

CLASS - X

Summer Holidays Homework-2023

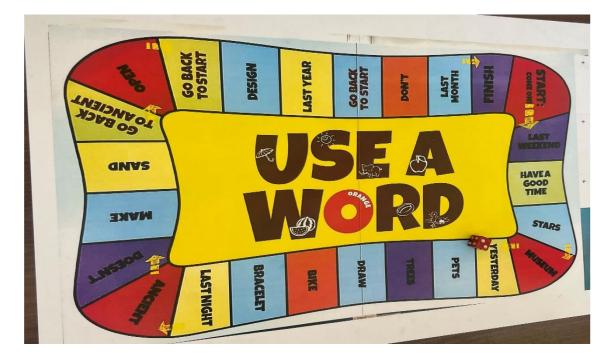
ENGLISH

General Instructions:

- Language Games have been assigned Roll number-wise to students.
- Students can choose any one assignment in Literaria section.
- Q 3 & 4 are compulsory for all and to be done as instructed.
- Handwriting should be neat and legible.
- The work should be original, creative and not copied from the Internet.
- Date of Submission: 16th June, 2023.
- **1. Language Games-**Bring out your creative and playful side by inventing fun grammar and vocabulary-based games.

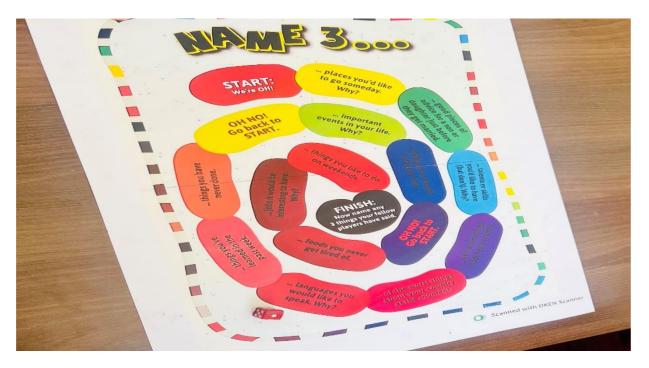
RNO 1 to 13

(i) <u>Use a word-</u> Invent situations to test vocabulary skills of the players. eg. If you roll a dice and it lands on -Last Month', the player should be able to speak at least 5 lines on what you did last month. You may refer to the following image for ideas. Also make a dice to play the game.



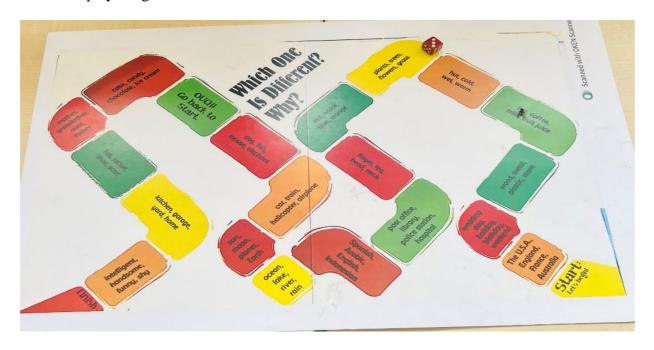
RNO 14 to 25

(ii) <u>Name THREE</u> - Write situations in which the player will have to tell three things on the situation with reason.eg. Three languages you would like to speak and why? You may incorporate grammar concepts by asking any examples of adverbs, adjectives, etc. Also make a dice to play the game.



RNO 26 to 40

(iii) Which One is Different? - Write a group of four-five words in your game chart. The players will spot the difference. You may use antonyms, synonyms, grammar concepts, etc. Also make a dice to play the game.



- **2.** <u>Literaria</u>- Let's explore the literature lessons by critically and creatively analyzing them and present it artistically. Do <u>any one</u> of the following activity -
- (i) **Puppet Show**-Design a puppet show on 'The Frog and the Nightingale' by Vikram Seth. Design puppets, write dialogues and prepare a set up for it.
- (ii) **Timeline** Make a timeline of the author's activities in Verona (Lesson-Two Gentlemen of Verona). Draw or paste relevant pictures with it.
- (iii) **Comic strip -** Make a comic strip of any Literature lesson from your syllabus. Use cardboard and chart paper for making it.
- (iv) **Design Facebook Page-**Design a Facebook page on <u>any one</u> of the following personalities using a cardboard or chart paper.
 - William Shakespeare
 - Albert Einstein
 - Iron Man
 - Harry Potter
- 3. Virtual Tour Take a virtual tour of Andaman and Nicobar Island using the link: https://youtu.be/q43hYTqNFXc and write a diary entry of the activities you would do there. It should be done in Writing Skill Register.
- **4.** Improve your Comprehension skills- Unit-1 Health and Medicine of MCB Reader should be done by students in the book.

