Class- X

Name-

Roll No.-

Date- /5/2022

Subject- Biology

chapter - 2

1. What is the functional unit of nervous system?
2. What is synapse?
3. What is the correct sequence of the components of a reflex arc?
4. What is an axon?
5. How many cranial nerves and spinal nerves are present in human being?
6. Name the part of neuron (a) where information is acquired. (b) through which information travels as an electric impulse.
7. Name two tissues that provide control and coordination in multicellular animals.
8. Name one gustatory receptor and one olfactory receptor present in human beings.
9. Why are electrochemical signals not an efficient means of communication in plants?
10. What is reflex action?
11- Write the correct path way of reflex action.
12- What are voluntary and involuntary actions. Give two examples of each.
13- How do animals muscles move?

14- How is reflex arc formed?

15- Define nerve impulse.

16- Which structure in a neuron helps to conduct a nerve impulse (a) towards the. cell body (b) away from the cell body.

17- Write three examples of reflex actions.

18- Which signals will get disrupted in case of a spinal cord injury?

Geography Class-X

Answer in long :--

1. List in the technological and institutional reforms in agriculture.

2. What is the contribution of Agriculture to the National Economy ?

3. Write all geographical conditions required for the growth of tea, coffee, wheat and sugarcane.

4. Differentiate for Zaid/Kharif and Ravi crops with examples/area.

5. Write a note on 'Slash and Buen Agriculture'.

6. Why is there enormous pressure on agricultural land in land intensive subsistence farming ?

7. Explain rubber cultivation in India under the following heads:-

(a) Importance. (b) Geo- conditions. (c) Producing.

8. Why is agriculture called the mainstem of Indian economy?

9. Define 'plantation agriculture'. Explain any four conditions of plantation agriculture.

10. What is the importanc of pluses in our country? Whybare pulses grown as a rotation crops?

11. Workings on map:--

(a) Any two Jowar producing states.

(b) Any two maize producing states.

(c) Any two bajra producing states.

(d) Any two tea producing states.

(e) Any two coffee producing states.

(f) Any two rice producing states.

(g) Any two wheat producing states.

Roll No._____   Name_____

Date_____

SUMMER VACATION HOMEWORK

1. Write a program to input a string and display the count of vowels and consonants in the string.

2. Write a program to input a string and display the string in the reverse order.

3. Write a python code to take the input of a number n and then find and display its factorial (n!). For example, 5! = 5*4*3*2*1 i.e, 120.

4. Write a python code to input the lengths of 3 sides of triangle and display whether a triangle can be formed with input or not. If a triangle can be formed then display whether the triangle will be scalen, isosceles or equilateral.

5. write a program to input 2 numbers and display the LCM of numbers.

6. Write a program to input a number and display whether it is palindrome or not.

7. Write a program to input a number and display whether it is a prime number or not.

8. Write a program to input two number and swap both the numbers without using the third number.

9. Using Numpy Package:

- Create a 4*2 array with Random integer.
- Create 3*3 array with all zeros.

10. Using Matplotlib and the given data, plot a bar chart.

11. Using Matplotlib and the given data plot a line chart:

12. Using Matplotlib and the given data plot a pie chart:
Data = [45, 23, 41, 78, 65]

13. Using Matplotlib and the given data plot a scatter chart:
Height = [4.5, 5.2, 4.1, 3.5, 5]
Weight = [34, 41, 45, 56, 39]

14. Using Numpy package. Create an array of 5marks and display the average of all marks.

15. Create a list of distance travelled by a car in a week and calculate using statistics module:
(i) Mean   (ii) Median   (iii) Mode

DELHI PUBLIC SCHOOL FIROZABAD

(UNDER THE AEGIS OF DELHI PUBLIC SCHOOL SOCIETY EAST OF KAILASH NEW DELHI)

(A SENIOR SECONDARY SCHOOL)

