THE S D VIDYA SCHOOL, NOIDA

SUMMER HOLIDAY HOMEWORK (2023-24)

CLASS X

Dear students,

"Self-belief and hard work will always earn you success."

Holidays provide a much-needed respite from the daily routine and academic pressure. It allows you to unwind, spend quality time with family and friends, and engage in activities you love. Balancing holidays and studies is a crucial aspect of a student's life. While they are meant for relaxation and enjoyment, it is equally important to maintain a certain level of focus on studies during these breaks. By setting realistic goals and creating a conducive study environment, you can effectively utilize holidays to consolidate knowledge, enhance skills, and stay academically on track. Moreover, incorporating breaks and leisure activities into your study routine can help to maintain focus, reduce stress, and make study sessions more productive. Ultimately, by finding the right balance between holidays and studies you can enjoy the break while also making progress in your academic journey.

KEEP IN MIND TO:

● Pray to the Almighty daily and thank Him for the blissful life that you enjoy.
● Give prime importance to your health.
● Set and maintain a routine at home. Be a good time manager.
● Practice positive thinking and be grateful for what we have.
● Relax, listen to music, or read books.
● Be a helping hand to your parents and learn the skill of shared responsibility.

MOST IMPORTANT:
● Make sure that all the syllabus done by May is revised thoroughly.
● Complete the assignments.

REMEMBER:
   "THE FUTURE BELONGS TO THE COMPETENT. GET GOOD, GET BETTER, BE THE BEST!"

Wishing all the students a joyful learning and happy holidays.

<div align="center">HINDI</div>

हिन्दी - ब्रह्मपुत्र नदी के उद्गम व संगम स्थान भारत के मानचित्र पर दर्शाते हुए इसकी पूर्ण जानकारी देते हुए लेख लिखिए |

नदियों के जल के संरक्षण व उपयोगिता पर तथ्यों के आधार पर निबंध लिखिए |

कार्यपत्रिका -1

1. कस्तूरी कहाँ होती है और मृग उसे कहाँ तलाशता है?

2. कबीर निंदक को कहाँ रखने को कहते हैं?

3. व्यक्ति को ईश्वर की प्राप्ति कब तक नहीं होती?

4. मीठी वाणी बोलने से क्या लाभ होता है?

5. संसार में कौन दुखी है और कौन सुखी है?

6. निंदक के समीप रहने से क्या लाभ होता है?

7. विरह का सर्प वियोगी की क्या दशा कर देता है?

8. "एकै आषिर पीव का पढै सु पंडित होय" से कबीर क्या शिक्षा देना चाहते हैं ?

9. कबीर की साखियों से क्या शिक्षा मिलती है ?

10. कबीर की भाषा पर प्रकाश डालिए |

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SOCIAL SCIENCE

ASSIGNMENT –1

GEOGRAPHY

</div>

RESOURCES AND DEVELOPMENT

1. Which one of the following types of resource is iron ore?

(a) Renewable

(b) Biotic

(c) Flow

(d) Non-renewable

2. Under which of the following type of resource can tidal energy be put?

(a) Replenishable

(b) Human-made

(c) Abiotic

(d) Non-renewable

3. Which one of the following is the main cause of land degradation in Punjab?

(a) Intensive cultivation

(b) Deforestation

(c) Over-irrigation

(d) Overgrazing

4. In which one of the following States is terrace cultivation practised?

(a) Punjab

(b) Plains of Uttar Pradesh

(c) Haryana

(d) Uttaranchal

5. In which of the following States is black soil found?

(a) Jammu & Kashmir

(b) Gujarat

(c) Rajasthan

(d) Jharkhand

6. What percentage of our land should be under forest according to the National

Forest Policy (1952)?