हिंदी

GENERAL INSTRUCTIONS

खंड - अ

विद्यार्थियों को अनुक्रमांक के अनुसार परियोजना प्रदान की गई है। अपने अनुक्रमांक के अनुसार ही परियोजना तैयार करें। परियोजना स्क्रैप फ़ाइल में तैयार कीजिए।

खंड - ब

इस खंड का कार्य हिंदी रजिस्टर में ही करें।

जमा कराने की तिथि - 19.06.2023

खंड – अ

अनुपम - अतुलित अंडमान-निकोबार द्वीप समूह

अंडमान शब्द मलय भाषा के शब्द 'हांदुमन' से आया है जो हिन्दू देवता 'हनुमान' के नाम का परिवर्तित रूप है। निकोबार शब्द भी इसी भाषा से लिया गया है। हिन्द महासागर में बसा निर्मल और शांत अंडमान पर्यटकों के मन को असीम आनंद की अनुभूति कराता भारत का एक लोकप्रिय द्वीप समूह है।



अनुक्रमांक 01 - 10

अंडमान - निकोबार द्वीप समूह पर आधारित एक आकर्षक सचित्र यात्रा विवरणिका (ब्रॉशर) तैयार करें, जिसमें निम्नलिखित निर्देशों का समावेश करें –

- 1 अंडमान निकोबार का संक्षिप्त इतिहास
- 2. अंडमान निकोबार द्वीप के पर्यटन स्थल
- 3. अंडमान निकोबार का मौसम
- 4. अंडमान निकोबार जाने का सबसे अच्छा समय क्या है
- 5. अंडमान निकोबार कैसे जाएँ

अनुक्रमांक 11 - 20

अडंमान-निकोबार द्वीप समूह भारत का अभिन्न अंग है, यहाँ प्रतिवर्ष लाखों पर्यटक छुट्टियाँ मनाने आते हैं, लेकिन इस द्वीप के अनेक ऐसे तथ्य हैं जिनके बारे में आप शायद हीं जानते होंगे।

अंडमान-निकोबार द्वीप समूह के इतिहास के बारे में जानकारी प्राप्त कीजिए तथा इस द्वीप समूह से जुड़े 20 -30 रोचक तथ्य लिखिए तथा चित्र भी चिपकाइए।

अनुक्रमांक 21 -30 तक

अंडमान - निकोबार द्वीप समूह की प्रसिद्ध लोक कथाओं को पढ़िए तथा जिस कहानी ने आपको सर्वाधिक प्रभावित किया उसे अपने शब्दों में सुंदर लेख में चित्र सहित प्रस्तुत कीजिए।

स्रोत :-अंडमान तथा निकोबार की लोंक-कथाएँ - व्यासमणि त्रिपाठी

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अनुक्रमांक 30 - अंत तक

पदबंध की साँप -सीढ़ी

साँप -सीढ़ी के खेल को नया रूप देते हुए पदबंध तथा उसके प्रकार को खेल के रूप में प्रस्तुत कीजिए।



खंड - ब

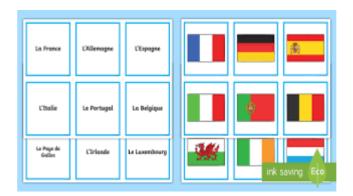
दिए गए विषयों पर आधारित विज्ञापन का निर्माण करें -

- 1. अपने विद्यालय की संस्था 'पहरेदार' की ओर से जल का दुरुपयोग रोकने का आग्रह करते हुए लगभग 30 शब्दों में एक विज्ञापन का आलेख तैयार कीजिए।
- 2. विद्यालय की कलावीथि में कुछ चित्र (पेंटिंग्स) बिक्री के लिए उपलब्ध हैं। इसके लिए एक विज्ञापन लगभग 50 शब्दों में लिखिए।
- 3. जीवन संघर्ष है , स्वप्न नहीं विषय पर 120 शब्दों में दिए गए संकेत बिंदुओं की सहायता से एक अनुच्छेद लिखिए।
 - संघर्ष जीवन का दूसरा नाम
 - जीवन गतिशील एवं बाधाओं से भरा हुआ है
 - स्वप्न असत्य है तथा जीवन सत्य है

FRENCH

General Instructions:

- Students to make an A4 size Comic Strip given in Q1(as per the instructions given)
- Students to make a project on A4 size sheets given in Q2 (as per the instruction given)
- Assignment questions to be done in French subject register by all students.
- Date of submission: 19th June '2023
- Q1. Bande dessinée: Make a beautiful, creative and hilarious comic strip in French on any real-life situation. Make it on A4 size sheets.
- Q2. Make a project on the history of Lakshdweep and find out 20 interesting facts about the Islands of Lakshdweep. Make the project with illustrative images on A4 size sheets. The presentation should be creative and beautiful.
- Q3. Make a dice/board game on Francophone countries.
 - 1. In this game you need to make small cards of Francophonie countries in French. The player needs to put each card next to its flag in the minimum time.



2. Make a crossword on Francophonie countries by giving clues about that country.



3. Make Flashcards on Francophonie countries. On each Flashcard write the name of the country in capital letters, its capital, continent, flag, currency, nationality etc



Assignment:

Q1: Décrivez une lettre à votre ami(e) pour décrire le système d'éducation français.