AFFILIATED TO CBSE, AFFILIATION NO. 2133064 SCHOOL NO: 61225

HOLIDAY HOMEWORK SESSION – 2022- 23

Subject: MATHS

Class: 10

Name _____

PREVIOUS YEAR QUESTIONS

1. Write the smallest number which is divisible by both 306 and 657. (22338) (CBSE 2019)
2. Prove that ($5 + 3\sqrt{2}$) is an irrational number . (CBSE 2018)
3. Express 429 as the product of prime factors . (CBSE 2019)
4. If HCF (336, 54) = 6 , find LCM (336 , 54). (3024) (CBSE 2019)
5. What is the HCF of smallest composite number and the smallest prime number?
   (CBSE 2018)
6. Find the zeros of polynomial and verify the relation between zeros and coefficients
   $7y^2 – 11/3\ y – 2/3$. (CBSE 2019)
7. Find a quadratic polynomial whose sum of zeros is -5 and their product is 6..(CBSE 2020)
8. For what value of k, -3 is a zero of the polynomial $x^2 + 11\ x + k$? (CBSE 2010)
9. Solve the equations : 21 x + 47y = 110 , 47 x + 21y = 162.
10. Find c , if the system of equations have infinite many solutions :
    cx + 3y + 3- c = 0 , 12 x + cy – c =0 . (CBSE 2019)
11. Find the value of k for equations have no solution kx + 3y = k- 3 , 12 x + ky = k.
12. Solve for x : $\frac{x+3}{x-2}$ - $\frac{1-x}{x}$ = 17/4 .   (CBSE 2017)
13. Solve for x : $3\ (\frac{7x+1}{5x-3}) – 4\ (\frac{5x-3}{7x+1}) = 11$
14. Write the discriminant of the quadratic equation : $(x + 5)^2 = 2\ (5x – 3)$
15. Find p for equation $(p + 1)\ x^2 – 6\ (p + 1)\ x + 3\ (p +9) = 0$ has equal roots. Hence find the roots .
16. A bag contains cards with numbers 1 to 49. A card is drawn from the bag at random. Find the probability that the number on the drawn card is
    a. An odd number
    b. A multiple of 5
    c. A perfect square
    d. An even prime number .
17. In a throw of a pair of dice , find the probability of getting :
    a. A doublet
    b. A sum greater than 9.
18. In triangle ABC , right angled at A , if AB = 5 , AC = 12 and BC = 13, find sin B , cosC , tan B .
19. If sin B = ½ , show that $3 \cos B – 4 \cos ^3 B = 0$.
20. If 5 tan x = 4 , show that $\frac{5 \sin x - 3 \cos x}{5 \sin x + 2 \cos x}$ = 1/6 .
21. If 3 cos x – 4 sin x = 2 cos x + sin x , find tan x.
22. If tan (a + b) = 1 , tan (a – b) = 1/$\sqrt{3}$, find a and b.
23. Find the value of x : tan x = sin 45⁰ cos 45⁰ + sin 30⁰.
24. Evaluate : (cos 0⁰ + sin 45⁰ + sin 30⁰)(sin 90⁰ – cos 45⁰ + cos 60⁰)
25. Evaluate : cos 60⁰ cos 45⁰ – sin 60⁰ sin 45⁰ .

WORKSHEET -1 CHEMISTRY

1. Arrange the following in the correct increasing order of acidic strength - hydrochloric acid, water, acetic acid.
2. Human body works at what PH range.
3. Two solutions A and B have Ph values of 5 and 8,which will be more basic and why?
4. Why does tooth decay start when the ph of mouth is lower than 5.5?
5. Write any two natural indicators.
6. Write two differences between acids and bases based on their chemical properties.
7. Which one of these has a higher concentration of hydronium ion? 1 M HCl or 1 M CH3COOH.
8. A stain of curry on a white cloth becomes reddish brown when soap is scrubbed on it. (i) which indicator can be used, write it's type also. (ii) why did stain becomes reddish brown.? (iii) What happens when the cloth is washed with plenty of water?
9. Name the acids present in the following - Tomato, apple, vinegar, tamarind,capsicum,curd,bee sting.
10. What will be the action of the following on litmus paper? Dry HCl gas, moistened NH3gas, lemon juice, carbonated soft drinks, soap solution.
11. A student prepared solutions of an acid and base in two separate beakers.She forgot to label the solution and litmus paper is not available in the laboratory. Since both the solutions are colourless, how will she distinguish between the two?
12. X is an indicator added to a dilute solution of sodium hydroxide. The colour of the solution turns pink. When a substance Y is added the solution becomes colourless. Y also combines with sodium hydroxide to form salt that we use in food everyday life. (I) Identify X and Y. (ii) Give the reaction of Y with sodium hydroxide. (iii) Name the type of reaction. (iv) What is the PH of Y?
13. A solution turns blue litmus red, what is it's PH range?
14. Why do acids not show acidic behavior in the absence of water?