(a) 33

(b) 22.5

(c) 31

(d) 30

7. Materials in the environment which have the potential to satisfy human needs but

human beings do not have appropriate technology to access them are called:

(a) Potential resource

(b) Stock

(c) Developed resource

(d) Reserves

8. India's territorial water extends up to a distance of:

(a) 12 km

(b) 12 nautical miles

(c) 19.2 miles

(d) 200 nautical miles

9. Resources that take long geological time for their formation are called:

(a) Renewable resources

(b) Reserve

(c) Community resources

(d) Non-renewable resources

10. Area sown more than once in an agricultural year plus net sown area is known

as:

(n) Net sown area

(b) Forest cover

(c) Waste land

(d) Gross cropped area

11. The total degraded land in our country is:

(a) 133 million hectares

(b) 130 million sq. km.

(c) 140 million hectares

(d) 130 million hectares

12. In which of the following States mining has caused severe land degradation?

(a) Gujarat

(b) Jharkhand

(c) Kerala

(d) Uttaranchal

13. The main cause of land degradation in Punjab, Haryana and Western Uttar

Pradesh is:

(a) Mining

(b) Over irrigation

(c) Deforestation

(d) Over grazing

14. Which is the most common soil of Northern India?

(a) Black soil

(b) Laterite soil

(c) Alluvial soil

(d) Red soil

15. Red soil is mostly found in:

(a) Parts of Jammu & Kashmir

(b) Upper Ganga Plains

(c) Eastern and Southern part of Deccan Plateau

(d) None of the above

16. Red soil is reddish in colour due to:

(a) high clay content

(b) presence of kankar nodules in the subsoil

(c) diffusion of iron in igneous and metamorphic rocks

(d) high moisture content

17. Which of the following is not important for soil formation?

(a) Relief

(b) Parent rock

(c) Climate

(d) Duration of day

18. Black soil is also called:

(a) Bangar

(b) Khadar

(c) Regur

(d) Humus

19. Black soils are common in:

(a) Deccan trap region

(b) Kashmir Valley

(c) Ganga Valley

(d) Northern Plains

20. Laterite soil is very useful for growing:

(a) Rice, wheat and mustard

(b) Tea, coffee and cashewnut

(c) Pulses, sugarcane and resin

(d) None of the above

ASSIGNMENT –2

ECONOMICS

DEVELOPMENT

Q1…Multiple choice questions:

1) For development, people look at a mix of _____.

a) goals

b) responsibilities

c) accountability

d) none of the above

2) To compare the development of countries, there _____ is considered to be one

of the most important attributes.

a) income

b) population

c) demographics

d) none of the above

3) For comparison between countries, total income is not such a useful measure.

State whether true or false.

a) true

b) false

4) Since countries have different _____, comparing total income will not tell us

what an average person is likely to earn.

a) economic policies

b) reserves

c) resources

d) populations

5) In World Development Reports, brought out by the_____, per capita income

criterion is used in classifying countries.

a) UNICEF

b) World Bank

c) World Economic Forum.

d) United Nations

6) Countries with per capita income of US$ 12616 per annum and above in 2012 are

called _____.

a) underdeveloped countries

b) developing countries

c) poor countries

d) rich countries

7) India comes in the category of _____ countries because its per capita income

in 2012 was just US$ 1530 per annum.

a) low middle income

b) middle income

c) high middle income

d) none of the above

8) Among the following states, _____ has the highest per capita income as per

2012-13 figures.

a) Maharashtra

b) Bihar

c) Kerala

d) Jharkhand

Q2… Define the term National Income?

Q3…. What is meant by sustainability of development?

Q4…. Kerala, with lower per capita income, has a better human development

ranking than Punjab. Hence, per capita income is not a useful criterion at all and

should not be used to compare States. Do you agree? Discuss

Q5…. Conflicting goals can also be developmental goals. Elaborate with examples.

