



ST. Thomas School, Indirapuram
Holiday Homework, 2024-25
Class X



The summer has arrived and this is a chance to visit beautiful places. Enjoy your summer vacation and make some memories so that it takes away all your stress.

English

Welcome to a world of unparalleled beauty and adventure, where every corner tells a unique story waiting to be explored. Embark on a journey of the most captivating destinations:

1. Coorg
2. Assam
3. Goa
4. South Africa
5. Germany
6. Russia
7. Iran
8. London
9. Benaras
10. France

Make a BROCHURE in any one of the given places. Be creative, add pictures and details about the place.

Read all the chapters done in the class

Hindi

1. SDG 9 का उद्देश्य लचीला बुनियादी ढाँचा बनाना, टिकाऊ औद्योगिकीकरण को बढ़ावा देना है और नवाचार को बढ़ावा देना है। आर्थिक विकास, सामाजिक विकास और जलवायु कारवाइ बुनियादी ढाँचे, सतत औद्योगिक विकास और तकनीकी प्रगति में निवेश पर काफी हद तक निर्भर है।

उद्योग नवाचार और बुनियादी सुविधाएँ पर चित्र व स्लोगन सहित पोस्टर बनाएँ।

(सफेद A4 Sheet का प्रयोग करें)

2. (क) एक पतली कॉपी बनाएँ, जिसमें कोई दस हिन्दी की खबरें(एक पेज पर एक) चिपकाकर उस खबर को अपने शब्दों में सुन्दर लेखनी (सुलेख) में लिखें।
(ख) अपनी प्रत्येक दिन की वास्तविक दिनचर्या को दस पेज में लिखें।

Mathematics

ART INTEGRATED PROJECT – MATHEMATICS- CLASS X

You have to plan a visit to atleast 3 tourist places of UTTAR PRADESH or ARUNACHAL PRADESH.

Prepare an itinerary of your visit relating to mathematical concepts.

1. Select the required destination and calculate the cost of travel and stay for entire journey

(Relate to pair of linear equation in 2 variables)

2. Calculate the surface area or volume of the bag you have chosen for travel.

(Application of Mensuration)

3. Find the mathematical concept used in the architecture of the places you visit and mention it.

You have to present the above in the form of ppt and submit both hard and soft copy with in the first week of July.

Slide 1 : About the project, Introduction

Slide 2 : Content

Slide 3 : Itinerary of your visit

Slide 4&5 : for point 1(attach pictures too)

Slide 6 : for point 2 ((attach pictures too)

Slide 7&8 : for point 3((attach pictures too)

Slide 9 : Conclusion

Science

Read the given passages carefully and answer the questions as instructed

Q.1

PHYSICS (TO BE DONE IN PHYSICS NOTEBOOK)

Shyam participated in a group discussion in his inter school competition on the practical application of light and was very happy to win an award for his school. That very evening his father gave treat to celebrate Shyam's win. Shyam while sitting saw an image of a person sitting at his backside in his curved plate and could see that person's mobile drop in the flower bed. Person was not aware until Shyam went and informed him. He thanked Shyam for his clever move.

a) From which side of his plate Shyam observed the Incident –

i) Outward curved

ii) Inward curved

iii) Plane surface

iv) Mirror

b) Part of plate from which Shyam observed the incident acted like a-

i) Concave mirror ii) Convex mirror

iii) Plane mirror iv) lens

c) The nature of the size of the image formed in above situation is –

i) Real, inverted and magnified ii) Same size , laterally inverted

iii) Virtual, erect and diminished iv) Real , inverted and diminished

d) Magnification of the image formed by convex mirror is –

i) 0 ii) More than 1

iii) Equal to 1 iv) Less than 1

Q.2

BIOLOGY (TO BE DONE IN BIOLOGY NOTEBOOK)