Q2 : Vous avez bien réussi à l'examen. Donc vous avez organisez une fête. Écrivez l'invitation à votre ami(e).

Q3 : Votre copain vous a invité pour voir le musée national de Delhi mais vous l'avez déjà vu. Rédigez le refus.

Q4 : Mettez le dialogue en ordre.

Pinky: Je le ferai. Je suis sûr. Je réussirai avec de bonnes notes.

Timsy: Demande à ton professeur de t'aider. Étudie bien.

Pinky : J'ai déjà préparé pour tous les sujets. Les mathématiques me semblent un peu difficiles.

Timsy: Bonne chance pour tes examens.

Pinky: Merci, à toi aussi.

Timsy: Comment prépares-tu pour tes examens?

<u>संस्कृत</u>

सामान्य निर्देश –

कार्य ३ के उदाहरण A-4 शीट पर लिखें

जमा करने की तारीख - ७/७/२३

1.अण्डमान-निकोबारद्वीपेभ्यः सम्बद्धानां कस्यापि दश रोचकतथ्यस्य ब्रोशरं सज्जीकरोतु। यथा –

(i). २० रुप्यकेषु जङ्गलभागः केवलं अण्डमानद्वीपस्य एव अस्ति ।



(ii). अण्डमानदेशे नारिकेलकङ्कणाः प्रचुररूपेण दृश्यन्ते । एते स्थले दृश्यमानाः बृहत्तमाः कङ्कणाः सन्ति, येषां दीर्घता १ मीटर् यावत् भवितुम् अर्हति । तेषां प्रियः आहारः नारिकेलः अस्ति, ते अपि मुखेन नारिकेलस्य दृढं शंखं भङ्क्ते।



भारतस्य लघुतमः संघराज्यः लक्षद्वीपः ३६ द्वीपैः युक्तः द्वीपसमूहः अस्ति यस्य क्षेत्रफलं ३२ कि.मी. अयं एकजिल्लासङ्गप्रदेशः अस्ति, अत्र १२ द्वीपाः, त्रीणि चट्टानानि, पञ्च डुबन्तः तटाः, दश निवसन्तः द्वीपाः च सन्ति । अस्य द्वीपानां विस्तारः ३२ वर्गिकलोमीटर् अस्ति ।राजधानी कावरट्टी अस्ति तथा च एतत् यूटी-देशस्य प्रमुखं नगरम् अपि अस्ति ।

- 2. लक्षद्वीपस्य १० प्रसिद्धपर्यटनस्थलानां विषये सूचनां दत्त्वा चित्रैः सह ब्रोशरं सज्जीकरोतु । यथा –
- (i) लक्षद्वीपस्य मुख्यं आकर्षणं मिनीकोयद्वीपः लक्षद्वीपस्य एकः मुख्यः आकर्षणः मिनीकोयद्वीपः अस्ति, यः लक्षद्वीपस्य ३६ लघुद्वीपेषु अन्यतमः अस्ति । मिनिकोयः स्थानीयभाषायां मालिकु इति नाम्ना प्रसिद्धः इति व्याख्यातव्यम्। मिनीकोयद्वीपः कोचीनतटतः प्रायः ४०० कि.मी.दूरे स्थितः अस्ति ।



(ii) लक्षद्वीपस्य प्रसिद्धं पर्यटनस्थलं अगट्टीद्वीपम् अगट्टीद्वीपः लक्षद्वीपे भ्रमणार्थं रोमाञ्चकारीषु स्थानेषु अन्यतमः अस्ति यः प्रवालपट्टिकानां मनोहरसौन्दर्यस्य कृते प्रसिद्धः अस्ति ।



3. A-4 SIZE पत्रे स्वर संधि: / व्यंजन संधि: / विसर्ग संधि: सन्धिनियमानां नामिभः सह सूचीं कुर्वन्तु ।

MATHEMATICS

GENERAL INSTRUCTIONS

- Mathematics holidays homework has two sections:
 - Section 1 is Creativity Section, to be done as per your roll number.
 - Sections 2 is an assignment; Assignment to be done in the Math register by all.
- <u>Date of Submission</u>: 20th June' 2023 (both section 1 and Section 2)

Section 1: CREATIVITY SECTION

1. Roll Nos. 1-10

Working model on **Basic Proportionality Theorem**

Link: https://youtu.be/uLapPjh-m64

2. Roll Nos. 11-20

Working model on Trigonometric Ratios

Link: https://youtu.be/iXwqjHNwqBY

3. Roll Nos. 21-30

Working model / board game on Probability

Link: https://youtu.be/rrDUHoU4ULU

4. Roll Nos. 31 onwards

Working model of **Clinometer**

Link: https://youtu.be/BZFw5AulJdw

Section 2: ASSIGNMENT

- Q1. Find the value of a so that the point (3, a), lies on the line represented by 2x-3y = 5.
- Q2. If α and $1/\alpha$ are the zeroes of the quadratic polynomial $2x^2 x + 8k$, then find k.
- Q3. Determine the value of x if $\tan 3x = \sin 30^0 + \sin 45^0 \cos 45^0$.
- Q4. Does the following pair of equations represent a pair of coincident lines? Justify your answer.

$$x/2 + y + 2/5 = 0$$

$$4x + 8y + 5/16 = 0$$
.

