



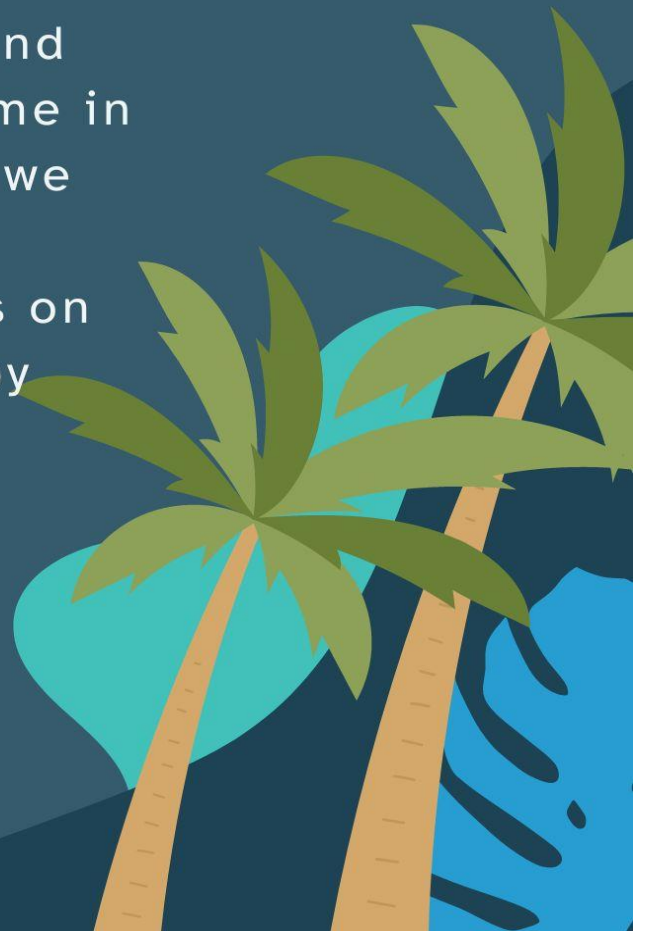
BCM School

Basant City, Pakhowal Road, Ludhiana

Class - IX

Holiday Homework

Dear Parent,
We wish you and your child a very happy summer holidays .
It's time to enjoy and create a bond with family, friends and relatives. To utilize this time in the most constructive way we have prepared Holidays Homework for the students on the principle of 'learning by doing' for their holistic development.



ENGLISH

A. Read 1 to 5 Unseen passages from BBC Compacta and solve them.

The best part about cooking without fire is that it is healthy, easy and quick and can be made as your mood permits. Try any non-fire cooking recipe. Mention the ingredients and procedure of making that recipe in detail using passive voice.

Write and decorate it on A4 size sheet.

B. Write diary entries on the following topics in about 150 words:

- **The best day of your summer vacation**
- **Contribution of Yoga in leading a Healthy and Peaceful, describe it in your diary, your experience in yoga class in summer vacation.**

C. Describe a place you visited in summer vacation in 100-120 words.

D. Make a picture illustration of the poem 'The Road Not Taken' on A4 size sheet and maintain it in English File.

E. Complete all the Assignments of Gap Filling in BBC Compacta.

F. Revise rules of Tenses and Determiners and do Practice from BBC Compacta.

G. Read Chapter no 3 to 5 of ' Moments'.

H. Prepare a File Folder (Portfolio) of English and put all the activities (Point B,C,D & E) of English in it.

Maths

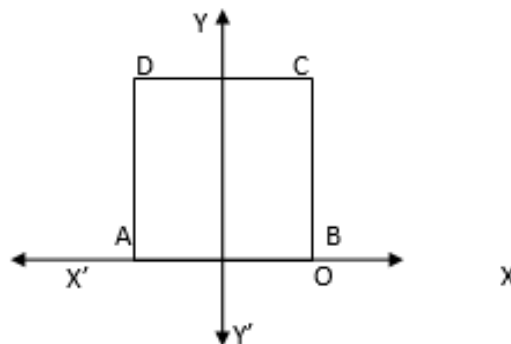
- **Solve the given assignment in separate notebook.**
- **Revise the syllabus covered in the month of April and May.**
- **Do the following activities in your practical notebook.**