ASSIGNMENT –3

DEMOCRATIC POLITICS

POWER SHARING

1) In Belgium, out of the total population, 59 per cent live in the Flemish region and

speak _____ language.

a) Dutch

b) French

c) English

d) German

2) In Belgium, there were tensions between the Dutch-speaking and _____-

speaking communities during the 1950s and 1960s.

a) German

b) French

c) English

d) Russian

3) In the island nation of Sri Lanka, the Sri Lankan Tamil population is concentrated

in the _____ and _____ of the country.

a) South and West

b) South and East

c) North and Central

d) North and East

4) Most of the Sinhala-speaking people of Sri Lanka are _____.

a) Christians

b) Hindus

c) Buddhists

d) Muslims

5) Sri Lanka emerged as an independent country in _____.

a) 1948

b) 1947

c) 1949

d) 1958

6) In _____, an Act was passed to recognise Sinhala as the only official

language, thus disregarding Tamil.

a) 1958

b) 1956

c) 1968

d) None of the above

Q2…. "Power Sharing is the very spirit of democracy". Justify the statement.

Q3……. What is meant by the system of 'checks and balances?

Q4…. How is Belgium's power-sharing path different from any other country?

Q5.... Analyse how majoritarianism has increased the feeling of alienation among

the Sri Lankan Tamils?

PROJECT WORK

Make PPT and scrap book on the agricultural development of Arunachal Pradesh

On the outline map of India label and locate Arunachal Pradesh.

On the same map of India label and locate soil type of Arunachal Pradesh.

HISTORY

CH-1, THE RISE OF NATIONALISM IN EUROPE

1. What was the major change that occurred in the political and constitutional scenario due

to the French Revolution in Europe?

2. What was the main aim of the French revolutionaries?

3. Name the Treaty of 1832 that recognised Greece as an independent nation.

4. Name the event that mobilised nationalist feelings among the educated elite across

Europe in 1830-1848?

5. Who was proclaimed German Emperor in a ceremony held at Versailles in January 1871?

6. What did Liberal Nationalism stand for? Explain any four ideas of Liberal Nationalists in the economic sphere.

7. Explain any three causes of conflict in the 'Balkan area' after 1871.

8. Name the states offering homage to the Statue of Liberty.

9. Explain any four provisions of the Napoleon Civil Code of 1804.

10. Describe any three steps taken by the French revolutionaries to create a sense of collective identity among the French people.

11. Examine the role of women in nationalist struggles of Europe.

12. Why were the years of 1830s of great hardship in Europe? Explain any five reasons.

13. Prepare a Power point presentation on Hunger, Hardship and Popular revolt.

SCIENCE

Project of all the Science subjects - Physics, Chemistry and Biology should follow the following

format:

1. Title of the Project

2. Certificate

3. Acknowledgement

4. Index

5. Introduction of the Topic

6. Description

7. Creative work if any

8. Bibliography/ References

Project should be done on light coloured A-4 size sheet.

Roll No 1 to 9 – will do Biology project

Roll No 10 to 18- will do Physics project

Roll No 19 to 27- will do Chemistry Project

All assignment sheets should be solved by each child.

TOPIC – BONDING IN COMPOUNDS

i) Introduction to Ionic and covalent bond. Write important characteristics features of ionic and covalent bond.

ii) Write chemical composition of glass beads and write the type of bond present in them.

iii) Design beaded jewellery worn by people of Arunachal Pradesh using paper mache or clay.

iv) Make a collage of different types of jewellery worn by them.

v) Attachments

Reference link:

https://www.youtube.com/watch?v=OTgpN62ou24 (Ionic & Covalent bonds)

https://www.youtube.com/watch?v=_H-aPiC796E (Bead making from paper mache)

https://www.youtube.com/watch?v=WPsnXoc9j14&feature=youtu.be (use of clay in jewellery

making)

https://www.kepler.co.th/17168311/glass-beads (composition of glass beads)

https://www.time8.in/unique-traditional-jewellery-of-arunachal-

pradesh/#:~:text=Beads%2C%20glass%20beads%2C%20coloured%20bird,and %20earrings%2C

%20among%20other%20things

https://local-moda.blogspot.com/2012/12/tribal-jewelry-and-adornments-of.h tml?m=0

https://indianbijou.wordpress.com/2015/04/18/north-east-india-jewellery/ (jewellery of Arunachal Pradesh)

CHEMISTRY (ASSIGNMENT)

CHAPTER – CHEMICAL REACTIONS AND EQUATIONS

Choose the correct answer:

