**CLASS:9 AUTUMN-BREAK HOLIDAY HOME-WORK**

**MATHEMATICS:**

1. Prove that the diagonal divides a parallelogram into two congruent triangles.

2. Prove that a quadrilateral is a parallelogram if a pair of its opposite sides is parallel and equal.

3. Prove that in a triangle, the line segment joining the mid points of any two sides is parallel to

the third side and in half of it and its converse.

4. Prove that the sum of the angles of a triangle is 180O.

5. Showing corresponding angles, alternate angles, interior angles when a transversal intersects two parallel lines make a chart on A4 size paper.

**PROJECT/ACTIVITY (ATTEMPT ANY ONE)**

A1. To construct a square-root spiral.

A2. To represent some irrational numbers on the number line.

The **evaluation of the project/activity** will be based on the following Rubrics:

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Item** | **Marks** |
| **1** | **Quality & Lay out of the project.** | **10** |
| **2** | **Visual Presentation of the facts like Description/Content/ Picture/Map/Graph/Diagram/ Derivation etc.** | **20** |
| **3** | **Overall Presentation (Neatness, Handwriting and word limit etc.)** | **10** |
| **4** | **Assessment of the Project through Questionnaire (Google Form-10 MCQ or telephonic viva/ any other suitable methodology)** | **10** |
|  | **Total** | **50** |

**COMMON LAY OUT OF MATHEMATICS – PROJECTS**

1. **Cover Page**
2. **Certificate**
3. **Table of contents – Page Title**
4. **Title /topic of the Project**
5. **Objective of the Project.**
6. **Brief description of the project.**
7. **Pre requisite Knowledge.**
8. **Material / Resources required.**
9. **Planning /Procedures followed.**
10. **Mathematical Concept(s) Used.**
11. **Results (Analysis /Interpretation etc.)**
12. **Conclusions.**
13. **Acknowledgement.**
14. **List of references.**

**Note: You may add any other relevant points as per your project allotment.**

**ART EDUCATION:**

Please do the following in your drawing copy and submit in Google classroom assignment.

1. Write a brief note about an Indian Contemporary Artist.

2. Study and draw from your surrounding a scene depicting natural beauty. Try to use perspectives in your drawing. Fill colors with medium of your own choice and convenience.

**CHEMISTRY:**

1. State and explain a) Law of conservation of mass b) Law of constant proportions

2. What is the mass of carbon dioxide formed if in a reaction 12g of carbon reacted with 32g of oxygen to form carbon dioxide? Does the reaction obey law of conservation of mass?

3. Write the atomic numbers and symbols of any twenty elements

4.Define atomic model with diagram

**PROJECT (Choose any one of two)**

1. ***Make a science news-letter showing current news in the field of science and also mention the date and source of news.***
2. ***Make a power point presentation on any one chapter (minimum 10 slides)***

**HINDI:**

1.अनुप्रास अलंकार की परिभाषा उदाहरण सहित लिखिए?

**2.इच्छावाचक** वाक्य की परिभाषा उदाहरण सहित लिखिए?

3.तत्पुरुष समास की परिभाषा और तीन उदाहरण लिखिए है?

4.अंग्रेज जेल में कैद सिपाहियों को क्या क्या सजा देते थे?

**WORK AND EXPERIENCE: Project work: 4-FOLD FILE COVER (WITH STANDARD SIZE)**

**BIOLOGY:**

**Q.1 State three conditions essential for being free of diseases.**

**Q.2 What do you interpret when you say a person is in good health?**

**Q.3 List any two practices you would like to follow in order to maintain good health**

**Or**

**List any four essential factors that must be taken care of by an individual for keeping good health.**

**Q.4 What are the various factors that affect health?**

**PHYSICS:**

**PHYSICS ASSIGNMENT FOR AUTUMN-BREAK:**

**PRACTICE work:**

1. Define the Newton’s Laws of Motion:

-Law of Inertia

-Newton’s second law and

-Newton’s third law of Motion.

1. Define Law of conservation of Momentum.
2. Define Universal law of Gravitation.
3. Concept of Work done and different cases. (positive, zero and negative work done).

**PROJECT work:**

**Perform a study and paper work on:**

-Equations of Uniform Motion-Graphical treatment

Or

-Position-time and velocity-time graphs for uniformly accelerated motion.

**The evaluation of the project/activity will be based on the following Rubrics:**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Item** | **Marks** |
| **1** | **Quality & Lay out of the project.** | **10** |
| **2** | **Visual Presentation of the facts like Description/Content/ Picture/Map/Graph/Diagram/ Derivation etc.** | **20** |
| **3** | **Overall Presentation (Neatness, Handwriting and word limit etc.)** | **10** |
| **4** | **Assessment of the Project through Questionnaire (Google Form-10 MCQ or telephonic viva/ any other suitable methodology)** | **10** |
|  | **Total** | **50** |

**COMMON LAY OUT OF SCIENCE – PROJECTS**

1. **Cover Page**
2. **Certificate**
3. **Table of contents – Page Title**
4. **Title /topic of the Project**
5. **Objective of the Project.**
6. **Brief description of the project.**
7. **Pre requisite Knowledge.**
8. **Material / Resources required.**
9. **Planning /Procedures followed.**
10. **Scientific Concept(s) Used.**
11. **Results (Analysis /Interpretation etc.)**
12. **Conclusions.**
13. **Acknowledgement.**
14. **List of references.**

**Note: You may add any other relevant points as per your project allotment.**

**संस्कृत:**

**1. पाठ-1 “जटायु शौर्यम” पाठ के कोई तीन श्लोक याद करके पुस्तक से चित्र सहित लिखिए |**

**2. पाठ-2 “सिकतासेतु:” पाठ का सम्पूर्ण अभ्यास कार्य कीजिये |**

**3. “अभ्यासवान् भव” व्याकरण पुस्तक ( Abhyaswan bhav) से *पत्र लेखन नं.-03* व *चित्र-वर्णनं में चित्र नं.-08* में रिक्त स्थानों की पूर्ति करने का प्रयास करें ।.**

**ENGLISH:**

**PROJECT & ASSIGNMENT FOR PT II**

CLASS : **IX**  SESSION : 2020-21

**PROJECT FOR PT II**

**1. Prepare a speech expressing your views on the topic ‘The future of the country is in the hands of the youth’ and make a video recording, in school uniform, delivering the speech coherently and with proper fluency. 20**

Please Note:

1. The video should not be of more than 2 minutes. Make sure to record in a silent place to avoid disturbances.
2. Memorize the speech and try to deliver spontaneously.
3. Depending on notes, while speaking, is strictly prohibited.
4. The speech should not be a copy of any speech in some book or website.
5. due weightage will be given for ORIGINALITY.

**ASSIGNMENT FOR PT II (Use file papers)**

**1. Develop a story on the basis of the proverb “Honesty is the best policy”. Supply a suitable title and a moral to the story. (200 words) 20**

|  |  |  |
| --- | --- | --- |
| **Sl No** | **Parameters for Assessment** | **Marks** |
| **1** | **Interactive Competence**  **(initiation & Relevance to the topic)** | **5** |
| **2** | **Fluency**  **(Cohesion, Coherence & speed of delivery)** | **5** |
| **3** | **Pronunciation** | **5** |
| **4** | **Language ( Acuracy & Vocabulary)** | **5** |
|  | **Total** | **20** |

**2. Make a verb list of minimum 20 unfamiliar words (along with their past and past participle forms) that are included in your lessons. 10**

**For Class IX & X**

**Computer - Write short notes about "Cyber crime & Cyber Safety " and prepare a drawing in own your way for represent the same.?**