

27.08.19 EVERWIN VIDHYASHRAM Marks:50  
STD: X(FN) CRP – I Time:1hr45min  
(AWE,EXC,CAP) ENGLISH PART 1

SECTION-A READING

I. Read the passage given below and answer the questions that follows:  $10 \times 1 = 10$

1. Cycling survives as a popular pastime because it yields pleasure and benefits. First of all cycling provides exercise, the need of which is felt, by most people. The development of machinery tends to deprive us of adequate opportunities of expending energy. Other opportunities should be created through the medium of sport. Of cycling, many people hastily say that it, is “hard work” but a fit and practiced rider does not agree with this verdict. The art of easy cycling must be cultivated but once it has been acquired a long day’s run should not unduly tire a rider endowed with the normal measure of health. You move along your own glad effort. Many of us wish to use our legs, and lungs, as well as our eyes. An active healthy person ought not to be content to travel always as a mere passenger “like an image pushed from behind”. That is not life. Those who would turn all active cyclists into sedentary motor –drivers or into idle passengers, would serve the nation better if, they restricted their attentions to the aged and infirm for whom petrol generated propulsion is doubtlessly a blessing may be a necessity.

It is often said that the cyclist cannot travel as fast as the motorist. Admitting this, the cyclist may be permitted to ask if it is always desirable that travel should involve modern motorin, speeds (or accidents). Is the enjoyment of a traveller in search of pleasure to be measured merely in miles, or what is worse in miles per hour, or what is worst still, in miles per litre? Surely the cyclist pedalling calmly along at a modest 12miles an hour is liable to assimilate scenery more easily than a car driver. Cyclist believe that their mode of travel is a sensible and convenient compromise between walking and driving.

These are atleast two distinct types of cyclist-purely athletic rider, who goes into strict training and a tourist type who does so

in leisure and has no desire to race. Comparatively few cyclists are interested in both touring and racing.

On the basis of your understanding of the above passage, answer the following questions in 30-40 words each.

- What are the benefits of a petrol generated drive?
- How is Cycling a comprise between walking and driving?
- Compare and contrast the different types of cyclist
- How has cycling stood the test of time ?
- What are the writer’s comments regarding the art of easy culture ?

Answer the following with the help of the given options:

a. What is the meaning of the word “ sedentary”?

- generally sitting
- involving great effort
- involving some amount of exercise
- hectic life style

b. Identify a word which has the same meaning as “judgement”

- verdict
- surrender
- punishment
- admitting

c. Synonym of the word , “ restricted” is \_\_\_\_\_

- small
- minute
- limited
- developed

d. Some cyclist are interested in \_\_\_\_\_

- desire and racing
- touring and racing
- training and racing
- cycling and racing

e. Cycling is a good \_\_\_\_\_

- exercise
- training
- touring
- racing

SECTION-B : WRITING AND GRAMMAR

1. You are Mazhilini living at H.No 45 , 'A' Block, Prashant Vihar , New Delhi. Write a letter to the postmaster complaining against the careless delivery of post by the postman of your area. 1x5=5

2. The following passage have not been edited. Edit the following passage. Write the correct word. 5x1 = 5

- Everyone have a mental picture a) \_\_\_\_\_  
Of a volcano. One appearance it b) \_\_\_\_\_  
Looks like a cone-shape mountain. c) \_\_\_\_\_  
But a top of the cone is d) \_\_\_\_\_  
Rather flat to hollow e) \_\_\_\_\_

3. Rearrange the given words or phrases to form meaningful sentences. Write the correct sentence : 5x1 = 5

(i) and creatively/thought/of/scientist/a/things/a little/differently/doing

(ii) Of a chariot/with the/the temple/as the/sun God/is in/the form/charioteer

(iii) fearless/and/people/history/records/enterprising/many.