1. Which of the following is not a physical change?

(a) Boiling of water to give water vapour

(b) Melting of ice to give water

(c) Dissolution of salt in water

(d) Combustion of Liquefied Petroleum Gas (LPG)

2. The following reaction is an example of a $4NH_3$ (g) + $5O_2$ (g) $\rightarrow$ $4NO$(g) + $6H_2O$(g)

(i) displacement reaction (ii) combination reaction (iii) redox reaction (iv) neutralisation reaction

(a) (i) and (iv)

(b) (ii) and (iii)

(c) (i) and (iii) (d) (iii) and (iv)

3. Which of the following statements about the given reaction are correct? $3Fe(s)$ +

$4H_2O$(g) $\rightarrow$ Fe_3O_4 (s) + $4H_2$ (g) (i) Iron metal is getting oxidised (ii) Water is getting

reduced (iii) Water is acting as reducing agent (iv) Water is acting as oxidising agent

(a) (i), (ii) and (iii)

(b) (iii) and (iv)

(c) (i), (ii) and (iv)

(d) (ii) and (iv)

4. Which of the following are exothermic processes? (i) Reaction of water with quick

lime (ii) Dilution of an acid (iii) Evaporation of water (iv) Sublimation of camphor

(crystals)

(a) (i) and (ii)

(b) (ii) and (iii)

(c) (i) and (iv)

(d) (iii) and (iv)

5. Three beakers labelled as A, B and C each containing 25 mL of water were taken. A

small amount of NaOH, anhydrous CuSO4 and NaCl were added to the beakers A, B

and C respectively. It was observed that there was an increase in the temperature of

the solutions contained in beakers A and B, whereas in case of beaker C, the

temperature of the solution falls. Which one of the following statement(s) is(are)

correct? (i) In beakers A and B, exothermic process has occurred. (ii) In beakers A and

B, endothermic process has occurred. (iii) In beaker C exothermic process has

occurred. (iv) In beaker C endothermic process has occurred.

(a) (i) only

(b) (ii) only

(c) (i) and (iv)

(d) (ii) and (iii)

6. Which among the following is(are) double displacement reaction(s)? (i) Pb + CuCl2 →

PbCl2 + Cu (ii) Na2 SO4 + BaCl2 → BaSO4 + 2NaCl (iii) C + O2 → CO2 (iv) CH4 + 2O2 →

CO2 + 2H2O

(a) (i) and (iv)

(b) (ii) only

(c) (i) and (ii)

(d) (iii) and (iv)

7. Which among the following statement(s) is(are) true? Exposure of silver chloride to

sunlight for a long duration turns grey due to (i) the formation of silver by

decomposition of silver chloride (ii) sublimation of silver chloride (iii) decomposition

of chlorine gas from silver chloride (iv) oxidation of silver chloride

(a) (i) only

(b) (i) and (iii)

(c) (ii) and (iii)

(d) (iv) only

8. Barium chloride on reacting with ammonium sulphate forms barium sulphate and ammonium chloride. Which of the following correctly represents the type of the reaction involved? (i) Displacement reaction (ii) Precipitation reaction (iii) Combination reaction (iv) Double displacement reaction

(a) (i) only

(b) (ii) only

(c) (iv) only

(d) (ii) and (iv)

9. Electrolysis of water is a decomposition reaction. The mole ratio of hydrogen and oxygen gases liberated during electrolysis of water is

(a) 1:1

(b) 2:1

(c) 4:1

(d) 1:2

10. Which of the following is(are) an endothermic process(es)? (i) Dilution of sulphuric acid (ii) Sublimation of dry ice (iii) Condensation of water vapours (iv) Evaporation of

water

(a) (i) and (iii)

(b) (ii) only

(c) (iii) only

(d) (ii) and (iv)

Answer the following questions:

11. 2 g 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.

12 When you have mixed the solutions of lead (II) nitrate and potassium iodide.

(a) What was the colour of the precipitate formed?

b) Write the balanced chemical equation for this reaction.

c)Is this a double displacement reaction?