The separation of the right side and the left side of the heart is useful to keep oxygenated and deoxygenated blood from mixing. Such separation allows a highly efficient supply of oxygen to the body. This is useful in animals that have high energy needs, such as birds and mammals, which constantly use energy to maintain their body temperature. In animals that do not use energy for this purpose, the body temperature depends on the temperature in the environment. Such animals, like amphibians or many reptiles have three-chambered hearts, and tolerate some mixing of the oxygenated and de-oxygenated blood streams. Fishes, on the other hand, have only two chambers to their hearts, and the blood is pumped to the gills, is oxygenated there, and passes directly to the rest of the body. Thus, blood goes only once through the heart in the fish during one cycle of passage through the body. On the other hand, it goes through the heart twice during each cycle in other vertebrates. This is known as double circulation

1. Human body needs efficient supply of oxygen. Explain.

2. What is the difference between single circulation and double circulation of blood?

3. Name the three major components of human circulatory system.

4. What is the other name for platelets and what is their function?

5. Blood is a liquid connective tissue. Identify the components of blood that perform the following functions:

- a) Clotting of blood _____
- b) Carrier of Oxygen _____
- c) Carrier of essential components and waste _____

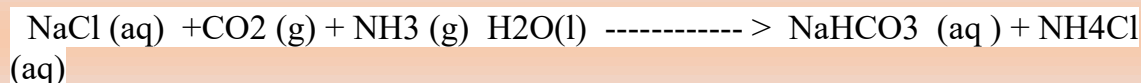
6. The internal structure of the vertebral heart explains why mammals and birds are warm-blooded animals while reptiles, amphibians and fish are cold-blooded animals. Justify.

7. How would our body be affected if the blood vessels start bleeding due to an injury? How does the body avoid this damage?

Q.3

CHEMISTRY (TO BE DONE IN CHEMISTRY NOTEBOOK)

Sodium bicarbonate (sodium hydrogencarbonate), commonly known as baking soda or bicarbonate of soda, is a chemical compound with the formula NaHCO_3 . It is a salt composed of a sodium cation (Na^+) and a bicarbonate anion (HCO_3^-). Sodium bicarbonate is a white solid that is crystalline but often appears as a fine powder. Sodium bicarbonate is prepared by following reaction



Baking soda acts as an antacid which is used to treat stomach upset and indigestion and used in fire extinguishers.

- i) What is the charge of the sodium ion?
- ii) What is the charge of the bicarbonate ion?
- iii) What do the symbols \rightarrow and \uparrow imply in the reaction?
- iv) If one more H^+ ion is removed from bicarbonate ion gives carbonate ion. Write the formula of the carbonate ion along with charge on ion
- v) The bicarbonate ion is _____ anion. (Monoatomic / Polyatomic)
- vi) State the law which must be fulfilled, while balancing the chemical equation.

AIL Project
Sub: Chemistry Class: X
(Roll no: 1-13)

The State of Arunachal Pradesh is endowed with **large deposits of a number of valuable minerals** such as coal, limestone, kaolin, clay, granite, glass-sand and uranium.

Make a project file depicting minerals (any five) and their uses abundantly found in Arunachal Pradesh.

Instructions: Use plastic file, colored pens, pictures and A4 size Papers.

AIL Project Sub:
Physics Class: X
(Roll no: 14-26)

▶ **Arunachal Pradesh**, situated in the North – Eastern tip of the country are hidden treasure of natural resources.

Both the States have huge potential for power generation.

- ▶ 1. Make a collage depicting existing power plants in the state of Arunachal Pradesh with their location.
- ▶ 2. Draw a flow chart showing different stages of power transmission and distribution from any Hydro power plant of Arunachal Pradesh.

**ALL Project
Sub: Biology
Class: X
(Roll no:27 onwards)**

Arunachal Pradesh is blessed with rich biodiversity. Explore and collect information and pictures about the biological diversity found in Arunachal Pradesh.