Activities

1. To make a square root spira of $\sqrt{13}$ by using paper folding.
2. To verify the algebraic identity $(a+b)^3=a^3+b^3+3a^2b+3ab^2$ geometrically by using sets of unit cubes.
3. To obtain the mirror image of a given geometrical figure with respect to x-axis and y-axis.
4. To obtain a linear equation and draw a graph which represents the linear equation($ax+by+c=0$)
5. To verify that in a triangle , the line joining the mid points of any two sides is parallel to the third side and half of it by paper folding and pasting.(Mid Point Theorem)
6. To verify that the angle subtended by an arc at the centre of circle is double the angle subtended at any point on the remaining part of the circle ,experimentally.
7. To show that the angles subtended the chord of a circle in the same segment are equal , experimentally.
8. To verify that angle in a semicircle is a right angle.

Assignment

1. Solve the following decimals in the form $\frac{p}{q}$.
 (a) $0.\overline{32}$ (b) $0.1\overline{23}$
2. Insert ten rational numbers between $\frac{-3}{11}$ and $\frac{8}{11}$
3. Represent $\sqrt{6}, \sqrt{7}, \sqrt{8}$ on the number line.
4. Evaluate:
 (a) $\left(\frac{2}{11}\right)^4 \times \left(\frac{11}{3}\right)^2 \times \left(\frac{3}{2}\right)^3$ $b \left(\frac{b+}{25}\right)^{-3}$
5. Simplify: $(25)^{\frac{-1}{3}} \times \sqrt[3]{16}$
6. If both 'a' and 'b' are rational numbers, find the values of a and b.
 (a) $\frac{3+\sqrt{7}}{3-\sqrt{7}} = a + b\sqrt{7}$
 (b) $\frac{b+\sqrt{3}}{7-4\sqrt{3}} = 47a + \sqrt{3}b$
7. If $x = 2 + \sqrt{3}$, find the value of $x^2 + \frac{1}{x^2}$
8. Factorize: $p^6 - 512q^6$
9. Find the remainder when $p(y) = y^3 + y^2 + 2y + 3$ is divided by $y + 2$.
10. Find the value of a, if $x - a$ is a factor of $x^3 - a^2x + x + 2$.
11. The perimeter of an isosceles triangle is 32 cm. The ratio of the equal side to its base is $\frac{3}{2}$.
 2. Find the area of the triangle.
12. The sides of a triangular field are 41 m, 40 m and 9 m. Find the number of rose beds that can be prepared in the field, if each rose bed on an average needs 900 cm² space.
13. Find the cost of laying grass in a triangular field of sides 50 m, 65 m and 65 m at the rate of ₹7 per m².
14. The sides of a triangle are x, x+1, 2x-1 and its area is $x\sqrt{10}$ m². What is the value of x?
15. Find the values of a and b so that the polynomial $x^3 - ax^2 - 13x + b$ has $(x - 1)$ and $(x + 3)$ as factors.
16. Factorise: $x^4 + x^3 - 7x^2 - x + 6$
17. Evaluate: $185 \times 185 - 115 \times 115$
18. Write in expanded form: $(9x + 2y + z)^2$
19. Write in expanded form: $(2x + 3y)^3$
20. In figure, ABCD is a square with each side 6 cm, O is the mid-point of AB. Find the coordinate of A, B, C, D.



21. Which of the following points lies on X-axis? Which on Y-axis?

A(0,2), B(5,6), C(-3,0), D(0,-3), E(0,4), F(6,0), G(3,0).

22. In which quadrant do the following points lie?

(a) (2,-1) (b) (-1,7) (c) (-2,-3) (d) (4,5)

23. Plot the points A(0,3), B(5,3), C(4,0) and D(-1,0) on the graph paper. Identify the figure ABCD and find whether the point (2,2) lies inside the figure or not?