13 The following diagram displays a chemical reaction. Observe carefully and answer the

following:

 a) Identify the type of chemical reaction that will take place and define it. How will the colour of the salt change?

b) Write the chemical equation of the reaction that takes place.

c) Mention one commercial use of this salt.

14 A magnesium ribbon is burnt in oxygen to give a white compound X accompanied by emission of light. If the burning ribbon is now placed in an atmosphere of nitrogen, it

continues to burn and

forms a compound Y.

(a) Write the chemical formulae of X and Y.

 (b) Write a balanced chemical equation, when X is dissolved in water.

15 A shiny brown coloured element 'X' on heating in air becomes black in colour. Name the element 'X' and the black coloured compound formed.

BIOLOGY

TOPIC- FORESTS AND WILD LIFE

1. Make list of species found only in Arunachal Pradesh or Uttar Pradesh.

2. Make a list of forest produce that people of above-mentioned states use.

3. Make a poster to show the relationship between the forest and wildlife of both the states.

https://www.indianetzone.com/51/wildlife_arunachal_pradesh.htm

https://www.mapsofindia.com/maps/wildlife/wildlife-uttarpradesh.htm

https://www.researchsquare.com/article/rs-51721/v1

https://upforestcorporation.co.in/

ASSIGNMENT

TOPIC - NUTRITION & RESPIRATION (Life Processes)

1. Which of the following statements about the autotrophs is incorrect?

(a) They synthesise carbohydrates from carbon dioxide and water in the presence of sunlight and chlorophyll

(b) They store carbohydrates in the form of starch

(c) They convert carbon dioxide and water into carbohydrates in the absence of sunlight

(d) They constitute the first trophic level in food chains

2. In which of the following groups of organisms, food material is broken down outside the

body and absorbed?

(a) Mushroom, green plants, Amoeba

(b) Yeast, mushroom, bread mould

(c) Paramecium, Amoeba, Cuscuta

(d) Cuscuta, lice, tapeworm

3. Select the correct statement

(a) Heterotrophs do not synthesise their own food

(b) Heterotrophs utilise solar energy for photosynthesis

(c) Heterotrophs synthesise their own food

(d) Heterotrophs are capable of converting carbon dioxide and water into carbohydrates

4. Which is the correct sequence of parts in human alimentary canal?

(a) Mouth → stomach → small intestine → oesophagus → large intestine

(b) Mouth →oesophagus → stomach → large intestine → small intestine

(c) Mouth → stomach → oesophagus → small intestine → large intestine

(d) Mouth → oesophagus → stomach → small intestine → large intestine

5. If salivary amylase is lacking in the saliva, which of the following events in the mouth cavity

will be affected?

(a) Proteins breaking down into amino acids

(b) Starch breaking down into sugars

(c) Fats breaking down into fatty acids and glycerol

(d) Absorption of vitamins

6. The inner lining of stomach is protected by one of the following from hydrochloric acid.

Choose the correct one

(a) Pepsin

(b) Mucus

(c) Salivary amylase

(d) Bile

7. Which part of alimentary canal receives bile from the liver?

(a) Stomach

(b) Small intestine

(c) Large intestine

(d) Oesophagus

8. A few drops of iodine solution were added to rice water. The solution turned blue-black in

colour. This indicates that rice water contains

(a) complex proteins

(b) simple proteins

(c) fats

(d) starch

9. In which part of the alimentary canal food is finally digested?

(a) Stomach

(b) Mouth cavity

(c) Large intestine

(d) Small intestine

10. Choose the function of the pancreatic juice from the following

(a) trypsin digests proteins and lipase carbohydrates

(b) trypsin digests emulsified fats and lipase proteins

(c) trypsin and lipase digest fats

(d) trypsin digests proteins and lipase emulsified fats

11. When air is blown from mouth into a test-tube containing lime water, the lime water

turned milky due to the presence of

(a) oxygen

(b) carbon dioxide

(c) nitrogen

(d) water vapour

12. Which of the following statement(s) is (are) true about respiration?

(i) During inhalation, ribs move inward and diaphragm is raised

(ii) In the alveoli, exchange of gases takes place i.e., oxygen from alveolar air diffuses into blood and carbon dioxide from blood into alveolar air

