VIVEKANAND INTERNATIONAL PUBLIC SCHOOL
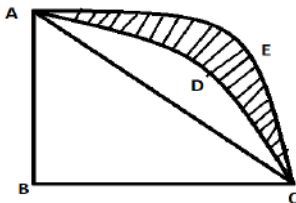## (HOLIDAYS HOMEWORK)
session 2023-24

CLASS:- 10TH (A,B,C)

Subject:- Biology

1. Do all previous year questions [CBSE] of Chapter 1,2,3,4,in a separate copy.
2. Name the basic unit present in the kidney.
3. Oxygen liberated during photosynthesis comes from?
4. List three points of distinction between aerobic and anaerobic respiration.
5. Give reasons.
   (a) The glottis is guarded by epiglottis.
   (b) The lung alveoli are covered with blood capillaries.
   (c) the wall of trachea is supported by cartilage rings.
6. Why do veins have thin walls as compared to arteries?
7. What is the significance of reproduction?
8. Name the hormones secreted by testes and overies.
9. Explain double fertilization in plants.
10. What could be the reasons for adopting contraceptive methods?
11. What is DNA copying? State its importance.
12. Where does fertilization take place in human beings?
13. Write two points of difference between asexual and sexual type of reproduction.
14. How does the amount of DNA remain constant though each new generation which is a combination of DNA copies of two individuals?
15. What DNA?
16. Why mendal choose pea plant for his experiment?
17. Define natural selection?
18. In human beings the statistical probability of getting either male or female child is 50:50. Give a suitable explanation.
19. We cannot pass on the our progeny the experiences and qualifications earned during our lifetime. "Justify the statement giving reason and examples.
20. What genetics?
21. Why do aquatic animals breathe faster than the terrestrial animals.
22. What is water harvesting? What are its benefits?
23. Describe the central nervous system in human beings.
24. Write difference between Endocrine and Exocrine glands.
25. Why are endocrine glands called ductless glands?
26. Drow the structure of neuron and explain its function.

Subject:- Maths

1. Do all previous year questions [CBSE] of Chapter 1,2,3,4 in a separate copy.
2. Show that $\frac{3+\sqrt{7}}{5}$ is an irrational number, given $\sqrt{7}$ is irrational.
3. What is the relation between the zero's and coefficient of a quadratic polynomial, and cubic polynomial also given an example.
4. $x - y - 5 = 0,\ 3x + 5y - 15 = 0$
   Solve the above system of equation graphically, by substitution method and by elimination method.

5. $\frac{bx}{a} + \frac{ay}{b} = a^2 + b^2$
    $x + y = 2ab$
    Solve it.
6. The sum of the area of two squares is 640 m^2. If the difference of their perimeter is 64 m find the side of squares.
7. Using quadrate formula, solve for x.
    $p^2x^2 + (p^2 - q^2)x - q^2 = 0$
8. What is the relations his between discriminant and nature of root of quadratic equation. Explain by giving examples of each case.
9. The 17th term of AP is 5 more than twice its 8th term. If the 11th term of the AP is 43, find it's nth term.
10. Sum of first 14 terms of an AP is 1505 and its first term is 10. Find it's 25th term.
11. If the midpoint of the line joining the points $A(3,4)$ and $B(k,6)$ is $P(x,y)$ and $x + y - 10 = 0$ find the value g k.
12. Explain 'Thales theorem'
    Given → A $\triangle ABC$ in which DE||BC and DE Intereats AB and AC at D and E respectively to prove
    $\frac{AD}{DB} = \frac{AE}{EC}$
13. Prove that the ratio of the areas of two similar triangles is equal to the ratio of the squares of their corresponding sides.
14. Prove that the tangent at any point of a circle is perpendicular to the radius through the point of contact.
15. Prove that the length of tangents drawn from an external point to a circle are equal.
16. For any a cute angle Q, prove that $sin^2\theta + cos^2\theta = 1$
17. The angles of elevation and depression of the top and bottom of a tower from the top of a building 60 m high are 30º and 60º respectively find the difference between heights of the building and the tower and also find the distance between them.
18. In a rectangulal park of dimensions 50 m x 40 m a rectangular pond is constructed so that the area of grass strip of uniform width surrounding the pond would be 1184 m². Find the length and breadth of the pond.
19. In the given figure, ABCD is a quadrant of a circle of radius 28 cm and a semicircle AECA is drawn with AC as diameter. Find the area of the shaded region.