24. Plot the points A(-3,3), B(3,-3), C(3,3), D(-3,3) in the Cartesian plane. Also, find the length of line segment AB.

25. Plot the points P(2,0), Q(5,0) and S(2,3). Find the coordinates of the points R such that PQRS is square.

26. Three vertices of rectangle are (-1,1), (5,1) and (5,3). Plot these points and find the coordinates of the fourth vertex.

27. Find the degree of polynomial :- a) $2x^2 + 5$ b) $(5x + 3)(3x^2 + 6)$

28. Find the value of a, if $x - 2$ is a factor $x^3 + 3x^2 + 2x + a$.

29. Find the zero of polynomial :- $3x + 5$

30. Find the following product by using suitable identities

a) $(3x + 4y)(3x - 8y)$

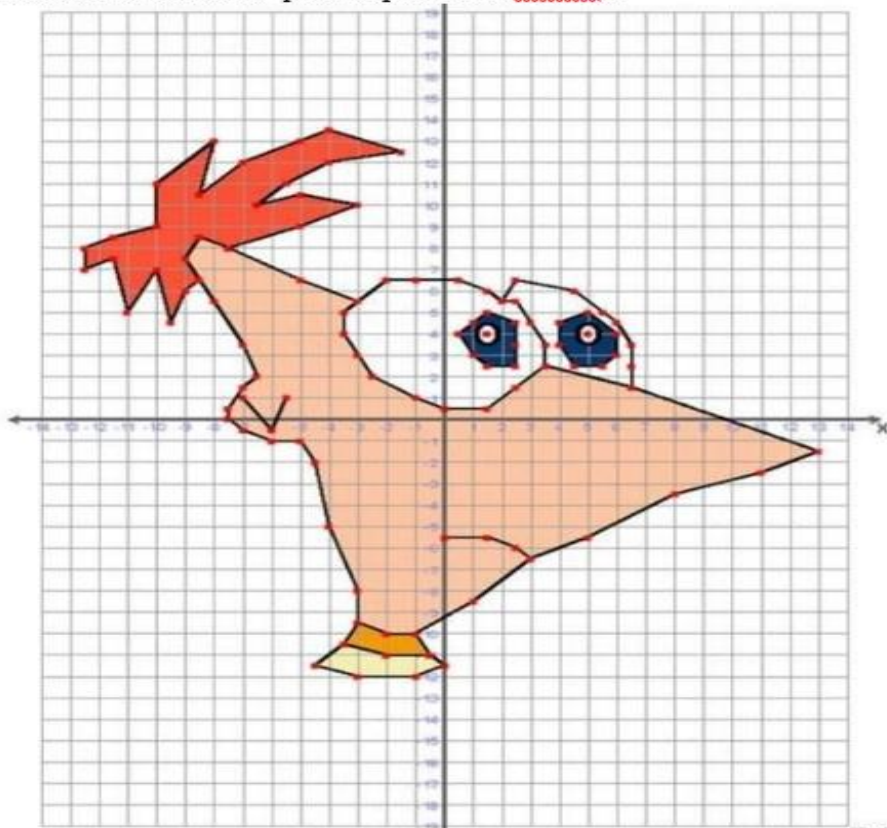
b) 102×98

c) $(4 + 5x)(4 + 5x)$

31. Factorise the following :- a) $x^2 - 7x + 12$ b) $x^3 - 6x^2 + 3x + 10$

32. Prove that: $\frac{1}{\sqrt{4+\sqrt{5}}} + \frac{1}{\sqrt{5+\sqrt{6}}} + \frac{1}{\sqrt{6+\sqrt{7}}} + \frac{1}{\sqrt{7+\sqrt{8}}} + \frac{1}{\sqrt{8+\sqrt{9}}} = 1$

33. Write the coordinates of plotted point and colour it.



Rational or Irrational?!?!