- Q5. If 49x+51y=499, 51x+49y=501, then find the value of x and y.
- Q6. The sum of the digits of a two-digit number is 12. The number obtained by interchanging the two digits exceeds the given number by 18. Find the number.
- Q7. If a and b are zeroes of x^2-6x+k . What is the value of k, if 3a+2b=20?
- Q8. Evaluate $\sin^2 30^0 \cos^2 45^0 + 4 \tan^2 30^0 + \frac{1}{2} \sin^2 90^0 2\cos^2 90^0 + \frac{1}{24}$
- Q9. If $\sin \theta + \sin^2 \theta = 1$, Prove that: $\cos^2 \theta + \cos^4 \theta = 1$
- Q10. If α and β are the zeroes of the polynomial $p(x) = 2x^2 + 5x + k$, satisfying the relation, $\alpha^2 + \beta^2 + \alpha\beta = 21/4$ then find the value of k.
- Q11. Prove that $\frac{\cos A}{1-\tan A} + \frac{\sin A}{1-\cot A} = \sin A + \cos A$.
- Q12. If m and n are zeroes of the polynomial $p(x)=2x^2-5x+7$, find a polynomial whose zeroes 2m+3 and 2n+3.
- Q13. If $7\sin^2 A + 3\cos^2 A = 4$, show that $\tan A = 1/\sqrt{3}$

Q14. Prove that
$$\frac{1}{\cos ec \ A - \cot A} - \frac{1}{\sin A} = \frac{1}{\sin A} - \frac{1}{\cos ec \ A + \cot A}$$

Q15. Find values of a and b for which the following system of equations has infinitely many solutions.

$$3 x + 4 y = 12$$

(a + b) x +2 (a- b) y = 5a-1

SCIENCE

GENERAL INSTRUCTIONS

- Homework has two sections:
 - Section 1 Students to check their class roll numbers for making a working model/ a fun game or preparing a demonstration experiment on the following topics.
 - Section 2 is an assignment; which is to be done in the respective subject notebooks.
 - Portfolio Activity has to be done by all.
- <u>Date of Submission:</u>
 - Assignment (Section 2): 20th June'2023
 - Models (Section 1): 21st June'2023

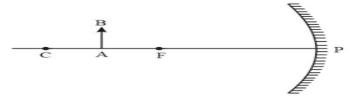
Section 1:

S. NO.	TOPIC	ROLL NO.
1	Distinguish between Physical and Chemical change	1-5
2	Electrolysis of water	6-10
3	Series and parallel combination of resistors	11-15
4	Effect of pH in our everyday life	16-20
5	Magnetic effects of current	21-25
5.	A fun game on chemical reactions and equations	26-30
6	Generation of electrical energy from mechanical energy.	30 onwards

Section 2:

PHYSICS

- 1. The refractive indices of alcohol and turpentine oil with respect to air are 1.36 and 1.47respectively. Find the refractive index of turpentine oil with respect to alcohol. In which of the two media the speed of light will be more.
- 2. What is the principle of reversibility of light? Show that the incident of light is parallel to the emergent ray of light when light falls obliquely on a side of a rectangular glass slab.
- 3. For the same angle of incidence 45°, the angle of refraction in two transparent media: I and II is 20° and 30° respectively. Out of I and II, which medium is optically denser and why?
- 4. An object of height h is kept at point P in front of a mirror as shown below. The height of the image produced is h'. In the diagram, F is the focus and C is the centre of curvature.



- a) If the object is now moved to point C, will the height of the image now produced be less than, equal to, or greater than h'? Give a reason for your answer.
- b) If the focal length of the mirror is 20 cm and the distance between points P and C is 10 cm, determine the distance between the images produced when the object is kept at P and C.

- c) Why does a ray of light passing through the center of curvature of a concave mirror after reflection, reflects back along the same path?
- 5. "The magnification produced by a spherical mirror is -3". List four information you obtain from this statement about the mirror/image.
- 6. The image of a candle flame placed at a distance of 30 cm from a mirror is formed on a screen placed in front of the mirror at a distance of 60 cm from its pole. What is the nature of the mirror? Find its focal length. If the height of the flame is 2.4 cm, find the height of its image. State whether the image formed is erect or inverted.
- 7. The image formed by a spherical mirror is real, inverted and is of magnification -2. If the image is at a distance of 30 cm from the mirror, where is the object placed? Find the focal length of the mirror.
- 8. Describe and illustrate with a diagram, how we should arrange two converging lenses so that a parallel beam of light entering one lens emerges as a parallel beam after passing through the second lens.
- 9. a) Water has refractive index 1.33 and alcohol has refractive index 1.36. Which of the two medium is optically denser? Give reason for your answer.
 - b) Draw a ray diagram to show the path of a ray of light passing obliquely from water to alcohol.
 - c) State the relationship between angle of incidence and angle of refraction in the above case.
- 10. A spherical mirror produces an image of magnification -1 on a screen placed at a distance of 50 cm from the mirror.
 - a) Write the type of mirror.
 - b) Find the distance of the image from the object.
 - c) What is the focal length of the mirror?
 - d) Draw the ray diagram to show the image formation in this case