(iv) concentration/heroism/the/is/of courage/glorious/dazzling and

(v) he came back/he/when/playing/saw/in his/garden/the children

#### SECTION-C : LITERATURE TEXTBOOKS

I. Read the following lines and answer the questions given below :

5x1 = 5

1. He should be lurking in shadow

Sliding through long grass

Near the water hole

Where plump deer pass.

a) What does the word "lurking" and "sliding" describe ?

b) Where is the tiger hiding ?

c) Who is going to be his prey ?

d) Who does the word "plump" means ?

e) What is the rhyme scheme of this stanza of the poem ?

II. Answer the following questions : 5x2 = 10

1. Why did Maddie write a note to Peggy and then tore it ?

2. In the poem "Dust of snow" how does the poet's mood get changed ?

3. When did the seagull's flight begin ? And where did he end ?

4. What unintended effect was produced by decades of oppression ?

5. Why does the postmaster send money to Lencho? Why does he sign the letter "God" ?

III. Answer the following questions in about 100-150 words : (5)

1. The tiger in the poem is feeling miserable in a concrete cell.

Does it not amount to cruelty? Express your opinion about keeping wild animals in Zoos.

(or)

Wanda had no friends and nobody liked to talk to her. Do you think such attitude of children towards Wanda is justified ? Is it right to judge people on the basis of their social status ?

IV. Answer the following questions in about 100-150 words : (5)

1. "He had never been known to refuse food; he would tackle a meal at any hour of the day or night". Herriot believed that Tricki's problem was his greed. Did he lack tolerance ? What values would you like Tricki to imbibe?

(or)

2. Horace Danby requested the lady to forget what she saw. Was Horace afraid of being caught? Did he lack courage to accept his crime publicly ?

27.08.2019

EVERWIN VIDHYASHRAM

Marks:50

STD: X (AN)

CRP – I

Time:1hr45min

(AWE, EXC,CAP)

ENGLISH PART II

I. Read the passage given below and answer the questions that

follow: 10×

1 = 10

Many great inventions are initially greeted with ridicule and disbelief. The invention of the airplane was no exception.

Although many people who heard about the first powered flight on December 17,1903 were excited and impressed , others reacted with peals of laughter. The idea of flying an aircraft was repulsive to some people. Such people called Wilbur and Orville Wright , the inventors of the first flying machine, impulsive fools. Negative reactions , however , did not stop the Wrights. Impelled by their desire to succeed , they continued their experiments in aviation.

Orville and Wilbur Wright had always had a compelling interest in aeronautics and mechanics. As young boys they earned money by making and selling kites and mechanical toys. Later , they designed a newspaper-folding machine, built a printing press, and operated a bicycle-repair shop. In 1896, when they read about the death of Otto Lilienthal , the brothers interest in flight grew into a compulsion.

Lilienthal , a pioneer in hand-gliding, had controlled his gliders by shifting his body in the desired direction. This idea was repellent to the Wright brothers, however , and they searched for more efficient methods to control the balance or airborne vehicles. In 1900 and 1901 , the Wrights tested numerous gliders and developed control techniques . The brother's inability to obtain enough lift power for the gliders almost led them to abandon their efforts

After further study, the Wright brothers concluded that the published tables of air pressure on curved surfaces must be wrong. They set up a wind tunnel and began a series of experiments with model wings. Because of their efforts , the old tables were repealed in time and replaced by the first reliable figures for air pressure on curved surfaces. This work, in turn , made it possible for the brothers to design a machine that would fly. In 1903 the Wright built their first airplane , which cost less than \$ 1,000. They even designed and built their own source of propulsion- a light weight gasoline engine. When they started the engine on December 17 , the airplane pulsated wildly before taking off. The plane managed to stay aloft for 12 second, however , and it flew 120 feet.

By 1905 , the Wrights had perfected the first airplane that could turn , circle , and remain airborne for half an hour at a time. Others had flown in balloons and hand gliders , but the Wright brothers were the first to build a full-size machine that could fly under its own power. As the contributors of one of the most outstanding engineering achievements in history , the Wright brothers are accurately called the fathers of aviation.