- * Biodiversity may include-hot spot regions, types of forests, endemic flora and fauna etc.**
- *Showcase your research work in the form of a collage or a photo album or scrap file.**

OR

Illustrate the structure of any body organ/ organelle/organ system/flower/any monohybrid cross/any ecological pyramid/food chain using different varieties of pulses and cereals grown in Arunachal Pradesh.

- *Use A4 size sheet**
- *Make neat and colored picture with proper outlines.**
- *Use creative ideas.**

Social Science

Subject Enrichment Activity (5 marks)

Every student has to compulsorily undertake one project on the topics according to the roll number given in the table.

2. Objective: The overall objective of the project work is to help students gain an insight and pragmatic understanding of the theme and see all the Social Science disciplines from interdisciplinary perspective. It should also help in enhancing the Life Skills of the students.

3.Students are expected to apply the Social Science concepts that they have learnt over the years in order to prepare the project report. If required, students may use different primary and secondary resources to prepare the project.

4. If possible, *different forms of Art* may be integrated in the project work.
5. Use eco-friendly products without incurring too much expenditure.
8. The Project Report should be *handwritten by the students themselves* on A4 size sheets.

PATTERN OF THE PROJECT FILE:

1. **Cover page** - Project title, school name, session, class, subject, name of the student
2. **First page**-Project title, subject, session, name of the student, class/ section
3. **Acknowledgment**- Acknowledging the individuals/institutions who helped in making the project
4. **Index**- With page numbers
5. **Introduction**- Purpose and aim of the project
6. **Content**- Present material/ data/ statistics with related pictures, pie charts, bar graphs, cartoons, slogans, maps etc. **on the left side of the file** to make a quality project.
7. **Conclusion**- Draw a relevant conclusion by mentioning the learning outcome and suggestions (if any).
8. **Bibliography**- Mention name of the book, newspaper, magazine, website, author, publisher.

(PROJECT SHOULD BE SUMMED UP IN 10-15 PAGES)

Make a Project File on the given topic as per the given format.

<u>Economics</u>	<u>Topic –</u>	<u>Sub-topics:</u>
	<u>Consumer Awareness</u>	1) Introduction
	Roll Nos.	2) Exploitation of consumers in marketplace
	10 A (1 – 14)	3) Consumer Protection Act-1986 (Consumer Rights)
	10 B (1 – 12)	4) Consumer Protection Act 2019.
	10 C (1 – 12)	5) Consumer Redressal Process (Case Study)
	10 D (1 – 12)	6) Conclusion
	10 E (1 – 12)	Note: Use related articles, pictures, slogans, statistics etc. to make a quality project.
		Refer Chapter 5 (Consumer Awareness) of Economics book

Political Science	Social Issues: Ethnic Relations in India: A Perspective on Pre-independent and Post-independent India Roll Nos. 10 A (15 – 27) 10 B (13 – 25) 10 C (13 – 25) 10 D (13 – 24) 10 E (13 – 24)	<ol style="list-style-type: none"> 1. Introduction 2. Pre-independent India 3. Post-independent India 4. Conclusion: My Perspective
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Geography	Topic- Sustainable Development Roll Nos. 10 A (29 – 43) 10 B (26 – 38) 10 C (26 – 38) 10 D (25 – 36) 10 E (25 – 34)	<ul style="list-style-type: none"> ✧ Define sustainable development. ✧ Sustainable development -- Agenda 2030. ✧ List the Goals of SDG 2030 SDG - 3 Good health and well being ✧ Define: Good health, well being ✧ List the goals within a goal: Health targets for SDG-3. ✧ Describe the following diseases supporting it with one case study of each (In India): <ol style="list-style-type: none"> i) Kala-Azar - Pockets of areas affected by it ii) Lymphatic Filariasis - Endemic pockets iii) Tuberculosis - India iv) Malnutrition - India (Pockets) ✧ Conclusion ✧ Suggestions ✧ Bibliography.
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Information Technology & Artificial Intelligence

Complete the IT practical file, questions are uploaded in EduNext.