CHEMISTRY

- 1. A student burnt a metal A found in the form of ribbon. The ribbon burnt with a dazzling flame and a white powder B was formed which is basic in nature. Identify A and B. Write a balanced chemical equation for the above-mentioned reaction.
- 2. A zinc rod is left for nearly 20 minutes in a copper sulphate solution. What change would you observe in the zinc rod?
- 3. A, B and C are three elements which undergo chemical reactions in the following way.

$$A_2O_3 + 2B \rightarrow B_2O_3 + 2A$$

 $3CSO_4 + 2B \rightarrow B_2(SO4)_3 + 3C$
 $3CO + 2A \rightarrow A2O_3 + 3C$

Answer the following:

- a) Which element is most reactive? Justify.
- b) Which element is least reactive? Justify.
- 4. Which of the following reaction is possible? Explain giving a suitable reason.
 - a) $Cu(s) + ZnSO_4(aq) \rightarrow CuSO_4(aq) + Zn(s)$
 - b) Fe (s) + ZnSO₄ (aq) \rightarrow FeSO₄ (aq) + Zn (s)
 - c) $Zn(s) + MgSO_4(aq) \rightarrow ZnSO_4(aq) + Mg(s)$
- 5. Write the balanced chemical equations for the following reactions:
 - a) Ammonium chloride and Potassium hydroxide on reaction gives potassium chloride, ammonia and water.
 - b) Calcium hydrogen carbonate on reaction with Sulphuric acid gives Calcium Sulphate, water and liberates carbon dioxide.
 - c) Copper (II) sulphate on treatment with potassium iodide precipitates cuprous iodide, liberates iodine gas and also forms potassium sulphate.

- 6. Re-write the given chemical equations after balancing them.
 - a) $CO_2 + H_2O \rightarrow C_6H_{12}O_6 + O_2$
 - b) $SiCl_4 + H_2O \rightarrow H_4SiO_4 + HCl$
 - c) $Al + HCl \rightarrow AlCl_3 + H_2$
 - d) $C_7H_6O_2 + O_2 \rightarrow CO_2 + H_2O$
 - e) $Fe_2(SO_4)_3 + KOH \rightarrow K_2SO_4 + Fe(OH)_3$
 - f) $Ca_3(PO_4)_2 + SiO_2 \rightarrow P_4O_{10} + CaSiO_3$
 - g) $KClO_3 \rightarrow KClO_4 + KCl$
 - h) $Al_2(SO_4)_3 + Ca(OH)_2 \rightarrow Al(OH)_3 + CaSO_4$
 - i) $H_2SO_4 + HI \rightarrow H_2S + I_2 + H_2O$
- 7. Identify the type of chemical reaction that takes place when _____
 - a) Limestone is heated.
 - b) A magnesium wire is burnt in air.
 - c) Electricity is passed through water.
 - d) Ammonia and hydrogen chloride are mixed.
 - e) Silver bromide is exposed to sunlight.
- 8. A sample of water weed was placed in water and exposed to sunlight. Bubbles of a gas are seen on the surface of the leaves.
 - a) Name the gas evolved.
 - b) Write a balanced equation of reaction taking place.
- 9. Give balanced equations for the following:
 - a) A reaction which gives out heat.
 - b) A reversible reaction.
 - c) A reaction with a solid and gas which produces heat.
- 10. 2g of ferrous sulphate crystals are heated in a dry boiling tube.
 - a) List any two observations.
 - b) Name the type of chemical reaction taking place.
 - c) Write the chemical equation for the reaction.

BIOLOGY

- 1. In which animal the heart does not pump the oxygenated blood to different parts of the body? Explain the type of circulation in that organism.
- 2. State the functions of renal vein and renal artery.
- 3. Which part of the visible spectrum of light is absorbed by the chlorophyll pigment?
- 4. Explain how the translocation of materials in phloem tissue in plants is achieved by utilizing energy.
- 5. What do the following transport?
 - a) Pulmonary vein
 - b) Vena cava
 - c) Pulmonary artery
 - d) Aorta
- 6. Give reasons:
 - a) Blood groups of donor and recipient is matched before blood transfusion.
 - b) Transport system in plants is slow.
 - c) Circulation of blood in aquatic vertebrates differs from that in terrestrial vertebrates.
 - d) During the daytime, water and minerals travel faster through xylem as compared to the night.
 - e) Veins have valves whereas arteries do not.
- 7. Find out how lungs of a heavy smoker different from the lungs of non-smoker.