20. Find the probability that a leap year selected at random will contain 53 Sundays and 53 Mondays.

Subject:- PHYSICS

A. Answer the following questions.
1. Discuss the application of concave mirror and convex mirror.
2. A convex lenses focal length of 20 CM. At what distance from the lens should an object be placed so that image is formed at 40 cm on the other side of lens.
3. Define reflection of light & refraction of light.
Write their laws.
4. How do we see colours?
5. What is myopia and hypermetropia?
6. Explane refraction of light through a glass prism.
7. Write the heating effect of electric current.
8. How is a voltameter connected in the circuit to measure the potential difference between two points.
9. How many volts make 1 megavolt.

10. Define a magnet and a magnetic field.

11 what is Right Hand Thumb Rule.

12. What is electromagnetic induction?

13. What is AC and DC in electric circuit?

14. Name four appliances where electric motor is used as an important component.

15. What is greenhouse effect.

16. Define petroleum, LPG and CNG.

17. Write the advantage and disadvantage of hydroelectric power plant.

18. What is biogas ?
write its advantages.

19. What is solar cooker and solar cell.

20. A convex lens produces a real and inverted image 2.5 times magnified at a distance of 25 cm from the lens. calculate focal length of the length.

NUMERICALS.

1.A concave lens of focal length 15 CM forms and image of 10 cm from the lens.How far is the object placed from the lens ? Draw the ray diagram.(-30cm)

2. An object is placed at a distance of 10 cm from a convex mirror of focal length 15 CM. Find the position and nature of the image.(sns. V=6cm)

3. An object 5 cm in length is placed at a distance of 20 CM in front of a convex mirror of radius of curvature 30 cm .Find the position of the image its nature and size.(v=8.57 cm, size=2.1cm.)

4. An object of side 7 cm is placed at 27 CM in front of a concave mirror of focal length 18 cm .At what distance from the mirror should a screen be placed ,so that a sharp focused image can be obtained. Find the size and the nature of the image.(v= -54/5 cm, size=-2.8 cm.)

CHEMISTRY

A. Answer the following questions-

1. What is an Oxidation reaction? Give an example of Oxidation reaction. Is oxidation an exothermic or endothermic reaction?

2. What is the colour of ferrous sulphate crystal?
How does this colour change after heating?

3 name the gas which is usually produced when dilute sulphuric acid react with a metal.

4. What will happen if solid calcium oxide was taken in a container and water was added slowly to it.

5. What are anhydrous and hydrated salts? explain with a suitable example?

6. Which gas is produced when dilute hydrochloric acid is added to a reactivity metal?
Write the chemical reaction when iron react with dilute H_2SO_4.

7. Briefly explain to ways to prevent rusting of iron.

8. Define the term alloy. give advantages of making alloys.

9. Name two metals which are allowed with iron to make stainless steel.

10. What is electroplating?

11. Write the chemical name of the coating that forms on silver and copper articles.

12. Write the chemical formula of Methane, Ethane ,propane ,butane pentane ,hexane.

13. What is meant by the term functional group?

14. Define saturated hydrocarbons.

15. Write the difference between diamond and graphite.

(हिन्दी एवं हिन्दी व्याकरण)

ग्रीष्मावकाश गृहकार्य (कक्षा - 10वीं : अ, ब, स) '2023-24'

खण्ड - क (अपठित बोध)