Complete your copy work.

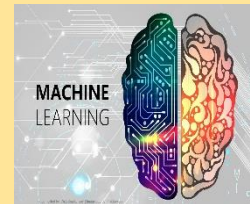
Portfolio Activity -

On white coloured A4 size sheet, write one computer related term starting with the first letter of your name. Define that term and paste the picture related to it.

For ex - Name - Minal Gupta

M for Machine learning

Definition - Machine learning is a subfield of artificial intelligence that uses algorithms to create models that enable machines to perform tasks that are usually only possible for humans.



French

1) Your friend is in London enjoying her/his summer vacations, write the dialogues of you two in french (15 dialogues).

Conversation téléphonique.

2) In your notebook write 10 sentences by using future simple.

3) Revise le passe composé.

German

Es war ein warmer Frühlingstag, als Anna beschloss, einen Spaziergang durch den nahegelegenen Wald zu machen. Der Duft der blühenden Blumen und das fröhliche Zwitschern der Vögel begleiteten sie, während sie den schmalen Pfad entlangging. Der Wald war ihr schon seit ihrer Kindheit vertraut, aber heute schien er eine besondere Magie auszustrahlen. Als sie tiefer in den Wald eindrang, entdeckte sie einen alten, moosbewachsenen Brunnen, den sie noch nie zuvor gesehen hatte. Neugierig näherte sie sich und blickte in das dunkle Wasser. Plötzlich schien der Brunnen zu leuchten, und ein goldenes Licht erfüllte die Umgebung. Eine leise Stimme flüsterte: "Wähle weise, was du wünschst, und es wird in Erfüllung gehen." Anna war erstaunt und konnte kaum glauben, was sie hörte. Sie dachte lange nach und entschied sich schließlich für einen Wunsch. Mit einem Herzen voller Hoffnung und einem Hauch von Angst sprach sie ihren Wunsch aus. Augenblicklich verblasste das Licht, und der Wald kehrte zu seiner normalen, ruhigen Atmosphäre zurück. Anna spürte eine Veränderung in sich und wusste, dass dieser Tag ihr Leben für immer verändern würde.

1. An welchem Tag beschloss Anna, einen Spaziergang zu machen?
2. Welche Geräusche begleiteten Anna auf ihrem Spaziergang?
3. Was entdeckte Anna im Wald, das sie noch nie zuvor gesehen hatte?
4. Wie beschrieb Anna den Brunnen, den sie fand?
5. Was geschah, als Anna in das Wasser des Brunnens blickte?
6. Welche Botschaft hörte Anna, als der Brunnen zu leuchten begann?
7. Was sollte Anna laut der leisen Stimme tun?
8. Wie fühlte sich Anna, als sie ihren Wunsch aussprach?
9. Was geschah mit dem Wald, nachdem Anna ihren Wunsch geäußert hatte?
10. Welche Veränderung spürte Anna nach dem Vorfall?

Adjective Endungen practice set

Nominative Case

1. Der ___ (schön) Mann läuft im Park.
2. Die ___ (klein) Katze spielt mit dem Ball.

3. Das ___ (alt) Haus steht an der Ecke.
4. Die ___ (nett) Kinder spielen im Garten.
5. Ein ___ (gut) Freund hilft immer.
6. Eine ___ (neu) Schule wurde gebaut.
7. Ein ___ (modern) Auto steht vor dem Haus.
8. Keine ___ (alt) Leute sind im Park.
9. Mein ___ (besser) Freund kommt heute zu Besuch.
10. Unser ___ (klein) Hund bellt laut.