(iii) Haemoglobin has greater affinity for carbon dioxide than oxygen

(iv) Alveoli increase surface area for exchange of gases

(a) (i) and (iv)

(b) (ii) and (iii)

(c) (i) and (iii)

(d) (ii) and (iv)

13. Which of the following statement (s) is (are) true about heart?

(i) Left atrium receives oxygenated blood from different parts of body while right atrium

receives deoxygenated blood from lungs

(ii) Left ventricle pumps oxygenated blood to different body parts while right ventricle pumps

deoxygenated blood to lungs

(iii) Left atrium transfers oxygenated blood to right ventricle which sends it to different body parts

(iv) Right atrium receives deoxygenated blood from different parts of the body while left ventricle pumps oxygenated blood to different parts of the body

(a) (i)

(b) (ii)

(c) (ii) and (iv)

(d) (i) and (iii)

14. Oxygen liberated during photosynthesis comes from

(a) water

(b) chlorophyll

(c) carbon dioxide

(d) glucose

15. The blood leaving the tissues becomes richer in

 (a) carbon dioxide

(b) water

(c) heamoglobin

(d) oxygen

Short answer Type

1 Why do fishes die when taken out of water?

2. Explain the term "Energy Currency". Which substance acts as energy currency in plants and animals?

3. When does anaerobic respiration occur in man and yeast?

4. Respiration requires 02. How did the first cells on the earth manage to survive in an atmosphere that lacked 02?

5. How does a tree trunk exchange gases with the environment although it lacks stomata?

6. Draw neatly labelled diagram of Human Respiratory System.

7. Write the modifications of air sac to help in maximum gaseous exchange.

8. Explain with the help of diagram the mechanism of Respiration.

9. Write the difference between –

a) Intercellular and intracellular Respiration

b) Breathing and Respiration

c) Aerobic and anaerobic Respiration

10. How do the roots of Pneumatophores respire? (Hint -Plant growing in marshy place)

PHYSICS

TOPIC- REFRACTION OF LIGHT

(i) What is refraction, how does it occur in nature?

(ii) Make ray diagrams of image formation by convex and concave lens.

(iii) Why does sun rises early in Arunachal Pradesh?

ASSIGNMENT (Ch-Light)

Q1. What is light? What is its nature?

Q2. What is the speed of light in vacuum?

Q3. What is a mirror?

Q4. What is the focal length of a plane mirror?

Q5. Differentiate between real and virtual image.

Q6. What type of image is formed on a cinema screen?

Q7. A concave mirror is a part of sphere of radius 40 cm. What is the focal length of the mirror?

Q8. Radius of curvature of a mirror is 20 cm. What type of mirror is it?

Q9. Magnification of a mirror is +2/3. What type of mirror is it?

Q10. Magnification of a mirror is '—1'. What type of mirror is it? What is the position of object and image? Give the nature of image.

Q11. Name the type of mirror used:- (i) as a reflector in search light (iii) by the dentist (ii) as side view mirror in vehicles. (iv) as a shaving mirror

Q12. Wherever you may stand in front of mirror, your image is always erect & same sized, what type of mirror is it?

Q13. (a) A ray of light strikes the mirror at an angle of 20° . What is the angle of reflection?

(b) Give the angle of incidence and reflection for normal incidence.

Q14. A candle is kept in front of plane mirror at distance of 15 cm. What is distance between candle & its image?

Q15. Radius of curvature of a mirror is +24cm. Name the kind of mirror and give the characteristics of the image formed by it.

Q16. Define refraction. State the laws of refraction.

Q17. How does the lateral displacement depend upon:- (a) Thickness of the glass slab. (b) Angle of incidence

Q18. What is the lateral displacement when a ray of light falls normally on a glass slab?