1 निम्नलिखित गद्यांशों को ध्यान से पढकर सर्वाधिक उपयुक्त विकल्प का चयन कीजिएः- साहसी मनुष्य का जीवन ही सच्चा जीवन होता है। ऐसे जीवन की सबसे बड़ी पहचान यह है कि वह बिल्कुल निडर और साहसी होता है। किसी भी कार्य की सफलता के लिए ध्येय के प्रति उत्कृष्ट लगन, कार्य में अटूट श्रद्धा एवं अपनी शक्तियों में पर्याप्त विश्वास आवश्यक है। विश्वास, एकाग्रता, लगन, संतुलन, श्रद्धा आदि सभी साहस पर निर्भर है, क्योंकि मनुष्य का सबसे प्रथम गुण साहस है। साहस अन्य सभी गुणों का प्रतिनिधित्व करता है। यदि तन, मन तथा वाणी सशक्त हो तो उनकेद्वारा प्राप्त कार्यशक्ति के आगे भाग्य स्वयं नतमस्तक हो जाता है। साहसी की प्रतिभा के सामने शोक, भय आदि टिक नही पाते हैं। साहसी को संसार भी रास्ता देता है। मनुष्य में सभी गुण हो, वह विद्वान

हो, धनवान हो, शक्तिशाली हो पर यदि उसमें साहस न हो तो वह अपने सद्गुणों, अपनी योग्यताओं व अपनी शक्तियों का उपयोग नही कर सकता। साहस मनुष्य के व्यक्तित्व का नायक है।

साहस व्यक्ति को निर्भय बनाता है और जहाँ निर्भयता है वहाँ सफलता निश्चित है।

निर्भयता से ही आत्मविश्वास जागृत होता है। आत्मविश्वास के अभाव में हम उस प्रत्येक कार्य को करते हुए डरेंगे जो हमने पहले कभी नही किया और जो हमारे लिए बिल्कुल नया है अर्थात् जिनके संकल्प अधूरे होते हैं, जो संशयग्रस्त होते हैं वे कोई बड़ा काम नही कर पाते और यदि कुछ करते भी हैं तो उसमें असफल हो जाते हैं।

(1) किसी भी कार्य की सफलता के लिए आवश्यक है

कथन पढ़कर सही विकल्प का चयन कीजिए:

कथन:- 1. ध्येय के प्रति उत्कट होना   2. कार्य में अटूट श्रद्धा

      3. अपनी शक्तियों में पर्याप्त विश्वास   4. कार्य के प्रति असंतुलन की प्रवृत्ति

विकल्प: (क) केवल 1 सही है   (ख) 1, 2 और 3 सही है

      (ग) 1 और 2 सही है   (घ) 3 और 4 सही है

(2) मनुष्य का प्रथम गुण क्या बताया गया है ?

(क) विश्वास   (ख) साहस   (ग) भाग्य   (घ) इनमें से कोई नही

(3) भाग्य स्वयं किसके आगे नतमस्तक हो जाता है ?

(क) तन, मन व वाणी से प्राप्त होने वाली कार्य शक्ति के आगे

(ख) श्रद्धा के आगे

(ग) मनुष्य के उद्यम के आगे

(घ) इनमें से कोई नही

(4) प्रस्तुत गद्यांश के माध्यम से लेखक क्या कहना चाहता है ?

(क) मनुष्य में सद्गुणों का विकास होना चाहिए

(ख) मनुष्य के भीतर साहस व आत्मविश्वास की भावना का विस्तार होना चाहिए

(ग) मनुष्य को स्वयं को संशयग्रस्त स्थिति में ले जाना चाहिए

(घ) इनमें से कोई नही

(5) कथन (A) और कारण (R) को पढ़कर उपर्युक्त विकल्प चुनिए-

कथन (A) असफल व्यक्ति संशयग्रस्त होते हैं।

कारण (R) जिनके संकल्प अधूरे होते हैं, वे बड़ा काम नही कर पाते हैं।

(क) कथन (A) गलत है, किंतु कारण (R) सही है।

(ख) कथन (A) और कारण (R) दोनो गलत है।

(ग) कथन (A) सही है, किंतु कारण (R) कथन (A) की सही व्याख्या है।

(घ) कथन (A) सही है, किंतु कारण (R) कथन (A) की सही व्याख्या नहीं है।

<center>खण्ड ख 'वर्णनात्मक प्रश्न</center>

(1) निम्नलिखित प्रश्नों के उत्तर दीजिए:-

(क) 'नेता जी का चश्मा पाठ में नगरपालिका की कार्य-पद्धति पर व्यंग्य छिपा है, उसे अपन शब्दों में लिखिए।

(ख) यदि हालदार साहब को नेता जी की मूर्ति पर चश्मा लगा नही मिलता तो उनके मन में किस प्रकार का भाव आता ?