Directions

- Color all rational numbers blue
- Leave all irrational numbers white

Rationals include:

Irrationals include:

$\sqrt{7}$	$\sqrt{64}$	$1/2$	-7.165	$2/7$	$\sqrt{7}$	2π	$\sqrt{100}$	0.8	$-1/8$	$\sqrt{15}$	
3.712	7.284	$\sqrt{4}/2$	-5.5	0	π	π	8	1.333	$3/11$	-10π	100.22
0.75	$\sqrt{49}$	-10π	$\sqrt{4}$	$2\sqrt{3}$	$-\sqrt{5}$	$\sqrt{1.8}$	6π	$2/3$	1.274	$3/16$	$\sqrt{144}$
$-1/4$	10.2	$1/2$	$\sqrt{13}$	-2π	$3\sqrt{1}$	1	$\sqrt{17}$	0.25	$\pi/4$	$5/16$	-4.5
-2.1	$\sqrt{25}$	4.271	-55	1.75	-200	$2\sqrt{9}$	$\sqrt{1/2}$	$\sqrt{81}$	2.7	7π	
-2π	$\sqrt{6}$	$\sqrt{14}$	-4π	$\sqrt{11}$	$\sqrt{2}$	$\sqrt{1/2}$	π	4.517	$\sqrt{16}$	$\sqrt{81}$	2π
-7π	$\sqrt{2}$	$\sqrt{3/4}$	$3/2$	$2\sqrt{8}$	$\sqrt{3}$	5π	$\sqrt{\pi}$	$\sqrt{11}\pi$	4.517	$\sqrt{16}$	$\sqrt{81}$
-9	$\sqrt{36}$	$\sqrt{3/4}$	$3/2$	$2\sqrt{8}$	$\sqrt{3}$	5π	$\sqrt{\pi}$	$\sqrt{11}\pi$	4.517	$\sqrt{16}$	$\sqrt{81}$
3.999	7.165	$2/5$	$\sqrt{15}$	0.3	π	$3\sqrt{8}$	$\sqrt{1/6}$	-3π	-1	$3/4$	5.96
$11/2$	$\sqrt{64}$	2.523	$\sqrt{10}$	$\sqrt{1}$	3.128	$\sqrt{2}/2$	$\sqrt{8}$	-4.5	-7π	0.44	-3.999
$1,000$	$\sqrt{8}$	$-1/8$	$\sqrt{225}$	6	π	π	-7	$\sqrt{169}$	$\sqrt{1/4}$	$\sqrt{\pi}/3$	0.325
-3π	2.662	-0.25	$1/4$	-7.8	9π	$2/3$	$\sqrt{\pi}$	12.91	$-1/2$	$\sqrt{121}$	$\sqrt{11}$

34.

SCIENCE

1. Solve at least 15 Numericals in Physics, 15 concept based questions in both Chemistry and Biology from reference book for the syllabus covered till date in class.

2. Make project report on any one of the following

- a. Force**
- b. Motion**
- c. Gravitation**
- d. Characteristics of particles of matter.**
- e. Application of Evaporation in daily life.**
- f. Impact of Global Warming on ecology.**
- g. Applications of Newton's laws of motion**

3. Read Ch. Cell and Tissue and frame 20 extra questions from each chapter.

4. Draw well labelled diagrams of the following on A4 size sheets

- a) Animal Cell**
- b) Plant Cell**
- c) Types of Muscle fibres**
- d) Neuron**

5. Make a project report on Chapter NATURAL RESOURCES for internal assessment.

Project

6. Make minimum two posters on following topics.

IX Oak Robotics

IX Pine Best out of waste

IX Teak Environmental science

IX Ebony working model on best out of waste.