Q19. Refractive index of water with respect to air is 1.33, what is refractive index of air with respect to water?

Q20. Under what condition, the angle of refraction will be equal to the angle of incidence?

Q21. Refractive index of glass is 1.65, what is the speed of light in glass?

Q22. If refractive indices of alcohol & water are 1.36 and 1.33 respectively, which of the two is optically denser?

ENGLISH

ASSIGNMENT I-

(ART INTEGRATED PROJECT WORK)

TOPIC: Conflict between Man and Nature-An Autobiography of a Tree

(from the poem 'The Trees' by Adrienne Rich)

🎬 Make a Project File defining and illustrating the critical appreciation of the poem 'The Trees' by Adrienne Rich.

The project must include the following in the same sequence-

1.Title of project

2. Certificate

3. Acknowledgement

4. Index

5. Introduction to the topic

6.About the poet

7.Analysis on the poem's theme/s and literary devices

8.As a tree, elucidate the destruction caused to you(tree) by man

9.As a tree, elaborate what you(tree) want humans to do for you and express your

wish to be one amongst the lush green trees in the forests of Arunachal Pradesh

10.Showcase Arunachal Pradesh's rich diversity of different forest types (any three)

and the kinds of trees in them

11.Conclusion and reflection on the significance of the poem 'The Trees'

12.Bibliography / References

🎬 You may display your creative vigour.

ASSIGNMENT II –

(CREATIVE WRITING SKILLS)

🎬 To be done in the Writing Skills register

1)Tourism being one of the biggest and fastest- growing industries globally, affects the economic, sociocultural, environmental and educational resources of nations. Improving tourism industry in India would thus lead to national development in many spheres. As Ankit/ Ankita, write a **letter to the editor** of The Times of India expressing your views on the same.

2)You are Sunita Roy, the librarian of Sunbeam Public School, New Delhi. You had placed an order for some books for your school library however, wrong books have been delivered to you.Write a letter to the Unique Book Co., New Delhi, **complaining** about the same.

3)You are Ankit / Ankita resident of 111, Jai Hind colony, Mumbai – 400589, a student of class 10 and want to take up a Summer course in Computer graphic design. Write a **letter of inquiry** to the Director of NIIT Computech seeking details on the course content, eligibility, fees, timings and future scope of the course.

4)You are Geeta/Ganesh, hostel warden, Radha Krishna Public School, Vrindavan, Uttar Pradesh. Write a letter to the Sales Manager, Bharat Electronics and Domestic Appliances Ltd, **placing an order** for fans, table lamps, tubelights and geysers that you wish to purchase for the hostel. Also ask for discount permissible on the purchase.

संस्कृत गहकार्य

1) अध्याय प्रथम से पञ्चम के शब्दार्थों से एक शब्द कोश का निर्माण करें तथा हस्त निर्मित सञ्चिका (कापी) बनाए |

2) अध्याय प्रथम और तृतीय के श्लोकों को अर्थ सहित हस्त निर्मित सञ्चिका (कापी) में लिखिए व याद कीजिए, इसी कार्य

पुस्तिका में सन्धियों के नियम भी लिखिए |

3) पढाए गए संस्कृत अध्यायों को बार-बार पढकर व समझकर बुद्धिकौशल को बढाएँ |

MATHEMATICS

ASSIGNMENT 1

PROJECT WORK

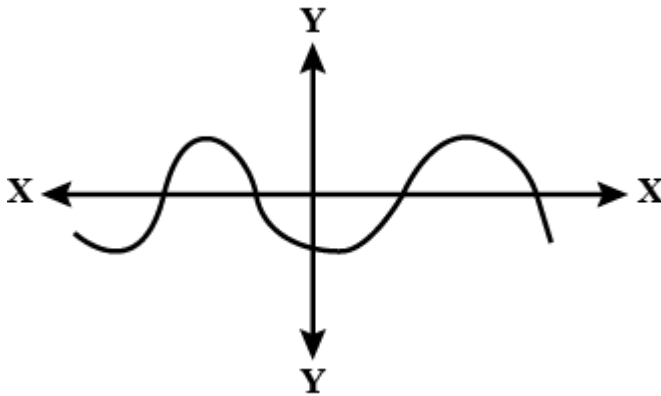Art Integration Project

Topic: Surface area and volumes.