Answer the questions given below briefly :

- a) Why was the idea of flying an aircraft repulsive to some people ?
- b) The spark to fly was kindled at a very young age for the Wright Brothers. Mention two points to prove it.
- c) What criticisms did the Wright Brothers overcome in the initial phase of their journey to success ? Mention any two.
- d) When did the desire to fly turn into a compulsion for the Wright Brothers?
- e) What made the Wright Brothers almost abandon all efforts to fly?

- f) What made the Wright Brothers different from the others who desired to fly ?
- g) Why is the year 1905 a hall mark in the history of aviation ?
- h) Where did the Brothers try out their experiments ?
- i) Give a word from the passage which means “ a person who is first to explore”
- j) Suggest a title that can be given to the Wright Brothers.

II. There is a missing word in each line. Find out the missing word :

$$7 \times 1 = 7$$

For centuries time measured by position \_\_\_\_\_ a)

the sun with the use sundials . Noon \_\_\_\_\_ b)

was recognised the sun was the highest \_\_\_\_\_ c)

In the sky, and cities set their clock by \_\_\_\_\_ d)

This apparent solar time, even though cities \_\_\_\_\_ e)

would often be on a slightly different time. \_\_\_\_\_ f)

Daylight Saving Time (DST) , sometimes summer \_\_\_\_\_ g)

\_\_\_\_\_ time was instituted to make better use of daylight.

III. Fill in the blank using the appropriate words given :

$$6 \times \frac{1}{2} = 3$$

He realized that his freedom (a) \_\_\_\_\_ (take) away from him. As a boy he was free (b) \_\_\_\_\_ (run) to the fields and swim in the stream. He was not troubled as long as he obeyed the laws and his parents. As a youth , again Mandela (c) \_\_\_\_\_ (realise) that his freedom (d) \_\_\_\_\_

(take) away from him. With the advancement of age and experience, he (e) \_\_\_\_\_ (feel) that not only his freedom but also the freedom of everyone was curtailed. So he (f) \_\_\_\_\_ (decide) to join the African National Congress to have freedom for all.

- (a) (i) took (ii) have taken
- (iii) had been taken (iv) were taking
- (b) (i) was running (ii) is run
- (iii) to run (iv) will be running
- (c) (i) realized (ii) was realized
- (iii) realize (iv) to be realised
- (d) (i) had been taken (ii) took
- (iii) takes (iv) was taking
- (e) (i) feels (ii) feeling (iii) felt (iv) is feeling
- (f) (i) decides (ii) decided
- (iii) was deciding (iv) deciding

IV. Write a story in 100-150 words with the following beginning and

give a suitable title to it.

$$5 \times 1 = 5$$

“ The moment Vikram stepped down from the train he was greeted at the platform by the people of his small town. They had gathered there with garlands and a band.....

V. Explain with reference to the context :

$$5 \times 1 = 5$$

“ Our entire class is quaking in its boots. The reason, of course,

is the forthcoming meeting in which the teachers decide who'll move up to the next form and who'll be kept back.

Half

the class is making bet..... but teachers are the most unpredictable creatures on earth.

- 1) Why is the entire class quaking in boots?
- 2) Why is half the class making bets?
- 3) What did she feel about teachers?

- 4) What do you mean by 'quaking in boots'?
- 5) Give a word from the passage which means "approaching".

VI. Answer the following in short :

5×2=10

1. What was the content of Mr Petronski's letter
2. What made Amanda sulk and moody?
3. Why did the poet not console the boy in "The Ball Poem"?
4. Why did not the pilot think of going back to Paris?
5. How did Griffin escape from the London store?

