

COMPILED WINTER HOLIDAY HOMEWORK FOR CLASS9

2025-26

Subject - Mathematics

1.CONCEPT BUIDING-

- (a) Create a case based question of chapter – Herons Formula or Congruence of circles(do in lab Manual)

2.LAB ACTIVITIES(TO BE DONE IN LAB MANUAL

- (a) To verify that the opposite angles of a cyclic quadrilateral are supplementary.
(b) To verify that the angles in the same segment of a circle are equal.
(c) To verify that the angle subtended by an arc of a circle is double the angle subtended by it any point on the remaining part of a circle.
(d) To form a cone from a sector of a circle and to find the formula.
- The above mentioned activities to be done in the lab manual
 - Proper steps of working to be shown for each activities.

3.ART INTEGRATED PROJECT- UTTARAKHAND PAIRED WITH PUDUCHERRY

Make an art integrated Project pairing Uttarakhand with Puducherry by including the following domains

- (a) Population comparison and its statistical representations.
(b) Number of districts / domains and its statistical representations
(c) Languages spoken in both states and their pie chart representations
(d) Famous architecture and heritage places and their trigonometric applications in finding height and distance .

-Do the art integration project in the well decorated file mentioning font page details, certificate, Acknowledgement, about Uttarakhand and Puducherry and conclusion.

Subject – Science

(A)ART INTEGERATED PROJECT –UTTARAKHAND PAIRED WITH PUDUCHERRY

(A) Make an art integrated Project pairing Uttarakhand with Puducherry by including the following domains

- Compare the crops grown in both the states
- compare the quality of the soil of both the states
- compare irrigation methods used in both the states
- compare the animal husbandry in both the states

Make it on A4 sheets and attach them in a file.Use picture and relevant data also

(B) LAB ACTIVITIES(TO BE DONE IN LAB MANUAL

1.Preparation of

a) A mixture

b) A compound

using iron filings and sulphur powder and distinguishing between these on the basis of:

- appearance, i.e., homogeneity and heterogeneity

- behaviour towards a magnet

-behaviour towards carbon disulphide as a solvent

-effect of heat

2. Verification of the laws of reflection of sound.

3. Establishing the relation between the loss in weight of a solid when fully immersed in

a) Tap water

b) Strongly salty water with the weight of water displaced by it by taking at least two different solids.

3.Revise full syllabus for final exams

Subject – Hindi

कला एकीकरण परियोजना कार्य

'पांडिचैरी' और 'उत्तराखंड' के प्रसिद्ध ऐतिहासिक व्यक्तियों पर शोध करते हुए उनके जीवन-चरित्र, कार्य, समाज में योगदान और भारत की संस्कृति पर उनके प्रभाव का तुलनात्मक अध्ययन प्रस्तुत कीजिए।" यह कार्य पाँच छात्रों के समूह में किया जाएगा। समूह विवरण कक्षा में पहले से दे दिया गया है।

क "कल्लू कुम्हार की उनाकोटी" पाठ के आधार पर उनाकोटी की मूर्तियों, मिथकों और प्राकृतिक सौंदर्य को दर्शाते हुए एक आकर्षक कोलाज तैयार कीजिए। परियोजना के प्रारंभ में अपना संक्षिप्त परिचय, पसंद - नापसंद का विवरण देकर, अपने जीवन का लक्ष्य के विषय में संक्षिप्त जानकारी भी लिखें।" यह कार्य स्कैप बुक या एक छोटी पुस्तिका (बुकलेट)पर करें ।

ख करवाया गया समस्त पाठ्यक्रम वार्षिक परीक्षा हेतु याद करें।

Subject – English

1. Write the figures of speech used in the poems of the Beehive textbook, along with examples from the text.
2. Imagine you are an intruder, write a diary entry about your encounter with Gerrard. (100-150 words).
3. Practice grammar and learn the whole syllabus for Annual Exams.

Subject – Social Science

1. ART INTEGRATION ACTIVITY (Uttarakhand and Puducherry)(In Scrap Book)

- ✓ **Wildlife sanctuary of Uttarakhand and Puducherry.**

- ✓ Prepare colourful brochures with pictorial depictions of the wildlife of both the states.

2. Write States and capitals of India two times in fair Note Book.

SUBJECT- ARTIFICIAL INTELLIGENCE

Write the following Python Programs:

Instructions-Write all the Python programs in AI Practical File. Program output to be written with Pencil only. Practical file should be completely covered and presentable.

1. Write a python program to find numbers that are divisible by 10 and multiples of 5 between 100-500.
2. Write a python program to print table of 6.
3. Write a python program to check if a given number is an Armstrong number.

Note: An Armstrong number is a number that is equal to the sum of cube of its digits. For example- 123, 371

4. Write a python program to print Fibonacci series first 10 elements like 0 1 1 2 3 5 8.
5. Write a python program to accept a number and display whether the number is Palindrome or not. **[Palindrome means- number=reverse of the number, 313=313]**
6. Write a python program to take the temperature of all 7 days of the week and display the average temperature of that week.
7. Write a python program to print numbers from 2-20 using range(n) function.
8. Write a python program to find the sum of all numbers stored in a list.
9. Write a python script to print the following pattern:

```
4 4 4 4 4
3 3 3 3
2 2 2
1 1
0
```

10. Write a python program to delete an element from a list.

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Subject – Information Technology

Do the following questions in a Practical File. Write the steps on the right-side page and paste the coloured printout of the output on the left page.

Refer to Part C – Practical Work – at the back of your IT book (Kips Publication)

Use *LibreOffice Calc*

- **TASK 6:**Page 2: Q6
- **TASK 7:**Page 2: Q7

- **TASK 8**:Page 3: Q8
- **TASK 9**:Page 3: Q9
- **TASK 10**:Page 10: Project 1

Use LibreOffice Impress

- **TASK 11**:Page 3: Q10
- **TASK 12**:Page 4: Q11
- **TASK 13**:Page 4: Q12
- **TASK 14**:Page 12: Project 1
- **TASK 15**:Page 13: Project 3