TECNIA INTERNATIONAL SCHOOL
(AN ENGLISH MEDIUM SR. SEC. SCHOOL AFFILIATED TO CBSE)
F-19, SECTOR-8, ROHINI
NEW DELHI-85
2018 – 19
CLASS – IX

ENGLISH

Design your own newspaper under the heading 'EXPRESSION' including the following topics:

a)   Article:

Write an article on the topic 'Cruelty Towards Animals' in about 150 words.

d)   Story:

Write a story in about 150-200 words using the lines given below:

Two boys found an old coin while digging a hole. They discussed what they should do with it ……….

d)   An Interview:

Take an interview of your neighbour / friend regarding how he / she will plan to spend summer vacation and how he / she will make it cheerful.

b)   Vocabulary:

Paste any article and underline 20 verbs mentioning their meaning and antonyms with the help of dictionary and learn them.

<u>हिंदी</u>

❖ किन्ही दो महान समाज सुधारकों के चित्र चिपकाकर उनका जीवन परिचय लिखिए |

❖ मशीनी युग ने किस तरह छोटे कारीगरों को प्रभावित किया है ? अपने आस पास के उदाहरण देकर अपने उत्तर की पुष्टि कीजिए |

❖ किसी एक विषय पर निबंध लिखिए

      मेरे जीवन का लक्ष्य

        या

     पर्यावरण के प्रति हमारा

❖ वृक्ष संरक्षण या वृक्षारोपण विषय पर समाज को जागृत करने के लिए एक आकर्षक पोस्टर बनाइए |

❖ कोई 25 शब्द लिखकर उनका वर्ण-विच्छेद कीजिए |

नोट :- कालांतर परीक्षा -1 के सम्पूर्ण पाठ्यक्रम का अभ्यास कीजिए |

MATHEMATICS

PROJECTS

Make an illustrative project file for the following:

1.
(i)   Search 10 new mathematical symbols from the internet, books, magazines etc.

(ii)   Collect information about their origin, meaning and their use in different areas of
        mathematics.

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

2. (i) Collect information about the bidding value of all 11 players of any 3 teams of IPL 2017.
(ii) Find mean and modal bidding value for each team.
 (iii) Find the median for the bidding values of each team.
(iv) Draw a pie chart to represent number of players from different countries in these 3 IPL franchises.
(v) Draw histogram and frequency polygon to represent the runs scored by the winning team in the final match in different overs. Represent overs on the X axis (taking class intervals as $0 - 2$, $2 - 4$, ...) and run scored on Y axis.

ASSIGNMENT (To be done in the assignment register)

Topic: Number System

Q1.Find three rational numbers between: (i) 1 3 and 5 4 (ii) 3 7 and 2 7 (iii) −3 5 and −1 3

Q2. Find three irrational numbers between (i) -11 and -12 (ii) 11 4 and 13 5 (iii) $\sqrt{2}$ and $\sqrt{3}$

Q3. Express the following in the form of p q where p, q are integers, $q \neq 0$ (i) $0.032\overline{7}$ (ii) $4.3\overline{8}$ (iii) $1.\overline{314}$

Q4.Simplify the following: (i) $(5+\sqrt{7})(2 + \sqrt{5})$ (iii) $(2\sqrt{3} + 6\sqrt{5})(5\sqrt{2} - 3\sqrt{3})$ (ii) $(\sqrt{11} + \sqrt{7})(\sqrt{11} - \sqrt{7})$ (iv) $(8\sqrt{2} + 3\sqrt{5})(3\sqrt{2} - 6\sqrt{3})$

Q5. Rationalize the denominator of the following: (i) 25 $\sqrt{2}$ + $\sqrt{5}$ (ii) 3 $\sqrt{7}$ −$\sqrt{2}$ (iii) $4\sqrt{3}$ + $3\sqrt{2}$ $6\sqrt{2}$ − $3\sqrt{5}$ (iv) 8 $3\sqrt{2}$ + $7\sqrt{3}$

Q6. Simplify the following: (i) $(64 125) −2 3 + (625 256) 1 4 + \sqrt{25} \sqrt{6}$
 (ii)$\sqrt{3}$ ×5 −3 ÷ $\sqrt{3}$ −1 3 × $\sqrt{5}$×$\sqrt{3}$ ×5 4 6
(iii) $\sqrt{81}$ 4 − $8\sqrt{216}$ 3 + $15\sqrt{32}$ 5 + $\sqrt{225}$

Q7.Simplify: (i) $2\sqrt{6}$ $\sqrt{3}$+$\sqrt{2}$ + $6\sqrt{2}$ $\sqrt{6}$+$\sqrt{3}$ − $8\sqrt{3}$ $\sqrt{6}$+$\sqrt{2}$