VII. Answer in about 150-200 words: ( Any one )

5marks

1. Give a brief character-sketch of Anne Frank based on the lesson  
" From the Diary of Anne Frank".
2. What is the central idea in the poem "Fire and Ice"

VIII. Answer in detail (150-200 words) (Any one )

5marks

1. Give the character sketch of Hari Singh.
2. Explain briefly how Ausable killed Max without bloodshed.

27.08.19 EVERWIN VIDHYASHRAM  
STD:X(FN) CRP – I Marks:50  
(MAJ) Mathematics – Part I Time : 1hr45mins

I. Answer the following :  $11 \times 11 = 11$

1. The volume of a frustum of a cone of height  $h$  and ends-radii  $r_1$  and  $r_2$  is
2. 37<sup>th</sup> term of the Ap:  $\sqrt{x}$  ,  $3\sqrt{x}$  ,  $5\sqrt{x}$  .....
3. What is the condition the A , B , C are the successive points of a line ?
4. If a pair of linear equation is consistent then the corresponding lines will be \_\_\_\_
5. The coordinates of the origin are \_\_\_\_\_
6. What is the common difference of the Ap :  $a-b$  ,  $a$  ,  $a+b$ , ...?
7. The coordinates of the centroid of the triangle with vertices  $(0,0)$  ,  $(3a , 0)$  and  $(0,3b)$
8. The probability of success is 0.5% ,then probability of failure is \_\_\_\_
9. Two coins are tossed simultaneously. The probability of getting at most one tail is \_\_\_\_\_.
10. The total surface area of a solid hemisphere is \_\_\_\_\_
11. Curved surface area of the frustum \_\_\_\_\_

II. Answer the following:  $4 \times 2 = 8$

12. Savita and Hamida are friends what is the probability that both will have :  
i) Different birthdays ii) The same birthday (Ignoring a leap year)
13. Find the sum of the first 22 terms of the Ap : 8 , 3 , -2.....
14. Find the coordinates of the point which divides the line segment joining the points  $(1,3)$   $(2,7)$  in the ratio 3:4
15. In a two-digit number the sum of the digits is 9. If the digits are reversed , the number is increased by 9. Find the number

III. Solve  $5 \times 3 = 15$

16. Solve for  $x$  and  $y$

$$\frac{4}{x} + 5y = 7 , \frac{3}{x} + 4y = 5$$

17. If the  $P^{\text{th}}$  term of an Ap is  $q$  and the  $q^{\text{th}}$  term is  $p$  , then prove that its  $n^{\text{th}}$  term is  $(p+q-n)$
18. If the vertices of a triangle are  $(1,-3)$  ,  $(4,K)$  and  $(-9,7)$  and its area is 15sq.units , find the value of  $K$
19. The material of a cone is converted into the shape of a cylinder of equal radius. If the height of the cylinder is 5cm , Find the height of the cone.
20. A card is drawn at random from a well shuffled deck of playing cards. Find the probability that the card a drawn is  
i) a king or jack      ii) a non-ace      iii) neither a king nor a queen

IV. Solve  $4 \times 4 = 16$

21. A bucket made up of a metal sheet is in the form of a frustum of a cone of height 16cm with radii of its lower and upper ends as 8cm and 20cm respectively. Find the cost of the bucket if the cost of metal sheet used is ₹ 15 per  $100\text{m}^2$  (use  $\pi = 3.14$  )
22. Find the number of terms of the AP 54,51,45.... So that their Sum is 513.
23. The ratio of incomes of two persons is 11:7 and the ratio of their expenditures is 9:5 . If each of them manages to save ₹ 400 per month , find their monthly incomes.
24. A solid right circular cylinder has a total surface area  $462\text{sq.cm}$ . If its curved surface area is one-third of the total surface area. Find the volume of their cylinder (Use  $\pi = \frac{22}{7}$  )

