

SARALA BIRLA PUBLIC SCHOOL

Birla Knowledge City, Mahilong, Ranchi

CLASS-IX (2020-21)



SARALA BIRLA
PUBLIC SCHOOL

(SARALA BIRLA GROUP OF SCHOOLS)

Summer Holiday Assignment

English

LITERATURE

- Answer the following questions in about 30-40 words:**
 - What beauty of nature shall the poet observe in Innisfree ?
 - What are the roads and pavements a symbol of in the poem 'Lake Isle of Innisfree'?
 - Why was the kangaroo reluctant to carry the duck on its back?
 - What did the duck do in reply to the kangaroo's objection?
 - How does the wind poke fun at the weaklings?
 - What is the central idea of the poem 'Wind'?
 - What was so magical about Evelyn getting to the top? What did she achieve?
 - How and by whom was the musical instrument pungi improved?
 - Why was Toto's entry into grandfather's zoo kept a secret?
 - What incident led to grandfather's decision of not keeping Toto as a pet?
- Write the character sketch of Toto in about 120 words.

GRAMMAR

- Following passage has not been edited. There is an error in each line. Write incorrect word and the correction in your answer sheet as given below against the correct blank number.

| | <u>Incorrect</u> | <u>Correct</u> |
|---|------------------|----------------|
| a. In traditional sense prayer meant | | |
| b. communicating on God Almighty. | | |
| c. It includes the devotions, verbal but | | |
| d. mental prayers that are saying. | | |
| e. There are various ways and forms to | | |
| f. prayer and meditation, vocal payers etc. | | |
| g. But the fundamental either the base. | | |
| h. of prayer are not any of these. | | |

- The following passage has not been edited. Write the omitted word along with the word that comes before and the word that comes after:

| | <u>Before</u> | <u>Missing</u> | <u>After</u> |
|---|---------------|----------------|--------------|
| Frequently, when is an air crash | when | there | is |
| a. there is mention a black box. This | ..... | ..... | ..... |
| b. is important part of every plane. | ..... | ..... | ..... |
| c. It is basically an electronic device is used | ..... | ..... | ..... |
| by people investigating | | | |
| d. the reasons the crash. | ..... | ..... | ..... |
| e. There are usually black boxes | ..... | ..... | ..... |
| f. one contains the recorder the | ..... | ..... | ..... |
| cockpit voice. The other | ..... | ..... | ..... |
| g. contains flight data. Both them | ..... | ..... | ..... |
| h. give information about cause | ..... | ..... | ..... |
| of the accident | | | |

Hindi

1. लंबे अवकाश में की गई रचनात्मक गतिविधियों के संबंध में अपने मामाजी के साथ हुए संवाद को लिखिए।
2. अर्थ की दृष्टि से वाक्य के भेदों को उदाहरण सहित लिखें।
3. संकेत बिंदुओं के आधार पर लगभग शब्दों में निबंध लिखिए। 300 से 250

स्वास्थ्य और व्यायाम

- स्वस्थ तन-मन के बिना जीवन बोज़
- शारीरिक स्वास्थ्य और व्यायाम
- मानसिक स्वास्थ्य और व्यायाम
- स्वस्थ व्यक्ति से स्वस्थ समाज का निर्माण
(सभी कार्य हिंदी व्याकरण की कॉपी में करें)

Mathematics

- Q1. Locate $\sqrt{6}$ on the number line. Write steps of construction and also JUSTIFY.
- Q2. Insert three different rational and three different irrational numbers between the rational numbers $\frac{4}{7}$ and $\frac{8}{11}$.
- Q3. Represent $\sqrt{7.5}$ on the number line. Write steps of construction and also JUSTIFY.
- Q4. Factorise $2x^3 - 6 - 11x + 3x^2$
- Q5. Divide the polynomial $3x^4 - 3x - 2 + 6x^2 - 4x^3$ by $x - 1$. Verify the remainder using remainder theorem.
- Q6. Prove $x^3 + y^3 + z^3 - 3xyz = (x + y + z)(x^2 + y^2 + z^2 - xy - yz - zx)$. Factorise $27x^3 + y^3 + z^3 - 9xyz$.
- Q7. In which quadrant or on which axis do each of the points $(-2.25, 4)$, $(3, -1)$, $(-1, 0)$, $(1, 2)$, $(0, -4.3)$, $(7.5, 0)$, $(0, 8)$ and $(-3.5, -5)$ lie? Verify your answer by locating them on the Cartesian plane in a graph paper.
- Q8. How would you rewrite Euclid's fifth postulate so that it would be easier to understand? Explain how Euclid's fifth postulate imply the existence of parallel lines?
- Q9. Activity 1.2 - An Irrational Number
- Q10. Activity 3.1 - Quadrants and Coordinates

Science

PHYSICS

1. Derive the following equation's of motion by graphical method
 - i) $v = u + at$
 - ii) $S = ut + \frac{1}{2}at^2$
 - iii) $V^2 = u^2 + 2aS$
2. Solve the exercise question no. 1 to 10 of chapter Motion given in NCERT book (page no. 112 & 113)

CHEMISTRY

Write the following Practicals in your practical copy.