(ग) लक्ष्मण के व्यंग्यमय शब्दों से परशुराम के व्यक्तित्व की कौन-सी विशेताएँ अभिव्यक्त

(घ) गोपियों ने उद्धव से योग की शिक्षा कैसे लोगों को देने की बात कही ?

(ङ) हालदार साहब मूर्ति पर सरकंडे का चश्मा देखकर भावुक क्यों हो गए ?

(च) गोपियों ने किन-किन उदाहरणों के माध्यम से उद्धव को उलाहने दिए हैं ?

(छ) तुलसीदास जी की जीवनी से जुड़ी दस पंक्तियाँ अपनी कॉपी में लिखकर लायें।

(ज) हम अपने इलाके के शिल्पकार, संगीतकार, चित्रकार तथा दूसरे कलाकारों के काम को कैसे महत्व और प्रोत्साहन दे सकते हैं ? लिखिए ।

(झ) उद्देश्य और विधेय को उदाहरण के साथ परिभाषित करें।

<center>खण्ड- ग (रचना लेखन)</center>

(1) निम्नलिखित विषय पर लगभग 120 शब्दों में सारगर्भित अनुच्छेद लिखिए:-

विषय: वृक्षारोपण संकेत बिंदु:

- मानव व वृक्षों का घनिष्ठ नाता
- सभ्यता के विकास के साथ स्वार्थ का हावी होना
- पेड़ों की अंधाधुंध कटाई वृक्ष की देखभाल की जिम्मेदारी उठाना
- सरकारी एवं सामाजिक संगठनों का योगदान
- वृक्षों से अनगिनत लाभ

- वृक्ष हमारे सच्चे साथी।

(2) आप बस द्वारा यात्रा कर रहे थे। इस दौरान आपके शैक्षणिक प्रमाण पत्रों का बैग बस में ही छूट गया था। बस में छूटे सामान का पता लगाने के लिए परिवहन निगम के मुख्य प्रबंधक को लगभग 100 शब्दों में एक पत्र लिखिए।

(3) हिन्दी शैक्षणिक भ्रमण के रूप में इस बार आपकी कक्षा किसी गाँव में एक सप्ताह तक प्रौढ़ शिक्षा का कार्यक्रम करने की इच्छा रखती है। इसके लिए अनुमति माँगते हुए प्रधानाचार्य को एक ईमेल कीजिए ।

(4) अधिगम कोचिंग सेन्टर हेतु लगभग 60 शब्दों का एक विज्ञापनतैयार कीजिए ।

(5) आपके छोटे भाई ने एक आवासीय विद्यालय में एक मास वू ही प्रवेश लिया है। उसको मित्रो के चुनाव में सावधानी बरतने के लिए समझाते हुए लगभग 100 शब्दों में एक पत्रलिखिए ।

(6) अपने शहर के नगर निगम अधिकारी को एक आवेदन पत्र लिखें, जिसमें आपके मुहल्ले की साफ-सफाई न होने की जानकारी का वर्णन हो ।

(7) एक चार्ट पेपर पर नेता जी सुभाष चंद्र बोस जी की फोटो बनाकर उनके बारे में उसी चार्ट पेपर पर ही पाँच पंक्तियाँ लिखें।

खण्ड - घ (स्मरण करने योग्य तथ्य)