- 8. Name four types of metabolic wastes produced by humans. Also, name any two human excretory organs other than kidney.
- 9. Explain the process of dialysis and support your answer with a well labelled diagram.
- 10. Find out about the following medical equipment and write a short note on them:
 - a) Ventilator
 - b) Sphygmomanometer
 - c) Pacemaker

PORTFOLIO ACTIVITY

Biodiversity is the greatest treasure we have and the Andaman & Nicobar and Lakshadweep Islands are home to some of the richest varieties of flora and fauna. Find out about at least five different plant species and animal species each and prepare a project report on A4 size sheets including their characteristic features and ecological importance. You can support your project work with pictures. (Max. Pages- 4-5).

SOCIAL SCIENCE

GENERAL INSTRUCTIONS

- Roll number-wise topics have been assigned for students.
- Students need to prepare a project on ANY ONE topic assigned to their roll-number group.
- The project report is to be prepared as per the instructions detailed below.
- Assignment Questions to be done in the Economics notes register by all
- students.

Date of Submission: 22nd June'2023

Prepare a **detailed project** in your Social **Science Activity-File** on the below-mentioned topic according to your roll number. The Project File should have the following headings (in the order mentioned):

- 1. **COVER PAGE** showing project title, schools name, students name, class and section and academic session (2023-24)
- 2. **CONTENTS** Table of contents with page number (approx...15 pages)
- 3. **PROJECT OVERVIEW**: Purpose, aim, methodology and experience while doing the project.
- 4. **MAIN BODY-** Chapters with relevant headings.
- 5. **CONCLUSION** Summary and conclusions based on findings.
- 6. **BIBLIOGRAPHY** should have the title, pages referred, author, publisher, year of publication and if a website, the name of the website with a specific link which has been used.

Roll Numbers: 1-11

TOPIC: Sustainable building techniques and green architecture.

OR

TOPIC: Role of advertisements and social media in promoting consumer awareness.

Roll Numbers: 12-22

TOPIC: Development of Andaman and Nicobar Islands: strategic imperative and ecological concerns.

OR

TOPIC: A case study about teen depression and suicide/ drug addiction

Roll Numbers: 23 onwards

TOPIC: Upkeep and expansion of environment friendly green places.

ΛR

TOPIC: An investigation of awareness of illiterate population on consumer rights in India

NOTE: Only eco-friendly material to be used for the PROJECT.

Assignment

- 1. How is the criterion used by the UNDP different from the World Bank for measuring the development of a country?
- 2. 'The issue of sustainability is important for development'. Examine the statement.
- 3. There has been a big change in the three sectors of economic activities, but a similar shift has not taken place in the share of employment. Explain the above statement on the basis of facts.
- 4. "There are several things needed by the society as a whole". In the light of this statement, explain as private or the public sector and why?
- 5. Explain the structure of the new Panchayati Raj institutions, both in rural and urban areas.
- 6. Why has federalism succeeded in India? Which are the policies adopted by India that have ensured it? Explain.
- 7. "Print not only stimulated the publication of conflicting opinions amongst communities, but it also connected communities and people in different parts of India". Elaborate.
- 8. Describe the impact of the Print Revolution in Europe during 15th and 16th century.
- 9. 'Printing technology gave women a chance to share their feelings with the world outside'. Support the statement with any five suitable examples.
- 10. Read the source given below and answer the following questions.

 Print created the possibility of wide circulation of ideas, and introduced a new world of debate and discussion. Even those who disagreed with established authorities could now print and circulate their ideas. Through the printed message, they could persuade people to think differently, and move them to action. This had significance in different spheres of life.
 - "The implication of this in one sphere of life in early modern Europe namely, religion. In 1517, the religious reformer Martin Luther wrote Ninety-Five These criticizing many of the practices and rituals of the Roman Catholic Church".
 - i) Why was print not welcomed by everyone?
 - ii) Who was Martin Luther? What did he say about 'printing'?
 - iii) What do you mean by 'protestant reformation'?

ARTIFICIAL INTELLIGENCE

GENERAL INSTRUCTIONS:

- Roll number-wise topics have been assigned for students.
- AI holidays homework has two sections: -
- -Section 1 is Chart / Movie making; students to check their class roll numbers when making models.
- Sections 2 is an assignment to be done in your register.
- Assignment Questions to be done in the Artificial Intelligence notes register by all students.
- Date of Submission: 23rd June,2023

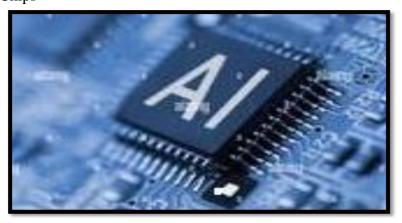
Section 1:

1. (Roll no. 1-10)

Create a movie on 'How are AI Chips Making the World a Smarter Place? Artificial Intelligence has become a showstopper. It is gaining attention from every domain. It is seldom now that you are visiting a website and there are no chatbots there, or you buy a phone which has no access to an assistant, these are all powered by AI. To take this up by a notch, the production of AI chips with a specific architecture having AI accelerators and the capability of deep learning is being pursued keenly by renowned chipmakers.

