Class – X

(Bengali)

* প্রকল্পেরবিষয় – **বহুরূপী :সেকালওএকাল**
* নীচেদেওয়াসূত্রগুলিঅবলম্বনকরেছাত্র-ছাত্রীরাপ্রকল্পটিরূপায়ণকরবে–

১. নামপত্র

২. ভূমিকা

৩.সূচীপত্র

৪. লেখকপরিচিতি

৫. বিষয়বস্তুরউপস্থাপনা

৬. উপসংহার

৭. সহায়কগ্রন্থসমূহ/ তথ্যঋণ

৮. স্বীকৃতিপত্র

* **প্রয়োজনীয়নির্দেশ :**

১৷প্রকল্পরূপায়ণেরজন্যছাত্র-ছাত্রীরাফিতে – বাঁধাপ্র্যাকটিক্যালখাতাব্যবহারকরবে।

২৷পাতারলাইন- টানাদিকটিলেখারজন্যএবংসাদাদিকটিপ্রাসঙ্গিকছবিরজন্যব্যবহারকরবে।

৩৷ ‘নামপত্র ‘অংশেছাত্র-ছাত্রীরানিজেদেরনাম, শ্রেণি, বিভাগ, ক্রমিকসংখ্যাএবংপ্রকল্পেরবিষয়স্পষ্টভাবেউল্লেখকরবে।

৪৷’বিষয়বস্তুরউপস্থাপনা’অংশেরজন্য৪অথবা৫টিপাতাব্যবহারকরবে।

৫৷অন্যান্যঅংশগুলিরপ্রতিটিরজন্য১টিকরেপাতাব্যবহারকরবে।

৬৷ছাত্র-ছাত্রীরাবিভিন্নরঙেরকালিব্যবহারকরতেপারবে।

৭৷প্রকল্প – খাতাটিতেঅবশ্যইএকটিপ্রচ্ছদথাকবে।

৮৷ছাত্র-ছাত্রীরা প্রকল্পের কাজ সম্পূর্ণ করে রাখবে এবং স্কুল খোলার পরে নির্দিষ্ট দিনে শিক্ষক/শিক্ষিকার কাছে প্রকল্পটি জমা দেবে।

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| (Hindi) |  |  |
| हिन्दी परियोजना |  |  |
| दशम श्रेणी |  |
| अंक - 10 |  |
| 1. विषय - कहानी |  |
| 2. कहानी का नाम - उसने कहा था |
| 3. लेखक का नाम - चन्द्र धर शर्मा गुलेरी |
| 4. लेखक - परिचय |  |  |
| 5. विषय - वस्तु |  |  |
| 6. पात्र - परिचय |  |  |
| 7. चरित्र - चित्रण |  |  |
| 8. संसाधन |  |  |
| 9.धन्यवाद ज्ञापन |  |  |
| 10. प्रमाण – पत्र |  |  |

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| Physics |  |  |  |  |  |  |  |  |  |  |  |
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|  (Topic of the project : Light ) |  |  |  |  |  |  |  |  |  |  |
| 1) TITLE : |  |  |  |  |  |  |  |  |  |  |  |
| 2) ACKNOWLEDGEMENT: |  |  |  |  |  |  |  |  |  |  |
| 3) INTRODUCTION : ( About the given topic ) |  |  |  |  |  |  |  |  |
| 4) SECTION I |  |  |  |  |  |  |  |  |  |  |  |
| Formation of images by using ray diagrams for the following spherical mirrors: |  |  |  |  |  |
| (A) CONCAVE MIRROR  |  |  |  |  |  |  |  |  |  |  |
| Positions of the objects are :- |  |  |  |  |  |  |  |  |  |  |
|  (i) At infinity |  |  |  |  |  |  |  |  |  |  |  |
|  (ii) Between infinity and centre of curvature |  |  |  |  |  |  |  |  |
|  (iii) At the centre of curvature |  |  |  |  |  |  |  |  |  |  |
|  (iv) Between centre of curvature and focus |  |  |  |  |  |  |  |  |
|  (v) At focus |  |  |  |  |  |  |  |  |  |  |  |
|  (vi) Between focus and pole  of the mirror |  |  |  |  |  |  |  |  |
|  (B) CONVEX MIRROR |  |  |  |  |  |  |  |  |  |  |
|   Positions of the objects are :- |  |  |  |  |  |  |  |  |  |  |
|  (i) At infinity |  |  |  |  |  |  |  |  |  |  |  |
|   (ii) Anywhere between infinity and pole of the mirror.     |  |  |  |  |  |  |  |
| Also give the positions of the images, nature of the images and size of the images formed for every position of the objects. |  |
| SECTION II |  |  |  |  |  |  |  |  |  |  |  |
|  Explain myopia and hypermetropia with suitable ray diagrams for the defects and correction of the respective eye defects. |  |
|  SECTION  III |  |  |  |  |  |  |  |  |  |  |  |
|  Derive the relation of angle of deviation in terms of angle of incidence, angle of   emergence and angle of prism for an equilateral prism. |
| 5)REFERENCES :  |  |  |  |  |  |  |  |  |  |  |  |

