CAMBRIAN PUBLIC SCHOOL

Kanke Road, Ranchi

Holiday Assignment (Session 2026-27)

Wishing you all a very Happy Diwali and Chhath Puja!

May these auspicious festivals bring happiness, peace, prosperity, and good health to you and your family

Class: X

General Instructions:

- Complete all the questions neatly as instructed.
- Maintain proper handwriting and presentation.
- Revise the syllabus covered before attempting the assignment.
- Submit the Completed assignment on the first day after the Vacation.
- Parents are requested to guide and encourage their ward to complete the work independently.

ENGLISH

1. **Analytical Paragraph — Data Interpretation**

   The table below shows how students of Class X spend their average daily screen time after school. Study the information and write an analytical paragraph in 100–120 words. Compare the categories, identify significant patterns and suggest one practical inference.

Purpose of screen time	Average time per day
Educational videos / research	45 minutes
Online classes / homework	60 minutes
Gaming	50 minutes
Social media / chatting	70 minutes
Reading e-books / articles	25 minutes

2. **Letter to the Editor — Digital Well-being**

   Write a letter to the Editor of a newspaper about the growing habit of excessive screen use among teenagers. Explain how it may affect study routines, sleep and face-to-face interaction, and suggest balanced, realistic solutions. Use the proper format and a formal tone.

3. **Answer the following competency-based questions from the chapters given below.**

   a) ***Mijbil the Otter — Gavin Maxwell***

   Imagine you are Maxwell. Write a diary entry describing your feelings after Mijbil's first enthusiastic exploration of water.

   b) ***The Tale of Custard the Dragon — Ogden Nash***

   "True courage is proved through action, not boasting." Explain this statement with reference to the poem.

   c) ***For Anne Gregory — W. B. Yeats***

   How is the poem relevant in a world influenced by appearance-based judgement and social media?

HINDI

प्रश्न: कृत्रिम बुद्धिमत्ता (AI) की सहायता से हिंदी भाषा के प्रचार-प्रसार, शिक्षण एवं विकास को दर्शाने वाला एक आकर्षक 3D मॉडल तैयार कीजिए। मॉडल में हिंदी वॉइस टाइपिंग, हिंदी से अन्य भाषाओं में अनुवाद, AI की सहायता से कहानी एवं कविता लेखन तथा डिजिटल हिंदी शिक्षा को सरल उदाहरणों और चित्रों के माध्यम से प्रदर्शित कीजिए।

SANSKRIT

- **रचनात्मककार्यम्***
  1. विद्यालयस्य चित्रं निर्माय तस्मिन् संस्कृतभाषायां पञ्च वाक्यानि लिखत।
  2. उद्यानस्य चित्रं निर्माय तस्मिन् संस्कृतभाषायां पञ्च वाक्यानि लिखत।
  3. परीक्षाविषये मित्रेण सह संवादं लिखत।

****निर्देशः*** — उपर्युक्तानि सर्वाणि कार्याणि A4 आकारस्य पत्रेषु लिखित्वा स्टिक्-फाइलमध्ये सम्यक् संयोज्य विद्यालयम् आनयत।*

MATHEMATICS

CIRCLES

1. Two concentric circles have radii 5 cm and 3 cm. Find the length of the chord of the larger circle which touches the smaller circle.
2. The length of the tangent from a point Q to a circle is 24 cm and the distance of Q from the centre is 25 cm. Find the radius of the circle.
3. Prove that the tangent at any point of a circle is perpendicular to the radius through the point of contact.
4. If PA and PB are two tangents drawn from an external point P to a circle with centre O, and ∠APB = 80°, find ∠OAB.
5. Prove that the lengths of tangents drawn from an external point to a circle are equal.
6. If TP and TQ are two tangents to a circle with centre O such that ∠POQ = 110°, find ∠PTQ.
7. A quadrilateral ABCD is drawn to circumscribe a circle. Prove that AB + CD = AD + BC.
8. Prove that the angle between the two tangents drawn from an external point to a circle is supplementary to the angle subtended by the line segment joining the points of contact at the centre.
9. A circle touches the side BC of a triangle ABC at P and touches AB and AC produced at Q and R respectively. Prove that AQ = ½ (perimeter of ΔABC).
10. A triangle ABC is drawn to circumscribe a circle of radius 4 cm, such that the segments BD and DC into which BC is divided by the point of contact D are of lengths 8 cm and 6 cm respectively. Find the sides AB and AC.

SCIENCE

CHEMISTRY

Green Diwali—A Chemical Perspective

Prepare a small poster or a one-page illustrated note on “Air Pollution During Diwali: Causes, Effects and Scientific Solutions.” Include the following:

1. Two harmful effects of emissions from firecrackers.
2. One or two pollutants commonly associated with firecracker smoke.
3. Three practical ways to celebrate a cleaner Diwali.

BIOLOGY

Seed Formation Investigation

Draw a sequence diagram showing the stages from pollination to seed formation in a flowering plant. Imagine that the pollen tube is unable to reach the embryo sac. Predict what will happen to fertilisation, seed formation, and fruit development. Present your answer as a short scientific report with suitable labels.

PHYSICS

Draw ray diagrams of image formation by mirror and lens.

SOCIAL SCIENCE

HISTORY

Imagine you have a time machine.

Create a visual timeline containing at least 10 important events from:

1789 → 1815 → 1821 → 1830 → 1848 → 1861 → 1871 → 1878 → 1914

For every event write:

Year → Event → What changed?

Note: I. Use arrows, icons and small illustrations instead of long paragraphs.

II. Assignment must be done on the A4 sheets and submit in a stick file.

GEOGRAPHY

On an outline map of India, locate and label major producing regions of the following minerals –

1. Iron ore
2. manganese
3. Bauxite
4. copper
5. mica
6. limestone

POLITICAL SCIENCE

On a political map of India locate and label 8 regional parties with their state and symbol:

1. TMC - West Bengal
2. DMK & AIADMK - Tamil Nadu
3. Shiv Sena (UBT) - Maharashtra
4. RJD & JDU - Bihar
5. JMM - Jharkhand
6. TRS / BRS – Telangana

Note: Make small symbols and stick them on the map. Assignment must be done on the A4 sheets and submit in a stick file.

ECONOMICS

1. Explain the role of RBI.
2. 2.Distinguish between formal and informal credit.
3. 3.Prepare a PPT on Banks and its Role in economics development of a country.

Note: Homework must be done in the subject copy.

Revise all the chapters taught till date.

INFORMATION TECHNOLOGY

UNIT-3: DATABASE MANAGEMENT SYSTEM — LIBREOFFICE BASE

Write all the points in practical copy

Creating a Database and Tables using Table Wizard

Objective: To launch LibreOffice Base, create a new database file, and build a table using the Table Wizard.

Steps:

1. Open LibreOffice Base from your applications menu.
2. In the Database Wizard, select Create a new database and click Next.
3. Keep "Yes, register the database for me" selected, and choose Open the database for editing.

Click Finish and save the file as SchoolDB.odb.

4. Under the Tables pane, click Use Wizard to Create Table.
5. Select a category (e.g., Business or Personal), choose a sample table (e.g., Students), and move required fields using the > arrow button. Click Next.
6. Review field types and lengths, set the primary key option to Create a primary key, and choose Automatically add a primary key.
7. Name the table Student_Master and click Finish to view and enter initial rows of data.

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