Accusative Case

11. Ich sehe den ___ (groß) Baum im Garten.
12. Sie kauft die ___ (rot) Schuhe.
13. Er liest das ___ (spannend) Buch.
14. Wir besuchen die ___ (alt) Kirche.
15. Ich habe einen ___ (gut) Film gesehen.
16. Sie hat eine ___ (neu) Jacke gekauft.
17. Wir brauchen ein ___ (groß) Auto.
18. Sie trinken keinen ___ (kalt) Kaffee.
19. Ich liebe meinen ___ (lieb) Hund.
20. Sie vermisst ihren ___ (alt) Freund.

Dative Case

21. Ich gebe dem ___ (klein) Kind ein Geschenk.
22. Er hilft der ___ (alt) Frau über die Straße.
23. Wir danken dem ___ (freundlich) Mann.
24. Die Kinder spielen mit dem ___ (neu) Ball.
25. Sie spricht mit einer ___ (nett) Lehrerin.
26. Er schenkt einem ___ (gut) Freund ein Buch.
27. Wir wohnen in einem ___ (groß) Haus.
28. Sie antwortet keinem ___ (dumm) Menschen.
29. Ich gebe meinem ___ (besser) Freund das Geld.

30. Sie gratulieren ihrer ___ (jung) Schwester.

Mixed Cases

31. Der ___ (jung) Mann schenkt der ___ (schön) Frau eine ___ (rot) Rose.

32. Die ___ (alt) Dame gibt dem ___ (freundlich) Jungen einen ___ (klein) Keks.

33. Wir sehen die ___ (neu) Filme im ___ (groß) Kino.

34. Sie helfen den ___ (alt) Leuten im ___ (klein) Dorf.

35. Ein ___ (gut) Freund besucht die ___ (schön) Stadt.

36. Er erzählt dem ___ (klein) Kind eine ___ (spannend) Geschichte.

37. Die ___ (nett) Lehrerinnen helfen den ___ (jung) Schülern.

38. Ich gebe der ___ (lieb) Katze das ___ (kalt) Wasser.

39. Der ___ (alt) Mann liest das ___ (dick) Buch im ___ (gemütlich) Sessel.

40. Wir schreiben dem ___ (neu) Freund einen ___ (lang) Brief.

More Practice

41. Die ___ (schön) Blumen blühen im ___ (groß) Garten.

42. Ich höre den ___ (laut) Vogel im ___ (alt) Baum.

43. Sie fährt mit dem ___ (schnell) Zug nach Berlin.

44. Der ___ (klein) Junge malt ein ___ (bunt) Bild.

45. Die ___ (jung) Frau trägt ein ___ (modisch) Kleid.

46. Ich gratuliere der ___ (lieb) Freundin zum Geburtstag.

47. Er schenkt seiner ___ (alt) Mutter eine ___ (hübsch) Blume.

48. Der ___ (groß) Hund spielt mit einem ___ (klein) Ball.

49. Sie isst die ___ (lecker) Pizza im ___ (bekannt) Restaurant.

50. Der ___ (alt) Mann hilft der ___ (jung) Frau.

Coordinating Conjunctions (nebenordnende Konjunktionen)

Fill in the blanks with **und**, **oder**, **aber**, **denn**, **sondern**.

1. Ich gehe ins Kino, ___ ich kaufe Popcorn. (und)
2. Möchtest du Tee ___ Kaffee trinken? (oder)
3. Er ist müde, ___ er will noch fernsehen. (aber)
4. Ich kann nicht kommen, ___ ich bin krank. (denn)
5. Er ist nicht mein Freund, ___ mein Kollege. (sondern)
6. Sie liest ein Buch, ___ er spielt Videospiele. (und)
7. Willst du ins Theater gehen ___ lieber einen Film sehen? (oder)
8. Er hat es versucht, ___ es hat nicht funktioniert. (aber)
9. Sie fährt nicht mit dem Auto, ___ mit dem Fahrrad. (sondern)
10. Wir bleiben zu Hause, ___ das Wetter ist schlecht. (denn)

Subordinating Conjunctions (unterordnende Konjunktionen)

Fill in the blanks with **weil, dass, wenn, obwohl, damit, als, ob, bevor, nachdem, während**.

