

# DIWALI AND CHHATH PUJA ASSIGNMENT

## Class X

### Maths

1. State and prove all the theorems from the topic triangles.
2. Verify all the trigonometric ratios of some specific angles like  $30^\circ$ ,  $45^\circ$  and  $60^\circ$ .
3. Verify the following trigonometric identities:-
  - i.  $\sin^2 Q + \cos^2 Q = 1$
  - ii.  $1 + \tan^2 Q + \sec^2 Q$
  - iii.  $1 + \cot^2 Q + \operatorname{cosec}^2 Q$

### GEOGRAPHY

1. On the outline map of India, mark the following:-
  - i. Durgapur – Iron and steel plant
  - ii. Bhilai – Iron and steel plant
  - iii. Narora nuclear power plant
  - iv. A power plant station in Kakrapasa
  - v. A nuclear power station in Tarapur.
  - vi. One rubber producing state
  - vii. The state where Beej Bachao Andolan took place
  - viii. Panna Biosphere reserve

### HISTORY

1. On the outline map of india, mark the following :-
  - i. A place in Punjab where the Jallianwala Bagh incident took place.
  - ii. Mahatma Gandhi organised a satyagraha movement at this place for indigo planters.
  - iii. A place wher Cotton mill workers satyagraha took place.
  - iv. The place where violence erupted during the non-co-operation movement leading to its withdrawal.
  - v. Place where Mahtma Gandhi broke the salt law in 1930.
  - vi. The place where Indian National Congress held its session in September 1920.
  - vii. The place where Indian National Congress held its session in December 1920.
  - viii. The Place where Indian National Congress held its session in 1927.

### Science

1. Draw a well-labelled diagram of a bisexual flower and sketch it.
2. Remember Terms :- Menstruation, Menopause, Foetus, Placenta, Embryo.
3. Draw a well-labelled diagram of Kidney, Neuron, Nephrons & female reproductive system.
4. Define the given terms with examples.  
A. Metallurgy B. Gangue and Flux C. Roasting and Calcination D. Smelting and Aluminothermy E. Anodising
5. What do you understand by thermite reaction ?
6. Elaborate how metals react with different states of water.
7. What is corrosion? How can we prevent metals from this?
8. What do you understand by decomposition reaction? What are its types? Elaborate with examples.

### हिन्दी

1. अनुच्छेद लेखन - (क) अंतरिक्ष में भारत के बढ़ते कदम (ख) साक्षरता अधियान
2. पत्र लेखन - (क) क्षेत्र में फैली गंदगी की ओर ध्यान आकर्षित कराते हुए स्वास्थ्य अधिकारी को एक प्रार्थना पत्र लिखें।  
(ख) बस में छूटे सामान का पता लगाने के लिए दिल्ली परिवहन निगम के प्रबंधक को प्रार्थना पत्र लिखें।
3. हिन्दी-शिक्षक पद की नियुक्ति के लिए 'टैलेंट कोचिंग' को एक ई-मेल लिखें।
4. केवल बुद्धिमान को सीख दो, मूढ को नहीं विषय पर लघु कथा लिखें।

### संस्कृत

1. संधि समास एवं वाक्य परिवर्तन के नियम याद करें।
2. पाठ्य पुस्तक के 'प्रश्न निर्माण, बनाएँ।
3. 20 कठिन शब्द जिसका अर्थ नहीं जानते हैं। पाठ्य पुस्तक से चुनें।
4. पाठ 2,7 एवं 8 के हिन्दी अनुवाद करें।
5. श्लोक जिसका अर्थ समझ में नहीं आया है। वैसे श्लोकों को चयनित करें।