27.08.19 EVERWIN VIDHYASHRAM  
 STD: X (AN) CRP – I Marks:50  
 (MAJ) Mathematics – Part II Time: 1hr45mins

I. Answer the following :

$$11 \times 11 = 11$$

- If  $A+B = 90^\circ$  ,  $\cot B = \frac{3}{4}$  then find  $\tan A$  ?
- $\sqrt{\frac{1+\sin \theta}{1-\sin \theta}} = \underline{\hspace{2cm}}$
- If  $\tan \theta = \cot \theta$  , then find the value of  $\sec \theta$
- The marks of four students in statistics are 53 , 75 , 42 and 70 respectively. Find the arithmetic mean of their marks
- Write empirical formula of mean , median and mode
- The positive average is \_\_\_\_\_
- Write the standard form of a quadratic equation
- Find the roots of the quadratic equation  $3(x+3)^2 = 48$
- Find Discriminant of the quadratic equation  $2x^2+x-8=0$
- $\Delta PQR$  is formed by joining the mid points of the sides of  $\Delta ABC$ . Then find the ratio of the areas of  $\Delta PQR$  and  $\Delta ABC$
- If triangle ABC is similar to triangle DEF such that  $2AB = DE$  and  $BC = 8\text{cm}$  then find EF?

II. Answer the following:

$$4 \times 2 = 8$$

- The perimeters of two similar triangles ABC and PQR are 60cm and 36cm respectively. If  $PQ = 9\text{cm}$  find AB
  - If  $\sin \theta = \frac{1}{2}$  , then find the value of  $(\tan \theta + \cot \theta)^2$
  - If mean of a distribution is 30 , and the median is 35 , then find the mode of the distribution
  - Find the roots of the quadratic equation  $x^2-5x+6 = 0$
- III. Answer the following:  $5 \times 3 = 15$
- Find two numbers whose sum is 27 , and product is 182.
  - The monthly income of 100 families are given below :

Income (in Rs )	No. of families
0-5000	8
5000-10000	26
10000-15000	41
15000-20000	16
20000-25000	3

Calculate the modal income

- The following distribution shows the daily pocket allowance of children of a locality. The mean pocket allowance is ₹ 18. Find the missing frequency f.

Daily pocket allowance	No. of children
11-13	7
13-15	6
15-17	9
17-19	13
19-21	f
21-23	5
23-25	4

- In  $\Delta PQR$  , right angled at Q ,  $PR+QR = 25\text{cm}$  and  $PQ = 5\text{cm}$ . Determine the values of  $\sin P$ ,  $\cos P$  and  $\tan P$ .
  - ABC is an isosceles triangle with  $AB = AC$  and D is a point on AC. Such that  $BC^2 = AC \times CD$ . Prove that  $BD = BC$ .
- IV. Solve  $4 \times 4 = 16$
- State and prove areas of similar triangles
  - $(\sin A + \operatorname{cosec} A)^2 + (\cos A + \sec A)^2 = 7 + \tan^2 A + \cot A$ .
  - The angle of elevation of an aeroplane from a point on the ground is  $60^\circ$ . After 15 seconds flight , the elevation changes to  $30^\circ$ . If the aeroplane is flying at a height of  $1500\sqrt{3}\text{m}$  , find the speed of the plane.
  - Draw "less than ogive and more than ogive "for the following distribution and hence find its median.

Class	Frequency
20-30	10
30-40	8
40-50	12
50-60	24
60-70	6
70-80	25
80-90	16

I. Choose the right option in the following statements:

3 × 1 = 3

1. Assertion [A]: Soaps are not suitable for washing purpose when water is hard.

Reason [R]: Soaps have relatively weak cleansing action

- (a) Both [A] and [R] are true and [R] is the correct explanation of [A].  
(b) Both [A] and [R] are true but [R] is not the correct explanation of [A].  
(c) [A] is true but [R] is false  
(d) Both [A] and [R] are false  
(e) [A] is false but [R] is true

2. Assertion [A]: A person standing in front of a mirror finds his image larger than himself.

Reason [R]: The person standing in front of a mirror is convex in nature

(a) [A] is correct [R] is wrong

- (a) [A] & [R] are correct  
(b) [A] is wrong [R] is correct  
(c) [A] & [R] are wrong

3. Assertion [A]: Vasectomy is a surgical method of birth control Reason [R] : In vasectomy , small portion of oviduct is cut or tied properly

- (a) Both A and R are true and R is the correct explanation of A  
(b) Both A and R are true but R is not the correct explanation of A  
(c) A is true but R is false  
(d) A is false but R is true  
(e) Both A and R are false

II. Fill in the blanks:

7 × 1 = 7

- Precipitation reactions produce \_\_\_\_\_ salts.
- Hydrogenation of vegetable oil is \_\_\_\_\_ reaction.
- In order to calculate the power of a lens , we need its focal length in \_\_\_\_\_.