IX Maple AI

SOCIAL SCIENCE

1. **CURRICULUM RELATED ACTIVITES:**

- Make a flow chart on Three estates on A-4 sized sheets (roll no. 1-10)
- Make a flow chart on Political system under constitution of 1791(roll no. 11-20)
- Collage on democratic rights (roll no. 21-30)
- Make flash cards for any three physical feature of India (roll no. 30 onwards)

2. **MAP WORK** (common for all the students)

- Geography Chapter 1(India: size and location)
- Geography Chapter 2 (Physical features of India)

3. **ART-INTEGRATED PROJECT** (common for all the students)

- Comparison of Punjab and Odisha on basis of the following points:
 - River
 - Crops
 - Soil
 - Climate

4. Complete the provided **ASSIGNMENT** on Ch: Physical features of India (common for all the students)

5. Topics for **PROJECT WORK:**

- Students will choose the topic according to their Roll No., those not according to the roll numbers will not be accepted.
- **NATURAL DISASTER**
 1. Floods (R. No- 1-4)
 2. Landslide (5-8)
 3. Earthquake (9-12)
 4. Volcanic eruption (13-16)
 5. Cloud burst (17-20)
 6. Forest fire (21-24)

➤ **MAN-MADE DISASTER**

7. Nuclear explosion (25-28)
8. Industrial accident (29-32)
9. Pollution (33-36)
10. Cyber attack (37-onwards)

FORMAT OF PROJECT:



B.C.M SCHOOL, PAKHOWAL ROAD, BASANT CITY, LUDHIANA

**SOCIAL SCIENCE
PROJECT REPORT SESSION – 2024 – 2025**

‘NAME OF THE TOPIC’

SUBMITTED TO:

SUBMITTED BY: (NAME)CLASS:

ROLL NO.

B.C.M SCHOOL, PAKHOWAL ROAD, BASANT CITY, LUDHIANA

DEPARTMENT OF SOCIAL SCIENCE

CERTIFICATE

This is to certify that _____ (name of student), a student of class X has successfully conducted the report on the project _____ (topic of Project) under the guidance of

_____ (Subject Teacher) during the year 2024 – 2025 in partial fulfillment of Social Science practical examination conducted by AISSE, New Delhi.

Name of Examiner

Signature of Examiner

Name of Subject Teacher

Signature of Subject Teacher

ACKNOWLEDGEMENT

In the present world of competition there is a race of existence in which those are having will to come forward succeed. Project is like a bridge between theoretical and practical working. With this willing I joined this particular project.

First of all, I am grateful to The Almighty God for establishing me to complete this project.

I wish to express my sincere thanks to ----- Principal of B.C.M School, Pakhowal Road, Basant City, Ludhiana) for providing me with all necessary facilities.

I place on record, my sincere gratitude to **Mrs. KIRAN GARG (Co-Ordinator)** for her constant encouragement.

I also thank _____ (Social Science Teacher), Department of Social Science. I am extremely grateful and indebted to her for her expert, sincere and valuable guidance and encouragement extended to me.

I take this opportunity to record my sincere thanks to all the faculty members for their help and encouragement. I also thank my parents for their unceasing encouragement and support.

I also place on record my sense of gratitude to one and all who directly or indirectly have lent their helping in this venture.

Page No 5 – 18

- Introduction
- Subject Matter
- Add Pictures, Maps and Graph

Page No 19

- Summary

Page No 20

- Bibliography

SPECIAL NOTE: -

- ✓ The project should have a good presentation and creativity.
- ✓ Use single line assignment sheets for your project report.
- ✓ Use colored/ glitter pens.
- ✓ Decorate your file cover also.

ASSIGNMENT

Ch-2 PHYSICAL FEATURES OF INDIA

VERY SHORT QUES/ANS

1. The Lakshadweep islands covers a small area of _____
2. The Indian Desert lies towards the western margin of _____.
3. Which river drains the Chotanagpur Plateau?
4. The newer, younger deposits of the flood plains are called_____.
5. The flow of rivers, the Chambal, the Sindh, the Betwa and the Ken, is from
_____.
6. What is the Peninsular Plateau composed of?
7. What do you mean by the word 'Doab'?
8. What do you understand by 'duns'?

