the plants in following ways:-

- The evaporation of water from leaves generates a suction pull. This suction pull can pull water to a great height in tall trees.
- Transpiration cools the plant and protects the cells from the heat of the sunlight.

12. NCERT VII SCIENCE pg- 135

13. The time taken by pendulum to complete 1 oscillation is called time period

The time taken by pendulum to complete 5 oscillation = 15sec

The time taken by pendulum to complete 1 oscillation = $\frac{15}{5} = 3$ sec

So time period = 3 sec

14. There are following two reasons of excessive currents in our houses:

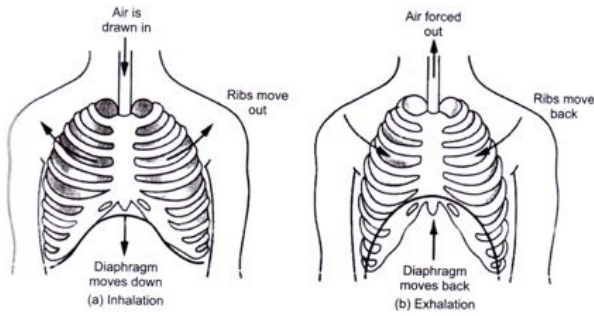
(i) Direct touching of wires: This may happen if the insulation on the wires has come off due to wear and tear. This may cause a short circuit.

(ii) Connection of many devices to a single socket: This may cause overload in the circuit.

Section C

15. The chest cavity is separated from the abdomen by a muscular wall called diaphragm. When diaphragm moves downwards and ribs move up and outward, the space in the chest cavity increases. As a result, air from atmosphere rushes through nose, trachea to lungs (inhalation or inspiration). When the diaphragm

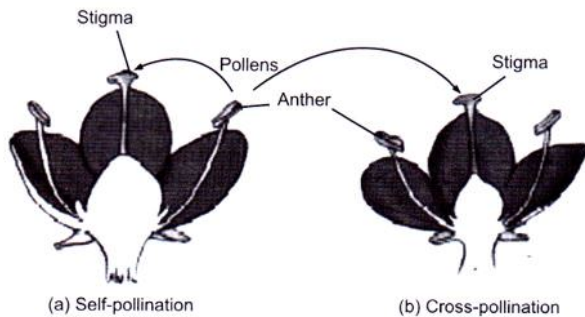
moves upwards to its original position, ribs move down and inward, the space in the chest cavity decreases. As a result, air from lungs is forced out of the body through air passage (exhalation or expiration).



| 16. Arteries | Veins |
|---|--|
| Arteries have thick elastic walls. | The walls of veins are thin. |
| Arteries have no valves. | There are valves present in veins. |
| Blood flow is rapid and at a high pressure. | Blood flows slowly and at low pressure. |
| Carry oxygen rich blood. | Carry carbon dioxide rich blood. |
| Arteries carry blood from the heart to the rest of the body | Veins carry blood from the rest of the body back to the heart. |
| These are reddish in color . | These are bluish in color . |
| Arteries empty up at the time of death . | Veins get filled up at time of death . |

17. The transfer of the pollen grains from the another to the stigma of a flower is called pollination. There are following two types of the pollination:

1. **Self-pollination:** If the pollen grains land on the stigma of same flower, then it is called self-pollination.
2. **Cross-pollination:** When the pollen grains of a flower land on the stigma of another flower of the same plant or that of a different plant of the same kind, then it is called cross-pollination.



Pollination in flower.

18. When current is passed through a coil of wire then the coil behaves like a magnet. One end of coil acts as north pole and other end acts as south pole. When the electric current is switched off, the coil generally loses its magnetism. Such coils are called electromagnets. The electromagnets are very strong and their power can be increased so they are very important.

Two important applications (uses) of electromagnets are:

- (i) They are used in electric bells, telegraphs, telephones and speakers etc.
- (ii) They are used in cranes to lift heavy loads of scrap iron or iron sheets.

Section D

19. NCERT VII SCIENCE LESSON 12

20. refer NCERT VII SCIENCE

Solution

Class 07 - Social Science

PERIODIC TEST-II 2019-2020

Section A

1. The Surat hundis were honoured in the far-off markets of Cairo in Egypt, Basra in Iraq and Antwerp in Belgium.
2. Smiths, carpenters and masons were specialised artisans.
3. Prairie is a temperate grassland found in N.America.
4. A dense network of roads is mainly found in plains.
5. Social advertisements are advertisements made by the State or private agencies. These advertisements have a larger message for the society.