11. Ich gehe ins Bett, ___ ich müde bin. (weil)
12. Er glaubt, ___ er der Beste ist. (dass)
13. ___ es regnet, nehme ich einen Regenschirm mit. (wenn)
14. Sie ging zur Arbeit, ___ sie krank war. (obwohl)
15. Ich lerne Deutsch, ___ ich in Deutschland studieren kann. (damit)
16. ___ ich klein war, habe ich viel gelesen. (als)
17. Er fragte, ___ ich ihn begleiten möchte. (ob)
18. Mach deine Hausaufgaben, ___ du ins Bett gehst. (bevor)
19. ___ wir gegessen hatten, gingen wir spazieren. (nachdem)
20. ___ sie kochte, hörte sie Musik. (während)

Other Connectors

Fill in the blanks with **deshalb, trotzdem, entweder ... oder, weder ... noch, sowohl ... als auch**.

21. Es war kalt, ___ ging er ohne Jacke hinaus. (trotzdem)
22. Ich habe Hunger, ___ gehe ich jetzt essen. (deshalb)
23. ___ gehe ich ins Kino ___ ich bleibe zu Hause. (Entweder, oder)

24. Er ist ___ Arzt ___ Lehrer. (weder, noch)
25. Sie spricht ___ Englisch ___ Deutsch. (sowohl, als auch)
26. ___ nimmst du den Bus, ___ du fährst mit dem Fahrrad. (Entweder, oder)
27. Wir haben ___ Zeit ___ Lust. (weder, noch)
28. ___ ist er klug, ___ ist er fleißig. (Sowohl, als auch)
29. Er arbeitet hart, ___ er hat keinen Erfolg. (trotzdem)
30. Sie hat viel geübt, ___ hat sie die Prüfung bestanden. (deshalb)

Translation Practice

Translate the following sentences into German, paying attention to the correct usage of conjunctions.

31. I like apples and oranges.
32. Do you want tea or coffee?
33. He is tired but still awake.
34. I can't come because I am sick.
35. She is not my friend, but my sister.
36. He tried, but it didn't work.
37. I study hard so that I can pass the exam.
38. Although it was raining, we went for a walk.
39. When I was young, I played soccer.
40. He asked if I would go with him

Art & Craft

Need to make Pattachitra Painting

Size should be A3 size minimum.

Giving some reference pics only, u can google more typing " Easy Pattachitra Painting".

Use paint only

Sanskrit

- 1-‘नवीकरणीय ऊर्जा’ (रिन्यूएबल एनर्जी) से सम्बन्धित एक पोस्टर बनाएँ तथा संस्कृत-भाषा में कुछ वाक्य लिखें। (सफेद रंग के ए-4 साइज शीट पर करें।)
- 2-सूर्य से वार्तालाप करते हुए संस्कृत-भाषा में कुछ वाक्य लिखें। (संस्कृत नोटबुक में)
- 3- पढ़ाया हुआ याद करें।

Library

Vacation Time ! Time to rejoice and rejuvenate !. This is also the time to put on your creative hats. So let your finger dance around with ink pen, paper, colour, your mind be filled with imagination. "Reading is essential for all those who seek to rise above the ordinary."

- 1) Read any classic novel and Read Newspaper Daily,
- 2) Some suggested Author – **Ruskin Bond**
Sudha Murty
Enid Blyton
Premchand
William Shakespeare

ACTIVITIES:

CLASS VI TO XI

- 1) ‘BE AN AUTHOR’ you are required to write your own story book in English and Hindi. Exhibit your creativity in making caricatures or Pictures according to your story. Decorate your book with an appealing Book Cover.
- 2) Make a ‘WISHLIST’ of books that you want to read. 5 Hindi books, 5 English Books.
- 3) Make a **Vshaped** desktop plate with library quotes (refer to the picture attached .



HAPPY
Holidays