(1) अध्याय 1, 2 एवं 10 के सभी प्रश्नोत्तर कंठस्थ करके आएँ ।

(2) राम-लक्ष्मण, परशुराम संवाद पाठ का संपूर्ण भावार्थ समझते हुए याद करके आएँ

HISTORY

1. Describe any three economic hardships faced by Europe in the 1830s.
2. Describe the process of unification of Italy.
3. "The first clear expression of nationalism came with the 'French Revelation' in 1789". Examine the statement.
4. How did culture play an important role in creating the idea of the nation, in Europe? Explain with four examples.
5. Why did Gandhiji decide to launch a nationwide 'Satyagraha' against the proposed Rowlatt Act (1919)? How was it opposed? Explain.
6. How did non-corporation movement start with participation of middle class people in the cities? Explain its impact on the economic front.
7. Why did Mahatma Gandhi decided to call off the civil disobedience movement? Explain.
8. Why was congress reluctant to allow women to hold any position of authority within the organization? How did women participate in civil disobedience movement? Explain.
9. Explain giving examples, the role played by technological inventions in transforming 19th century world.
10. What do you know about the great Depression? Explain the major factors responsible for the great Depression.
11. What key lessons did politicians and economists learn from the interwar economic experience?
12. Describe the factors that led to the end of Bretton woods system and the beginning of globalization.
13. Describe the life of the workers in Victorian Britain.
14. What is meant by proto – industrialization? How did it affect the rural peasants and artisans?
15. Describe the contribution of the early industrialists of India in shaping the industrial development of India.
16. "By the first decade of the 20th century, a series of changes affected the pattern of industrialization in India." Support the statement with example.
17. How had the earliest printing technology developed in the world. Explain with examples.
18. "By the end of 19th century a new viral culture was taking shape" Explain.
19. 'Printing technology gave women a chance to share their felling with the world outside' support the statement with any five suitable examples.
20. What was the attitude of liberal and conservative Indians towards women's reading? How did women like kailashbashini Delhi respond to this in her writhing?

Geography

1. Examine the three major problems created as a result of indiscriminate utilization of natural resources.

2. "33 per cent of the total land area of a country should be under forest." Justify the statement highlighting the environment valves of forests.
3. Suggest any six measures to solve the problem of land degradation in India?
4. Explain any three factors responsible for the formation of sail.
5. Distinguish between rare species and vulnerable species of animals with examples.
6. In which year was the 'Indian wildlife protection Act' implemented in India? Describe the main thrust area of this programing.
7. Classify forest of India. Give two characteristics of nay two types of forests?
8. Discuss the salient features of joint forests Management programme.
9. Mention a negative effect of irrigation. How can irrigation transform the social landscape?
10. Explain any three reason due to which large doms have come under great opposition in recent years.
11. Describe any three different rainwater harvesting systems practiced in India.
12. Describe the procedure for rooftop rainwater harvesting.
13. Explain the features of three cropping seasons in India.
14. Name the important beverage crop introduced by the British in India. Explain the geographical conditions needed for its cultivation. Write two important states where it is grown.
15. Mention the geographical requirements for the growth of wheat in India. Mention two wheat growing zones.
16. Explain any five features of comprehensive land development programme initiated during the 1980s and the 1990s.
17. Differentiate between ferrous and non-ferrous minerals with examples.
18. Why do you think that solar energy has a bright future in India?
19. Explain the importance of conservation of minerals. Highlight any three measures to conserve them.
20. Which is the most abundantly available fossil fuel in India? What are its three major forms? Write main features of each from.
21. What is the meaning of a manufacturing industry? Why is it considered the backbone of economic development? Give two reasons?
22. 'Agriculture and industry move hand in hand. Analyse the statement with three examples.
23. Describe any five factors responsible for the concentration of jute mills along the banks of the Hugli River.
24. Explain the pro-active approach adopted by the National thermal power corporation (NTPC) for preserving the natural environment and resources.
25. Describe any five major problems faced by road transport in India.
26. Why is road transport more useful than Rail Transport in India? Explain four reasons.
27. "Efficient means of transport are prerequisite for fast development" Express your views in favour of this statement.
28. How has the distribution pattern of the railways network in the country been largely influenced by physiographic and economic factors? Explain with examples.