4. When light ray travels from denser medium to rarer medium bends \_\_\_\_\_ normal

5. Pollen grains are transferred from stamens to \_\_\_\_\_ of carpels.

6. The process of asexual reproduction in amoeba is \_\_\_\_\_.

7. The theory of Natural selection was proposed by \_\_\_\_\_.

III. Answer in one word :

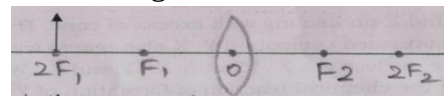
7 × 1 = 7

1. If copper metal is heated over a flame it develops a coating. What is the colour and composition of coating?

What is scum ?

2. The speed of light in a transparent medium is 0.6 times that of its speed in vacuum. What is the refractive index of the medium ?

3. Complete the diagram



4. Why is the progeny always tall when a tall pea plant is crossed with a short pea plant?

5. Mendel observed a contrasting trait in relation to position of flower. Mention the trait.

6. Give an advantage of vegetative propagation.

IV. Answer in brief:

6 × 3 = 18

- Decomposition reactions require energy either in the form of heat, light or electricity for breaking down the reactants. Write an equation each for decomposition reactions where energy is supplied in the form of heat , light and electricity.
- Two carbon compounds 'X' and 'Y' have the molecular formula  $C_3H_6$  and  $C_4H_{10}$  respectively. Which one of the two is most likely to show addition reaction? Justify your answer , also give chemical equation to explain the process of addition in this case
- An object of height 6cm is placed perpendicular to the principal axis of a concave lens of focal length 5cm. Use lens formula to determine the positions, size and nature of the image if the distance of the object from the lens is 10cm.
- A student wants to obtain an erect image of an object using a concave mirror of 12cm focal length. What should be the range of distance of the object from the mirror ? State the nature and size



of the image he is likely to observe . Draw a ray diagram to justify your answer.

5. a) List any two methods of asexual reproduction.  
b) Explain how spirogyra reproduces.
6. a) Why traits such as intelligence and knowledge cannot be passed on to the next generation?  
b) How are fossil formed ? Describe, in brief, two methods of determining the age of fossils.

V. Answer in detail:  $3 \times 5 = 15$

1. a) Differentiate between Double- Displacement reaction and precipitation reaction with examples  
b) A compound X on heating with excess of conc.  $H_2SO_4$  at 443K gives an unsaturated compound Y. X also reacts with sodium metal to evolve a colourless gas Z . Identify X , Y and Z . Write the equations of the chemical reaction of formation of Y and also write the role of Conc.  $H_2SO_4$  in the reaction.
2. A student wants to project the image of a candle flame on a screen 80cm in front of a mirror by keeping the candle flame at a distance of 20cm from its pole
  - a) Which type of mirror should the student use ?
  - b) Find the magnification of the image
  - c) Find the distance between the object and its image
  - d) Draw a ray diagram to show the image formation in this case and mark the distance between the object and its image
3. a) Differentiate between Fragmentation and regeneration  
b) Draw a labelled diagram of
  - i. Budding in Hydra
  - ii. Regeneration in planaria

27.08.19 EVERWIN VIDHYASHRAM  
 STD:X (AN) CRP - I  
 Marks:50  
 (DAZ,CUT,BLIS) Science - Part II Time:  
 1hr45mins

I. Choose the right option from the following statements:

3 × 1 = 3

1. Assertion [A]: Carbon has ability to form long carbon chains.  
 Reason [R]: Carbon has unique property of ability to form long

straight and branched chains called catenation.

(a) Both [A] and [R] are true and [R] is the correct explanation of [A].

(b) Both [A] and [R] are true but [R] is not the correct explanation of [A].