SHORT QUES/ANS

1. Write a short note on Deccan Plateau.
2. "The northern plains have diverse relief features". Explain.
3. Describe the river systems of the Northern Plains.
4. Write any three features of the Shiwalik range.
5. Why are the Himalayas called as young mountains?
6. Which plateau lies between the Aravali and the Vindhya range? Write a brief note on thisplateau.
7. Why is the soil in the Northern Plain fertile?
8. Which are the three main ranges of the Himalayas?

LONG QUES/ANS

1. Give a brief account on Indian Desert.
2. What is the significance of Himalayas?
3. What is the significance of the Northern Plains?
4. Name the two coastal strips that flank the peninsular plateau. Distinguish the two by giving two characteristics of each.
5. 'The Indian landmass shows great physical contrast.' Explain the statement.

In the questions given below, there are two Statements marked as Assertion (A) and Reason (R). Read the Statements and Choose the correct option: Options are:

- (A) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (B) Both (A) and (R) are true but (R) is not the correct explanation of (A).
- (C) (A) is correct but (R) is wrong.
- (D) (A) is wrong but (R) is correct.

1. Assertion (A): The Western Ghats and the Eastern Ghats mark the Western and Eastern edges of the Deccan Plateau respectively.

Reason (R): The Western Ghats are higher than the eastern Ghats.

2. Assertion (A): Our Country has practically all major Physical features of the earth i.e., Mountains, Plains, Deserts, Plateaus and Islands.

Reason (R): The land of India displays great Physical variation.

3. Assertion (A): The northern Plains are generally described as flat land with no variations in its relief.

Reason (R): According to the Variations in relief features, the Northern Plains can be divided into four regions.

4. Assertion (A): The Himalayas form an arc, which covers a distance of about 2400 km. Reason (R): The width varies from 200 km in Kashmir to 50 km in Arunachal Pradesh.

ग्रीष्मकालीन अवकाश गृहकार्य

कक्षा 9 हिंदी

परियोजना कार्य

1. 'विद्यार्थी जीवन में समय प्रबंधन का महत्व' तथा 'मेरी नई कक्षा का अनुभव' विषय पर लगभग 150 शब्दों में अनुच्छेद लिखिए।
2. अपनी किसी रोमांचक यात्रा का वर्णन करते हुए मित्र के साथ हुए संवाद को लिखिए।
3. पंजाब और ओडिशा के किन्हीं पांच लेखकों के बारे में जानकारी प्राप्त कर के प्रोजेक्ट बनाएं।
4. अपनी पाठ्यपुस्तक से उपसर्ग एवं प्रत्यय वाले 20-20 शब्द खोजकर लिखिए।
5. कोई 20 कवियों के नाम लिखते हुए अपने पसंदीदा कवि का परिचय।
6. अपने द्वारा पढ़ी हुई किसी पुस्तक की समीक्षा [BOOK REVIEW] कीजिए।

पोर्टफोलिओ

कक्षा : 9

छात्र का फोटो

छात्र की सूचना

छात्र / छात्रा का नाम : _____

जन्म तिथि : _____

उम्र : _____

कक्षा व वर्ग : _____

क्रम संख्या : _____

विद्यालय का नाम : _____

विद्यालय में प्रवेश संख्या : _____

विद्यालय में प्रवेश वर्ष : _____

लंबाई : _____

भार : _____

रक्त समूह : _____

आधार संख्या : _____

पारिवारिक सूचना

- माता का नाम : _____
- पेशा : _____
- संपर्क दूरभाष : _____
- पिता का नाम : _____
- पेशा : _____
- संपर्क दूरभाष : _____
- भाई-बहन की संख्या : _____
- घर का पता : _____

छात्र / छात्रा के अपने जवाब

1. आपको किन चीजों से ज्यादा लगाव है ?

उ: _____

2. आपका प्रिय खेल कौन-सा है ?

उ: _____

3. आपको किस चीज से ज्यादा डर लगता है ?

उ: _____

4. अपने घनिष्ठ मित्र का नाम लिखिए -

उ: _____

5. आपको अपने मित्र के कौन से गुण अच्छे लगते हैं ?