Political Science
1. Describe any three 'Majoritarian measures' taken by the Sri Lankan Government to establish Sinhala supremacy.
2. How have Belgium and Sri Lanka dealt with the questions of power sharing differently?
3. Differentiate horizontal and vertical power sharing in modern democracies.
4. Explain two sets of reasons as why power sharing in desirable.
5. Compare the federations of coming together and holding together type.
6. Explain two achievements and two difficulties of local self government in India.
7. On what type of principles is the Indian union based? Describe the three fold distribution of legislative powers between union government and the state governments.
8. The creation of linguistic states was the first and a major test for democratic polities in our country. Justify this statement.

9. State any four permissions of the India constitution which make it a secular state.
10. 'Caste (System) and politics in India cannot be separate? Justify
11. What forms does communalism take in politics?
12. Examine any two institutional amendments made by different institutions to reforms political parties and their leader.
13. Differentiate between national and regional parties.
14. Describe the importance of regional parties in strengthening democracy.
15. Describe any five efforts made to reform political parties in India.
16. "Democracy is more effective than its other alternatives". Justify the statement.
17. How is 'democratic government' a legitimate government'? explain with examples.
18. How is social diversity accommodated in democracy? Explain with examples.
19. Explain any three ways in which democracy has succeeded in maintaining dignity and freedom of citizens.
20. "Democracies lead to a peaceful and harmonious life among citizens"
21. "A public expressing of dissatisfaction with democracy shows the success of democratic projects" Justify the statement.

Economic

1. Consequences of environmental degradations do not respect nation or state boundaries. Justify the given statement.
2. Explain with the help of five example, how development could mean different things to different people.
3. Why is sustainable development essential for economic growth?
4. How are the three sectors of economy interdependent? Explain.
5. What precaution should be taken while estimating total production?
6. Highlight any three factors responsible for the growth of service sector in the Indian economy.
7. Name the sector that is the largest employer in India. Why does this sector produce only a quarter of the GDP?
8. Distinguish between organized and unorganized sector by stating any five points of distinction.
9. Differentiate between formal sector credit and informal sector credit.
10. Why is cheap and affordable credit important for a country's development? Explain with reasons.
11. Why is it necessary for the banks and cooperatives to increase their lending facilities in rural areas? Explain.
12. Discuss the functioning of Self-Help Group(SHGs).
13. "The credit activities of the informal sector should be discovered." Support the statement with arguments.
14. "Technology has stimulated the globalization process." Support the statement with examples.
15. Barriers on foreign trade and foreign investment were removed to a large extent in India around 1991. Justify the statement.
16. "Information and communication technology has played a major role in spreading out production of services across the countries." Justify the statement with examples.
17. "Fair globalization would create opportunities for all and also ensure that benefits of globalization are shared better." Support the statement .

ENGLISH

Q.1. Write the following/given letters below separately in your own words. You should get reference as much as you can to make your writing clean and precise (exact) in length. Not shorter or longer. Now read the given tips to write your letters accordingly. :-

1. **Letter to the Editor-**

- ➢ Be simple and straight forward in language
- ➢ Be informative to share your ideas/opinion freely.
- ➢ Be concise (exact, accurate) and original to yourself.
- ➢ Be suggestive and provided solutions for problem (if any) or give your conclusion as for an easy solution.

2. **Letter of Inquiry-**
- ➢ Be straight forward and honest in your language.
- ➢ Be very much polite and just to the point to be short.
- ➢ Be very willing and wanting to collect informations as much as you can.

3. **Letter to place an order –**
- ➢ Be polite, clear and very precise in your language
- ➢ Mention the list of goods to be ordered very clearly.
- ➢ Mention your mode of payment
- ➢ Give deadline for shipping and shipping address.

4. **Letter of Complaints –**
- ➢ Be very polite, clear and consise in language.
- ➢ Describe your issues or problems or other details that is troubling you.
- ➢ Present your suggestions for easy solution of the problem for conclusion or solution of your problems.

5. **Letter of recommendation –**
- ➢ Be short and very informative in your writing .
- ➢ Give the details of the person's moral duties and moral background .
- ➢ Present your own opinion for why someone must be awarded generously.
- ➢ Present your conclusion or solution.