(c) [A] is true but [R] is false

(d) [A] is false but [R] is true

(e) Both [A] and [R] are false

2. Assertion [A] : When a battery is short circuited , the terminal voltage is zero

Reason [R] : In short circuit , the current is zero

(a) [A] is true , [R] is false

(b) [A] & [R] are wrong

(c) [A] is false [R] is true

(d) [A] & [R] are true

3. Assertion [A] : Excretory unit of kidney is nephrons

Reason [R] : It has no role in secretion of urine

(a) Both A and R are true and R is the correct explanation of A

(b) Both A and R are true but R is not the correct explanation of A

(c) A is true but R is false

(d) A is false but R is true

(e) Both A and R are false

II. Fill in the blanks:

7 × 1 = 7

1. Anhydrous sodium carbonate is commonly known as \_\_\_\_\_

2. The first member of alkyne homologous series is \_\_\_\_\_

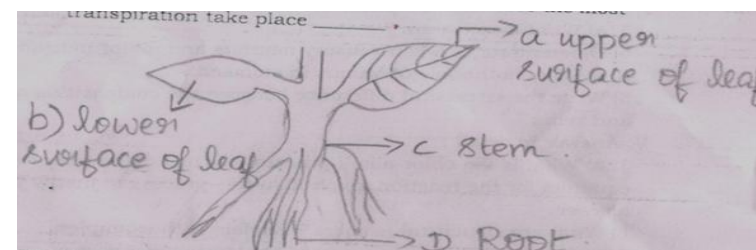
3. \_\_\_\_\_ is a device that helps to maintain a potential difference across a conductor

4. \_\_\_\_\_ generators are used in automobile batteries

5. The breakdown of pyruvate to give carbon-di-oxide , in water and energy takes place in \_\_\_\_\_.

6. Receptors are structures which are able to detect \_\_\_\_\_.

7. The diagram shows parts of a plant where does the most transpiration take place \_\_\_\_\_.



III. Answer in one word:

7 × 1 = 7

1. How chloride of lime differs from calcium chloride?

2. Write the name and structure of an alcohol with three carbon atoms in its molecule?

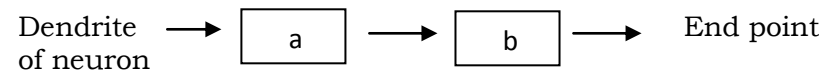
3. What is meant by saying that the potential difference between two points is IV?

4. What is the energy transformation in an electric motor?

5. Mention two ways in which food gets oxidized in organisms

6. Define the term 'translocation'?

7. Write (a) and (b) in the given flow chart of neuron through which information travels as an electrical impulse



IV. Answer in brief:

6 × 3 =

18

1. What is the chemical name of bleaching powder ? Write the chemical equation for the preparation of bleaching powder . State two uses of it.

2. What are covalent compounds? List the physical properties of covalent compounds

3. What are the advantages of connecting electrical devices in parallel with the battery instead of connecting them in series ?

4. a) State Fleming's left hand rule  
b) Write the principle of working of an electric motor  
c) Explain the function of the following  
(i) Brushes (ii) Split rings
5. a) What is reflex arc ?  
b) Differentiate between sensory neurons and motor neurons
6. a) What is the role of Mucus in stomach ?  
b) Write the structural difference between the composition of artery and veins

V. Answer in detail:  $3 \times 5 = 15$

1. a) What is chlor-alkali process? Write a balanced chemical equation for the reaction involved in this process to justify your answer  
b) What are structural isomers? Explain with examples
2. a) Calculate the resistance of 1Km long copper wire of radius 1mm . Resistivity of the copper is  $1.72 \times 10^{-8} \Omega \text{ m}$   
b) Draw a schematic diagram of a circuit consisting of a battery of 4 cells of 2v each connected to a key, an ammeter and two resistors of  $2 \Omega$  and  $3 \Omega$  respectively in series and a voltmeter to measure potential difference across  $3 \Omega$
3. a) Draw and label a neuron  
b) Explain how it carries message