PHYSICS

1. State one function of the human eye. (AI 2020)
2. Define the term power of accommodation. Write the modification in the curvature of the eye lens which enables us to see the nearby objects clearly? (Delhi 2019)
3. Trace the sequence of the events which occur when a bright light is focused on your eyes. (Delhi 2019)
4. State the function of each of the following parts of the human eye a. Cornea b. Iris c. Pupil (Delhi 2013)
5. List two causes of hypermetropia. (AI 2020)
6. A person is suffering from both myopia and hypermetropia. a. What is this condition called? b. What kind of lenses can correct this defect? c. A person needs a lens power of +3 D for correcting his near vision and -3 D for correcting his distant vison. Calculate the focal length of the lenses required to correct these defects. (AI 2020)
7. A student cannot see a chart hanging on a wall placed at a distance of 3 m from him. Name the defect of vision he is suffering from. How can it be corrected? Draw ray diagrams for the defects of vision and also for its correction. (Delhi 2012)
8. An old man cannot see objects closer than 1 m from the eye clearly. Name the defect of vision he is suffering from. How can it be corrected? Draw a ray diagram for the defect of vision and also for its correction. (AI 2012) *

HOLIDAY ASSIGNMENT AND PROJECT WORK

ENGLISH LITERATURE: Project Term 1

1) Character/thematic analysis.
2) Appreciation of literary qualities.
3) Identifying with a character. Putting oneself in the place of the character in a given circumstances and explaining one's actions.
4) Imagine alternative outcomes or endings in a literary piece and the effect on all concerned.

GENERAL INSTRUCTIONS:

1) Attempt all 4 topics.
2) All projects must be handwritten.
3) All project work must be submitted in file page with proper spiral binding.
4) The cover page should show the school's name, Logo, Student's Name, Class, Section and Subject. The cover page should be typed.
5) The second page should be about acknowledgement
6) The third page should be about the content headings with their page numbers.
7) Each topic should be written on a new page and arranged as
8) Use pictures and captions wherever possible.
9) Marks will be deducted for spelling and grammatical errors.
10) Word limit is 1500.
11) Last page should be about bibliography (references/citation).

Topic 1. Read 'Long Walk to Freedom' and write the book review. (in not more than 250 words)

Topic 2. Read about Robert Frost's Life and write an article on him. (In not more than 250 words)

Topis 3 Which of the personalities you seek after Robert Frost or Nelson Mandela? And why? Answer in 100 words

Topic 4. Write a poem or an article 'I wish I could save the world.'

Holiday Assignment: (must be done in CW note book)

Read 'The Proposal'

Read all the stories from 'Foot Prints'

Attempt these questions:

1. A part of the extract has been paraphrased. Choose the option that includesthe most appropriate solution to the blanks in the given paraphrase of the extract.

The speaker's belief about freedom, since childhood proved false. It wasnot until the speakergrew up to be a young man when it i) _____ on him that he was ii) _____offreedom. Then he began iii) _____ it.

i) desired	ii) dawned	iii) depriving
i) dawned	ii) deprived	iii) desiring
i) dawned	ii) arrived	iii) desiring
i) arrived	ii) deprived	iii) dawned

2. Based on your reading of the lesson, what can you infer about Mandela as father and as a leader?
3. Mandela feels that courage is triumph over fear. How would you definecourage in this context?
4. Mandela says that his country's greatest wealth is its people and not thepurest diamonds. Justify his statement.
5. If you were in Mandela's position, would you have given preference to yourfamily or your country? Wh