(Note: Date of Experiment will be filled when the Practical will be done.)

(Expt.1) Preparation of true solution ,suspension ,colloidal solution .

(Expt.2) Preparation of (a) mixture

(b) compound using iron fillings and sulphur powder.

(Expt. 3) Separation of the components of a mixture of sand,common salt and ammonium chloride.

(Expt. 4) To study the various reactions and classify them as physical or chemical changes: i) Iron with copper sulphate solution in water

ii) Burning of magnesium in air

iii)Zinc with dilute sulphuric acid

iv) Heating of copper sulphate crystals

v) Sodium sulphate with Barium

Chloride in the form of their solutions in water.

BIOLOGY

Write the following Practicals in your lab manual copy.

(Note: Date of Experiment will be filled when the Practical will be done.)

(Expt. 5 A) Preparation of stained temporary mounts of an onion peel and to record observations and draw labelled diagram.

(Exp.5 B)Preparation of stained temporary mounts of human cheek cells and to record observations and draw labelled diagram.

(Exp.6 A) Identification of parenchyma, collenchyma and sclerenchyma tissues in plants from prepared slides and draw labelled diagrams.

(Exp.6 B) Identification of striped, smooth and cardiac muscle fibres and nerve cells in animals from prepared slides and draw labelled diagrams.

Social Science

HISTORY /CIVICS

1. Draw the map of France on an A4 sheet and mark and label the following:

Paris

Marseille

Nantes

Bordeaux

2. Write the Preamble of India on a chart paper .

GEOGRAPHY

3. Prepare a power point presentation of 10 - 12 slides on water pollution : Causes effects and solutions.

Economics

4. Describe the virtuous and vicious cycles of growth with diagrams. How vicious cycle can be converted into virtuous cycle? Give your suggestions.

(Do in class work copy.)

Sanskrit

1) गद्यांशं पठित्वा उत्तराणि दीयताम्।

बहुआयामी प्रतिभायाः धनी स्वामी श्रद्धानंदः सरस्वती महाभागानां पूर्वनाम मुंशीरामः आसीत् सः पश्चात् 'महात्मा मुंशीरामः' इति नाम्ना संबोध्यते स्म। तेषाम् महोदयानां जन्म पंजाब प्रांतस्य तलवन ग्रामे अभवत्। तेषाम् शिक्षा – दीक्षा च वाराणसी लाहौर च नगरयोः अभवताम्। स्वामी दयानंदः सरस्वती महाभागेन सह तस्य मेलनं बरेली नगरे अभवत्। लाहौर नगरस्य आर्य समाजस्य सभासदः अभवत्। हरिद्वार नगरे गङ्गायाः तटे कांगड़ी ग्रामे गुरुकुलस्य स्थापनाम् अकरोत्।

1) एकपदेन उत्तरता

- क) स्वामी श्रद्धानंदः सरस्वती महाभागानां पूर्वनाम किमासीत्?
ख) तस्य मेलनं केन सह अभवत्?

11) पूर्णवाक्येन उत्तरता

- क) सः कुत्र गुरुकुलस्य स्थापना अकरोत्?
ख) तस्य जन्म कुत्र अभवत्?

111) अनुच्छेदस्य उचितं शीर्षकं लिखत।

IV) भाषिक कार्यम्।

क) अनुच्छेदे 'अकरोत्' इति क्रियापदस्य कर्तृपदं किम्? (सः/ गुरु)

ख) 'दरिद्रः' पदस्य विपर्ययपदं किम्? (बहु/ धनी)

ग) गद्यांशे अव्ययपदं किम्? (अधः/ इति)

2) उचित शब्दरूपैः रिक्तस्थानानि पूरयत-

क) ___ पितुः नाम राकेशः अस्ति। (माम्/मम/अहम्)

ख) जनाः ___ तरन्ति। (नदी/ नद्यौ/ नद्याम्)

ग) ___ वने निवसन्ति। (साधवः/साधु/साधुम्)

घ) ___ विद्यालयं गच्छति। (छात्र/छात्राः/छात्रः)

Artificial Intelligence

1. What is the difference between Strong Artificial Intelligence and Weak Artificial Intelligence? (Write any FOUR difference)
2. List some applications of AI.
3. List the programming languages used in AI.
4. What is Turing test?
5. What is an expert system? What are the characteristics of an expert system?
6. List the advantages of an expert system.
7. What is Deep Learning?
8. List the applications of Machine Learning.