Section B

6. A.By the beginning of the 17th century the town of Ramdasapur, Amritsar had developed around the central Gurudwara known as Harmandar Sahib, the Golden Temple.
B.It was virtually self-governing body and the modern historians refer to the early 17th century Sikh community as 'a state within state.'
C.This made the Mughal emperor Jahangir hostile to the Sikh community. He looked upon them as a potential threat and he ordered the execution of Guru Arjan in 1606.
D.It is from this time the Sikh movement began to gain momentum. It was a development which culminated in the institution of the Khalsa by Guru Gobind Singh in 1699.
7. A.In its heyday in the 15-16th centuries Hampi was an important centre of commercial and cultural activities. Moors, which was a name used collectively for Muslim merchants, Chettis and agents of European traders such as the Portuguese, visited the markets of Hampi.
B.Temples were the hub of cultural activities. Temple dancers known as devadasis performed before the deities, royalty and masses in the many-pillared halls in the Virupaksha, a form of Shiva, temple.
C.The Mahanavami festival was one of the most important festivals celebrated at Hampi.
D.Hampi fell into ruin following the defeat of Vijayanagara in 1565 by the Deccani Sultans.
8. Branding in real came from cattle grazing. The cattle of different owners used to graze together in ranches and they often mixed up. To solve the problem, owners thought of a solution and hence started marking their cattle with the owner's sign by using a heated iron. This process came to be known as branding.
9. Advertisements play a major role in our lives. They influence us to a great extent. We watch advertisements, discuss them and often judge people according to the brand products they use. Whenever we see cricket heroes and film stars advertising different products we feel tempted to buy those products. It is because persons whom we consider our heroes tell us that they are worth buying.
Advertisements tell us how we should live our lives, what we should aspire and dream for, how we should express our love, what it means to be smart, successful and beautiful. Thus, advertisements have significant role in our lives. In the present scenario, we cannot think of a life without advertisements.
10. A.The Ganga-Brahmaputra plain has several big towns and cities, such as Allahabad, Kanpur, Varanasi, Lucknow, Patna and Kolkata.All these places are important from tourism point of view.
B.Taj Mahal on the bank of the river Yamuna in Agra is a famous tourist place.
C.Allahabad is situated on the confluence of the river Ganga and the Yamuna. Several people visit this place every day to have a holy dip in it.
D.Buddhist stupas in Uttar Pradesh and Bihar, Lucknow with its Imambara, Assam with Kaziranga and Manas with wildlife sanctuaries are some other places in the basin where people from different parts of the country and abroad go with great enthusiasm.

Section C

11. The people of the Amazon basin practise slash and burn agriculture. They grow most of their food in small areas after clearing some trees in the forest. Men hunt and fish along the rivers and women take care of the crops. They mainly grow tapioca, pineapple and sweet potato. As hunting and fishing are uncertain it is the women who support the family. They feed them the vegetables that they grow. Their staple food is manioc, also known as cassava that grows under the ground like potato. They also eat queen ants and egg sacs. Cash crops like coffee, maize and cocoa are also grown. People get wood for their houses from the rainforests.

They build thatched houses shaped like beehives. There are also malocas which are large apartment-like houses with a steeply slanting roof. The Amazon basin is developing day by day. In 1970 the trans Amazon Highway made all parts of the rainforest accessible. With the change of time, the people's lifestyle is also changing gradually.

12. Settlements are the places where people build their homes to live in. Early human beings did not need to develop settlements because they lived on trees and in caves. When they started to grow crops, it became essential to have a permanent home. Thus, settlements began to grow near the river valleys as water was available and land was fertile. By and by settlements became larger because trade, commerce and manufacturing also developed. Settlements can be permanent or temporary.
- **Temporary Settlement.** Settlements which are occupied for a short time are called temporary settlements. The people living in deep forests, hot and cold deserts and mountains often dwell in such settlements. These people are engaged in hunting, gathering, shifting cultivation and transhumance.
 - **Permanent Settlement.** Under permanent settlements, people build homes to live in.
13. A. Tribal people were found in almost every region of the sub-continent. In Punjab, the Khokhar tribe was influential during the 13th and 14th centuries.
- B. Later, the Gakkhars became more powerful. In Multan and Sind, the Langahs and Arghuns dominated extensive regions.
- C. The Balochis were another large and powerful tribe in the north-west. In the western Himalayas, the Gaddi Shepherds lived. The Nagas, Ahoms and many others lived in the distant north-eastern part of the subcontinent.
- D. In many areas of present-day Bihar and Jharkhand, Chero Chiefdoms had emerged by the 12th century. However, they were subdued by the Mughals.
- E. The Mundas and Santals were other important tribes that lived in these states and also in Orissa and Bengal.
- F. The Kolis, Berads and numerous others lived in the Maharashtra highlands, Karnataka and Gujarat.
- G. Further there were large tribal populations of Koragas, Vetars, Maravars and many others in South. The Bhils were spread across western and central India. By the late 16th century many of them had become settled agriculturists and some even zamindars. Many Bhil clans, nevertheless, remained hunter-gatherers.
- H. The Gonds were found in a large number across the present-day states of Chhattisgarh, Madhya Pradesh, Maharashtra and Andhra Pradesh.
14. During the thirteenth century a new wave of the Bhakti movement began in north India. This was an age when Islam, Brahmanical Hinduism, Sufism, various strands of Bhakti, and the Nathpanths, Siddhas and Yogis influenced one another. Ordinary people such as craftspersons, peasants, traders, etc. showed their interest in listening to these new saints.
- A. Kabir and Surdas did not approve orthodox religions:
- TULSIDAS:** He conceived God in the form of Rama. The composition of Tulsidas, the Ramcharitmanas, is important both as an expression of his devotion and as a literary work.
- SURDAS:** He was a devotee of Krishna. His compositions that are compiled in the Sursagara, Surasaravali and Sahitya Lahari express his devotion.
- B. **SHANKARADEVA:** He was another contemporary of the period. He belonged to Assam and composed poems and plays in Assamese. He emphasized devotion to Lord Vishnu. He began the practice of setting up namghars or houses of recitations and prayers. This practice still continues. This tradition also includes saints like Ravidas, Dadu Dayal and Mirabai.
- C. **MIRA BAI:** Mirabai was a Rajput princess and was married into the royal family of Mewar in the 16th century. She became a disciple of Ravidas, an untouchable saint. She devoted her life to Lord Krishna. She composed a number of bhajans expressing her intense devotion. A unique feature of most of the saints is that their works were composed in regional languages and could be sung. Therefore, they became very popular among the common mass.

15. .