Topic- अपठित बोध

Roll No._____ Name _____class_____10th_____ Date_____

अपठित गद्यांश

1 नीचे दिए गए गद्यांश को पढ़कर प्रश्नों के उत्तर दीजिए –

विद्यार्थी जीवन को मानव जीवन की रीढ़ की हड्डी कहें, तो कोई अतिशयोक्ति नहीं होगी। विद्यार्थी काल में बालक में जो संस्कार पड़ जाते हैं, जीवन भर वही संस्कार अमिट रहते हैं। इसीलिए यही काल आधारशिला कहा गया है। यदि यह नींव दृढ़ बन जाती है तो जीवन सुदृढ़ और सुखी बन जाता है। यदि इस काल में बालक कष्ट सहन कर लेता है तो उसका स्वास्थ्य सुंदर बनता है। यदि मन लगाकर अध्ययन कर लेता है तो उसे ज्ञान मिलता है, उसका मानसिक विकास होता है। जिस वृक्ष को प्रारंभ से सुंदर सिंचन और खाद मिल जाती है, वह पुष्पित एवं पल्लवित होकर संसार को सौरभ देने लगता है। इसी प्रकार विद्यार्थी काल में जो बालक श्रम, अनुशासन, समय एवं नियमन के साँचे में ढल जाता है, वह आदर्श विद्यार्थी बनकर सभ्य नागरिक बन जाता है। सभ्य नागरिक के लिए जिन-जिन गुणों की आवश्यकता है, उन गुणों के लिए विद्यार्थी काल ही तो सुंदर पाठशाला है। यहाँ पर अपने साथियों के बीच रहकर वे सभी गुण आ जाने आवश्यक हैं, जिनकी कि विद्यार्थी को अपने जीवन में आवश्यकता होती है।

प्रश्न: 1.
जीवन की आधारशिला किस काल को कहा जाता है?
उत्तर:_____
_____
_____

प्रश्न: 2.
गद्यांश का उपयुक्त शीर्षक लिखिए।
उत्तर:_____
_____प्रश्न: 3.
मानव जीवन के लिए विद्यार्थी जीवन की महत्ता स्पष्ट कीजिए।
उत्तर:_____
_____
_____

प्रश्न: 4.
छोटे वृक्ष के पोषण का उल्लेख किस संदर्भ में किया गया है और क्यों?
उत्तर:_____
_____
_____

प्रश्न: 5.
विद्यार्थी जीवन की तुलना पाठशाला से क्यों की गई है?
उत्तर:_____
_____
_____

2. हमारे देश के त्योहार चाहे धार्मिक दृष्टि से मनाए जा रहे हैं, या नए वर्ष के आगमन के रूप में; फसल की कटाई एवं खलिहानों के भरने की खुशी में हो या महापुरुषों की याद में; सभी अपनी विशेषताओं एवं क्षेत्रीय प्रभाव से युक्त होने के साथ ही देश की राष्ट्रीय एवं सांस्कृतिक एकता और अखंडता को मज़बूती प्रदान करते हैं। ये त्योहार जहाँ जनमानस में उल्लास, उमंग एवं खुशहाली भर देते हैं, वहीं हमारे अंदर देश-भक्ति एवं गौरव की भावना के साथ-साथ, विश्व-बंधुत्व एवं समन्वय की भावना भी बढ़ाते हैं। इनके द्वारा महापुरुषों के उपदेश हमें बार-बार इस बात की याद दिलाते हैं कि सद्विचार एवं सद्भावना द्वारा ही हम प्रगति

की ओर बढ़ सकते हैं। इन त्योहारों के माध्यम से हमें यह भी शिक्षा मिलती है कि वास्तव में धर्मों का मूल लक्ष्य एक है, केवल उस लक्ष्य तक पहुँचने के तरीके अलग-अलग हैं।

प्रश्न

प्रश्न: 1.
उपर्युक्त गद्यांश का उपयुक्त शीर्षक लिखिए।
उत्तर:_____
_____

प्रश्न: 2.
त्योहारों से मनुष्य को क्या शिक्षा मिलती है ?
उत्तर:_____
_____
_____

प्रश्न: 3.
हमारे देश में त्योहार मनाने के मुख्य आधार क्या हैं ?
उत्तर:_____
_____
_____

प्रश्न: 4.
त्योहारों का हमारे जीवन में क्या महत्त्व है ?
उत्तर:_____
_____
_____

प्रश्न: 5.
त्योहारों और महापुरुषों के उपदेश में समानता गद्यांश के आधार पर स्पष्ट कीजिए।
उत्तर:_____
_____
_____