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| Chemistry |  |  |  |
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| Class X A (Chemistry) |  |  |
| Chemistry (any one): |  |  |
|  | 1 | Air Pollution |  |
|  | 2 | Periodic Table |  |
|  | 3 | Chemical Bonding |  |
|  | 4 | Electrolysis |  |
|  |  |  |  |  |
| Make the project with the following points: |
|  | 1 | Topic |  |  |
|  | 2 | Introduction |  |
|  | 3 | Project details |  |
|  | 4 | Conclusion |  |
|  | 5 | Acknowledgement |  |

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| Class:XB (Chemistry) |  |  |  |
| Topic: Any one |  |  |  |  |
| 1. Electrolysis and its application. |  |  |
| 2. Periodictable. |  |  |  |  |
| 3. Properties of H2S. |  |  |  |
| 4. Properties of NH3. |  |  |  |
| 5. Non-biodegradableandbiodegradablepolymer. |  |
|  |  |  |  |  |  |
| Instructions to be followed: |  |  |  |
| 1.Aim |  |  |  |  |  |
| 2.Introduction |  |  |  |  |
| 3.Reaction |  |  |  |  |
| 4.Theory |  |  |  |  |  |
| 5.Dataintableformat/flowchart/diagram |  |  |
| 6.Uses |  |  |  |  |  |
| 7.Practicalapplicationindaytodaylife |  |  |
| 8.Conclusion |  |  |  |  |
| 9.References |  |  |  |  |
|  |  |  |  |

Project I

Topic – Quadratic Equation in one Variable

Introduction

(Definition with general form of quadratic equation in one variable must be given with explanation)

Examples of different types of Quadratic equations to be shown

Methods of solving quadratic equation

1. Solution of a quadratic equation by factorisation method:-

(Explanation with examples is required, either from textbook or elsewhere).

1. Solution of a quadratic equation by the method of completing the square.

Method of completing the square is required to be explained and hence Sridhar Acharya’s method to be established.

Explanation with examples is required, either from textbook or elsewhere.

Discriminant and Nature of roots

Algebric expression of discriminant of a quadratic equation to be defined and nature of roots to be explained from this discriminant.

Explanation with examples is required, either from textbook or elsewhere.

Relation between roots of quadric equation

Relation between roots of quadric equation to be explained and established.

Explanation with examples is required, either from textbook or elsewhere.

Problem based on quadric equation

Few problems related to the topic given above to be considered from the textbook or elsewhere.

Conclusion

Utility of quadric equation to be explained here.

Acknowledgement

Project II

Cuboid

Introduction

(Definition with examples)

1. Formula related to cuboid
* formula of total surface area
* formula for lateral surface area
* formula of diagonals of cuboid
* formula of volume of cuboid

(examples against each topic must be given i.e. against each topic, a sum, either from textbook or elsewhere should be given)

(figure of cuboid of different shapes must be drawn as shown in textbook)

1. Definition of cube

Definition should include the formula of total surface area, diagonal and volume of the cube. Figure as shown in textbook must be drawn.(examples against each topic must be given i.e. against each topic, a sum, either from textbook or elsewhere should be given).

Conclusion

Mention utility of cuboids with example.

Acknowledgement

Life Science

Select any topic at your own choice from the Madhyamik syllabus and complete the project work.

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| (History) |
| Project topic- The Gandhian Movements |
| 1st pg- Student's Identity |
| 2nd pg-Acknowledgement |
| 3rd pg- Content |
| 4th pg- Introduction to the mentioned topic |
| 5th & 6th pg- Centres of Non Cooperation Movement to be shown on an outline map of India along with 20 sentences on the Movement |
| 7th & 8th pg- Centres of Civil Disobedience  Movement on an outline map of India along with 20 sentences on the Movement |
| 9th & 10th pg - Centres of Quit India Movement on an outline map of India along with 20 sentences on the Movement |
| 11th pg- Conclusion |
| \*\* The project should be bright , colourful and creative... |

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| English |  |  |  |  |  |
| Pages to be followed- |  |  |  |
| 1- Name/Class/Roll Number, School Name, Year |  |
| 2- Index |  |  |  |  |  |
| 3- Father's Help- Introduction of the author. (1- 1.5 pages) |
| 4- Topic- Identifying Direct Speeches |  |  |
| Expected learning outcome- Ability to identify direct speeches from a given topic in the textbook. |
| 5- Direct Speeches |  |  |  |  |
| Father's Help- Unit-1 |  |  |  |
| Example- |  |  |  |  |
| A) .............. |  |  |  |  |
| B).................. |  |  |  |  |
| 6- Analysis of collected information- |  |  |
| In Unit 1 of Father's Help there are \_\_\_\_\_ direct speeches. |
| R.K Narayan has mostly used direct speeches in this unit to make the episode quite interesting and attractive. |
| 7- Charachter Identification.- |  |  |  |
| A) Swami B) Father C)Samuel |  |  |  |
| Which character do you like the most and why? (Write few lines) |
| 8- Acknowledgement |  |  |  |
|  |  |  |  |  |  |
| N.B Some instructions to be followed-  |  |  |
| 1- Write neatly. |  |  |  |  |
| 2- No usage of red ink pen while writing. |  |
| 3- Cover the file, makle it presentable. |  |  |
| 4- Draw or paste one,two or more pictures from any unit. |
| 5- Stick a picture of the author in Page Number-3 |  |
| 6- In pages 4 and 6, write the same thing provided. |  |