The religious monuments are geometric designs that hold a great deal of symbolism in all cultures. Such monuments are believed to represent different aspects of the universe and are used as instruments of meditation and symbols of prayer.

Apply mathematics on such monuments and compare architectural designs (Temples, Mosque, Church, Monastery .... etc.) of Arunachal Pradesh.

Identify the different shapes as cube, cuboid, cylinder, cone, hemisphere and sphere and also for each give a detailed description of its surface area and volume.

ASSIGNMENT 2

1. No. of zeros in the graph given is

(a) 4 (b) 2 (c) 1 (d) 3

2. Given that HCF(1152, 1664) = 128 the LCM(1152, 1664) is

(a) 14976 (b) 1664 (c) 1152 (d) none of these

3. If the HCF of 65 and 117 is expressible in the form 65m − 117, then the value of m is

(a) 4 (b) 2 (c) 1 (d) 3

4. The HCF of smallest composite number and the smallest prime number is

(a) 0 (b) 1 (c) 2 (d) 3

5. A quadratic polynomial whose sum and product of zeroes are −3 and 4 is

(a) $x^2 − 3x +12$ (b) $x^2 + 3x + 12$ (c) $2x^2 + x − 24$. (d) none of the above.

Long answer type questions

1. Prove that $7 + 2\sqrt{3}$ is an irrational number

2. Prove that $\sqrt{3} + \sqrt{5}$ is an irrational number

3. Find the value of k, so that the following system of equations has no solution:

(a) $3x + y = 1$; $(2k -1)x + (k -1) y = (2k -1)$.

(b) $3x + y = 1$; $(2k -1)x + (k -1) y = (2k +1)$.

(c) 5. $x - 2y = 3$; $3x + ky = 1$.

(d) $x + 2y = 5$; $3x + ky + 15 = 0$.

LONG ANSWER TYPE QUESTIONS

1. Solve the following system of linear equations graphically: $4x -3y + 4 = 0$; $4x + 3y - 20 = 0$. Calculate the area bounded by these lines and x-axis.

2. Solve the following system of linear equations graphically: $4x -5y +16 = 0$; $2x + y - 6 = 0$. Find the coordinates of the vertices of the triangle formed by these lines and y-axis.

 3. 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.

4. The sum of the digits of a two-digit number is 15. The number obtained by interchanging the two digits exceeds the given number by 9. Find the number.

5. The denominator of a fraction is greater than its numerator by 11. If 8 is added to both its numerator and denominator, it reduces to 1/3. Find the fraction.

6. If twice the son's age in years is added to the mother's age, the sum is 70 years. But if twice The mother's age is added to the son's age, the sum is 95 years. Find the age of the mother and her son.

7. A boat goes 30 km upstream and 44 km downstream in 10 hours. In 13 hours, it can go 40 km upstream and 55 km down-stream. Determine the speed of the stream and that of the boat in stillwater.

8. The sum of the areas of two squares is 468 m2. If the difference of their perimeters is 24 m, find the sides of the two squares.

9. Rita can row downstream 20 km in 2 hours, and upstream 4 km in 2 hours. Find her speed of rowing in still water and the speed of the current.

10.Rohit travels 300 km to her home partly by train and partly by bus. She takes 4 hours if she travels 60 km by train and the remaining by bus. If she travels 100 km by train and the remaining by bus, she takes 10 minutes longer. Find the speed of the train and the bus separately.

11. If sinA = cosA , find the value of 'A'

12. If sin A = 3/5, calculate cosA.

13. If sinA + cosA = p and secA + cosec A = q, show that q (p 2 -1)= 2p

14. If A= 30 ° then verify that sin2A = 2 tan A / (1 + tan 2A)

15. If cos A = 12/13 verify that: sin A(1 -tan A) = 35/156 .