Students are required to collect information about:

- What are AI Chips?
- Advantages of Artificial Intelligence Chips Over General Hardware
- Latest AI Chips



Rules:

- The duration of the movie should not exceed 2 minutes.
- Movie to be submitted in .mp4 format only.
- Name of some latest AI Chips
- The movie should be uploaded on YouTube and unlisted link should be mailed.

2. (Roll no. 11-20)

Make a chart on 'ERNIE-ViL: Knowledge Enhanced Vision-Language'.

ERNIE-ViL is a multi - view contrastive learning framework that aims to acquire a more Robust cross-modal representation by concurrently building intra -modal and inter-modal correlations between distinct views. Students are required to collect more information about it.

3. (Roll no. 21-30)

In present time, technology with AI must be implemented in an economically feasible way to strengthen various fields like Agriculture, Textile, Manufacturing, Construction, Medical, Tourism, Offline Education etc. Keeping this in mind, the students must pick ONE such field and present their idea in an investor-pitch-style presentation/ video. The proposal should be economically viable.

Students are required to make a presentation (maximum 10 slides) or video (maximum two minutes), showcasing their product/service. The presentation/video should include the following:

- One slide describing the issue and two or more slides for the solutions and various features of the product/service.
- One slide should mention how AI would help in solving the problem.
- A prototype/application preview showcasing the working of the product / service is a must. Mail the PPT/Movie.

4. (Roll no. 31-42)

Make any one AI Model on 'Dice Game / Unscramble Words from Letters / Jigsaw Puzzle / Tic-Tac-Toe game'

Section 2:

1. Make a creative project on 'Smart City-My Dream City'.

Smart cities use a variety of software, user interfaces and communication networks alongside the Internet of Things (IoT) to deliver connected solutions for the public. Of these, the IoT is the most important. The IoT is a network of connected devices that communicate and exchange data. This can include anything from vehicles to home appliances and on-street sensors. Explain the smart devices that you would like to incorporate in your Smart City. Smart Cities, with IoT cameras monitoring the cleanliness of public spaces, crowd density and the movement of registered vehicles and Smart parking system. Give any five names of cities across the world which are in different stages of smart technology development and implementation. A picture on 'Smart City' is given below for reference:



QI Mul	tiple Choice Questions
people a. Na b. In c. Ex	Intelligence is the ability to communicate with others by understanding other le'sfeelings and influence on the person. aturalist terpersonal sistential trapersonal
a. A b. T c. F	Ch is the first step for "Decision Making"? Analysing the problem Thinking of alternative options available Problem Solving dentifying the problem
a. S b. 4 c. D	type of data being collected in data acquisition is known as ystem Mapping Ws Canvas Oata Features Veb Scraping
thefor a. U b. G c. F	data which can be in the form of any value within a range is considered as which of llowing categories of data? Ungrouped Grouped Grequency None of These
a. M b. As c. Ea	which involves choosing the best option out of the multiple. Iental Process rtificial Process asy and Simple Process one of the above

- 6) Which "Humanoid" got the citizenship of a country?
 - a. Google Mini
 - b. Alexa
 - c. Siri
 - d. Sophia
- 7) AI is a____.
 a. A field of study
 - b. A type of technology
 - c. Form of intelligence
 - d. All the above
- 8) Which is not the important term of AI?
 - a. Computer Vision
 - b. Algorithm
 - c. Autonomous
 - d. Neural Networks

9) Self-Driving Car is an example of a. Data Science b. Natural Language Understanding c. Natural Language Processing d. Computer Vision
 10) Which of the following type of data can have a specific pattern or structure? a. Semi Structure b. Structured c. Unstructured d. Fully Structured 11) Which of the following model shows the relationship or patterns in data defined by the developer? a. Rule Base Approach b. Learning Based Approach c. Decision Tree d. K Map
12) The basis of decision making depends upon i. Availability of Information ii. Past Experience iii. Positive Attitude iv. Self-Awareness a. i) and ii) b. ii) and iv) c. i), ii) and iv) d. i), ii) and iii)
 13) Unscramble the letters and find the parameter that is NOT used in evaluation stage a. CMVETEEHAIN b. ONSIPRICE c. RYAUACCC d. ECLARL
 14) In, the machine is trained with huge amount of data which helps it in training itself around the data. a. Supervised learning b. Deep learning c. Classification d. Unsupervised learning
 15) Choose the correct option: a. Unsupervised learning -> labelled dataset, Regression b. Supervised learning -> labelled data set, Regression c. Unsupervised learning -> unlabeled dataset, Classification d. Supervised learning -> unlabeled data set, Regression.