उ: _____

6. आप भविष्य में क्या बनना चाहते हैं ?

उ: _____

7. आपके प्रिय महापुरुष कौन है ?

उ: _____

8. पसंदीदा पुस्तक का नाम लिखिए-

उ: _____

9. आपका शौक क्या है ?

उ: _____

10. छुट्टियों में आप कहाँ जाना चाहते हैं ?

उ : _____

छात्र / छात्रा का हस्ताक्षर : _____ शिक्षक/ शिक्षिका का हस्ताक्षर : _____

नाम : _____

नाम : _____

दिनांक : _____

दिनांक : _____

ARTIFICIAL INTELLIGENCE

1. Roll No. 1 to 20

- Make a Poster on latest Python based Game

Roll No. 21 to 40

- Robotics in Automation/Education/Transportation.

2. Portfolio - Research Work on

- AI for SDGs (Rn 1-10)
- AI in Health care (Rn 11-20)
- 4Ws Canvas (RN 21-30)
- AI in Education (Rn 31-40)

3. Revise and Learn the chapters of the May Unit Test

PUNJABI

1. ਆਪਣੀ ਪਾਠ ਪੁਸਤਕ ਵਿੱਚ ਦਰਜ ਇਕਾਂਗੀ ਸਿਰਜਣਾ ਨੂੰ ਧਿਆਨਪੂਰਵਕ ਪੜ੍ਹੋ ਤੇ ਉਸ ਵਿੱਚੋਂ ਸਮਾਜ ਨੂੰ ਜੋ ਸੇਧ ਦੇਣ ਲਈ ਜੋ ਸਿੱਖਿਆ ਮਿਲਦੀ ਹੈ ਉਸ ਬਾਰੇ ਲਿਖੋ।
2. ਆਪਣੀ ਵਿਆਕਰਨ ਪੁਸਤਕ ਵਿੱਚੋਂ ਏ ਤੇ ਸ ਨਾਲ ਸਬੰਧਿਤ ਦਸ ਦਸ ਮੁਹਾਵਰੇ ਲਿਖੋ।
3. ਆਪਣੇ ਸਕੂਲ ਮੈਗਜ਼ੀਨ ਲਈ 'ਮਿਹਨਤ' ਵਿਸ਼ੇ ਨੂੰ ਦਰਸਾਉਂਦੀ ਕਹਾਣੀ ਲਿਖੋ।
4. ਆਪਣੀ ਵਿਆਕਰਨ ਪੁਸਤਕ ਵਿੱਚੋਂ ਵਿਰੋਧੀ ਸ਼ਬਦ, ਲਿੰਗ ਬਦਲੇ, ਸ਼ਬਦ ਸੁੱਧੀ ਤੇ ਵਿਸਮਿਕ ਪੜ੍ਹੋ ਤੇ ਯਾਦ ਕਰੋ।
5. i) ਪੰਜਾਬ ਤੇ ਉੜੀਸਾ ਦੇ ਪਹਿਰਾਵੇ ਨੂੰ ਦਰਸਾਉਂਦਾ ਪੋਜੈਕਟ ਬਣਾਓ। (Roll.No.1-10)
ii) ਪੰਜਾਬ ਤੇ ਉੜੀਸਾ ਦੇ ਖਾਣ ਪੀਣ ਨੂੰ ਦਰਸਾਉਂਦਾ ਪੋਜੈਕਟ ਬਣਾਓ। (Roll.No.11-20)
iii) ਪੰਜਾਬ ਤੇ ਉੜੀਸਾ ਗੀਤ ਸੰਗੀਤ ਨੂੰ ਦਰਸਾਉਂਦਾ ਪੋਜੈਕਟ ਬਣਾਓ। (Roll.No.21-30)
iv) ਪੰਜਾਬ ਤੇ ਉੜੀਸਾ ਨਾਚ ਨੂੰ ਦਰਸਾਉਂਦਾ ਪੋਜੈਕਟ ਬਣਾਓ। (Roll.No.31 Onwards)

Happy Holidays