(ii)4+$\sqrt{5}$ 4−$\sqrt{5}$ + 4−$\sqrt{5}$ 4+$\sqrt{5}$

(iii) 3 5−$\sqrt{3}$ + 2 5+$\sqrt{3}$ 3

Q8. Find the value p if (i) 2 $5p$ ÷ 2 p = $5\sqrt{2}$ 20
                   (II)(27) p = 9 ÷ 3 p

Q9. (a) If 3+$\sqrt{7}$ 3−$\sqrt{7}$ = a + b$\sqrt{7}$, find the value of a and b.
    (b) If x = 2−$\sqrt{5}$ 2+$\sqrt{5}$ and y = 2+ $\sqrt{5}$ 2−$\sqrt{5}$, find x 2 − y 2
    (c) If x = 3 + $\sqrt{8}$, find x 2 + 1 x 2
Q10. Represent the following numbers on a num.
(i) $\sqrt{18}$ (ii) $\sqrt{5.6}$ (iii) $\sqrt{13}$ (iv) $\sqrt{6.7}$ (v) $\sqrt{29}$

SCIENCE

1. Prepare a project report on 4th and 5th sates of matter and paste the pictures also.
2. Complete the practical file.
3. Prepare and revise Ch-1 thoroughly.
4. Do the given question bank of Ch-1 in chemistry notebook.

QUESTION BANK
Ch-1: Matter In Our Surroundings

Q1.   Give one word for the following:-

(i)   Which state of matter can easily change its shape and volume?
(ii)   In which state of matter are the molecules most tightly packed?
(iii) In what form should energy be supplied to an object to change its state?
(iv)   What is the process of change of state from a gas to a liquid called?
(v)   What is mass per unit volume of a substance called?

Q2.   When a crystal of copper sulphate is placed at the bottom of a beaker containing water the water slowly turns blue. Giver reason.

Q3.   Why is it difficult to change the shape of a solid?

Q.4.   If we heat a solid, it ultimately changes into a liquid? At what stage does this happen?
Q.5.   A sponge can be compressed. Is it a solid or not? Why?
Q.6.   Give an activity which demonstrates that particles of matter have space between them.
Q.7.   Why are gases so easily compressible whereas it is impossible to compress a solid or liquid?
Q.8.   When a solid starts melting, its temperature does not rise till whole of it has melted. Explain.
Q.9.   Define the following terms:-

(i) Latent heat of vaporization.
(ii) Sublimation.
(iii) Diffusion
(iv) Latent heat of diffusion.

Q.10. Describe an activity which demonstrates the process of sublimation.

Q.11. Which contains more heat 1 kg of water at $100\ ^0C$ or 1 kg of steam at $100\ ^0C$? Give reason for your answer.

Q.12. Define evaporation. What are the factors affecting evaporation?
Q.13. Why do people sprinkle water on the roof or open ground after a hot sunny day?
Q.14. It is a hot summer day Priyanshi and Ali are wearing cotton and nylon clothes respectively. Who do you think would be more comfortable and why?
Q.15. How does perspiration or sweating help to keep our body cool on a hot day?

Social Science

I Prepare a project on Disaster Management on any one of the following topics.
• Earthquake
• Tsunami
• Cyclone
• Flood

- Drought
- Landslide

Following are the guidelines for the project: -

1. The total length of the project report should not be more than 10-15 pages of project file.

2. The project report should be handwritten and credit will be awarded to original drawings, illustrations and creative use of materials.

3. The project report should be framed in the following order.

- List of contents with page numbers.
- Acknowledgements (acknowledging the institution, offices and libraries visited and persons who have helped).
- Introduction - Meaning of Disaster Management

Natural Disasters in India - For each mention meaning, causes, distribution pattern in India, consequences and mitigation measures

- Steps taken by Indian Government
- Summary and conclusions based on findings.
- Bibliography: should have the Title, pages referred, author, and publisher, in case a website the name of the website with the specific website link which has been used.

4. All the photographs and sketches should be labeled.

II Complete the given Question Bank in respective C.W Notebooks.
III Learn Periodic-1 syllabus for Periodic-1 Exam.

COMPUTER APPLICATION

Word processing:
a) Create a greeting card in MS Word to invite your friends for "Annual Day" celebration in your school.
b) Discuss the following in a text document about the basic organisation of a computer: CPU, memory, input/output devices, hard disk.
c) Create a text document in an Indian language other than English on "Technology".

Presentation:
Create 4 presentations having atleast 5 slides (in each presentation) on the following topics:-
a) Digital Convergence
b) 3 Cs of convergence
c) IPO (Input→ Processing → Output) cycle
d) Types of computers

Spreadsheet:
Create 4 spreadsheets on the following topics:-
a) Timetable of a class
b) Bill of a Grocery shop
c) Marksheet of a student
d) Cricket score with chart