- 16) Identify which of the following is incorrect about the unsupervised learning-based model.
 - a. We can provide a very large data set.
 - b. The algorithm itself analyzes the data set and determines relationships within that data.
 - c. The labelled data is fed with some rules by the developers.
 - d. It lets make predictions and improves the algorithms on its own.
- is a process by which a node is divided into two or more sub-nodes.
 - a. Splitting
 - b. 4Ws Canvas
 - c. Data Features
 - d. Web Scraping
- 18) A business problem wherein we categorize whether an observation is "Safe," "At Risk," or "Unsafe" is an example of
 - a. Classification
 - b. Clustering
 - c. Regression
 - d. Dimensionality Reduction
- 19) _____refers to the techniques and tools that are used for identifying important patterns and trends using graphs.
 - a. Data visualization
 - b. Data organizing
 - c. Data Features
 - d. Web Scraping
- 20) In data acquisition, the data which is provided as input is called_____.
 - a. Testing Data
 - b. Training Data
 - c. Input data
 - d. None of the above
- 21) The AI models predict the values like Male/Female, True/False, Spam/Not Spam are an example of
 - a. Classification
 - b. Regression
 - c. Clustering
 - d. Dimensionality Reduction
- 22) Match the following:

A) Input Layer	i) has its own machine learning algorithm to be executed
B) Hidden layer	ii) meant for user interface
C) Output Layer	iii) acquire the data fed into the neural network

- a) A-i, B-ii, C-iii
- b) A-iii, B-ii, C-i
- c) A-iii, B-i, C-ii
- d) A-ii, B-i, C-iii

- 23) If data is represented as "Knowledge", Processing represented as "Practice" and Output is represented as "Result", which of the following can be related to the description of layers in the Neural Network?
 - a) Input Layer: Knowledge, Output Layer: Practice and Hidden Layer: Result
 - b) Input Layer: Result, Hidden Layer: Knowledge and Output Layer: Practice
 - c) Input Layer: Knowledge, Hidden Layer: Practice and Output Layer: Result
 - d) Input Layer: Practice, Hidden layer: Result and Output Layer: Knowledge
- 24) Which of the following is/are Neural Network features?
 - a) modelled on the human brain and nervous system
 - b) automatically extract features of data without any input
 - c) every node is essentially a machine algorithm
 - d) All of these
- 25) Which of the following is correct for Neural Network?
 - i) Its network on multiple perceptions
 - ii) each node connects one to another
 - iii) every node has an associated weight and threshold
 - iv) Neural networks are comprised of input layers, hidden layers, and an output layer
 - a) i, and iii
 - b) i, ii and iii
 - c) i, ii, iii and iv
 - d) None of them

Q2. Answer the following Assertion and Reasoning based questions:

1. Assertion (A): We can use histograms when data is in categories (such as "Pop", "Rock", "Jazz", "Hip-Hop" etc)

Reason (R): We use bar charts when we have continuous data (such as a person's height or weight)

- a. (A) is false but (R) is true
- b. (A) is true but (R) is false
- c. Both (A) and (R) are true
- d. Both (A) and (R) are false
- 2. Assertion (A): A pie chart is divided into segments to represent values of Different sizes.

Reason (R): Pie Chart is very effective when we have so many data series

- a. (A) is false but (R) is true
- b. (A) is true but (R) is false
- c. Both (A) and (R) are true
- d. Both (A) and (R) are false
- 3. Assertion (A): At the same time, we should keep in mind that the data which we collect is open-sourced and not someone's property.

Reason(R): Extracting private data can be an offence.

- a. Statement 1 is True
- b. Statement 2 is True
- c. Statement 1 and 2 both are True
- d. None of these statements are True

- 4. Assertion (A): Self-motivation teaches us self-discipline and hard work to achieve our goals.
 - Reason(R): Individuals experience increased anxiety and boredom when they motivate themselves.
 - a. Both Statement 1 and Statement 2 are correct.
 - b. Both Statement 1 and Statement 2 are incorrect.
 - c. Statement 1 is correct but Statement 2 is incorrect
 - d. Statement 1 is incorrect but Statement 2 is correct
- 5. Assertion (A): A self-driving car is made up of a combination of sensors, cameras, radar and AI. Reason (R): The owner is liable if a self-driving car is involved in an accident
 - a. Both A and R are correct and R is the correct explanation of A.
 - b. Both A and R are correct but R is NOT the correct explanation of A
 - c. A is correct but R is incorrect
 - d. A is incorrect but R is correct

ART

DATE OF SUBMISSION: BY 7TH JULY, 2023

ART SKILL BOOK -7

PAGE - 53: STILL LIFE (PASTEL COLOUR)

PAGE - 28: FLOWER (WATER COLOUR)

PAGE- 38: ANIMAL DRAWING (FOX; WATER COLOUR)

CRAFT WORK:

IN **LAKSHDEEP**, HANDICRAFTS IS A SOURCE OF INCOME FOR THE INHABITANTS OF LAKSHDEEP. THEIR HANDICRAFTS IS FAMOUS ALL AROUND THE WORLD. MAKE A POTTERY/ SHELL HANGING USING THE REQUIRED MATERIALS.



