**J&K POLICE PUBLIC SCHOOL, MIRAN SAHIB, JAMMU**

**SUMMER HOLIDAY’S HOMEWORK**

**Class 9th Sub-Computer**

* **Learn & prepare Unit- 1 of Part A & B for class test in July.**
* **Project-**

**Make a project using MS-Word on the given topics & take the print out of it with your class, section, roll no & name.**

1. **Advertisement (Cosmetics items/ Any electronic items)**
2. **Brochures**
3. **Bio-data**
4. **Posters on save environment.**

* **Assignment-**

**Do this assignment in your computer notebook with heading holiday’s homework.**

1. **How many page orientations are there in word processor?**
2. **What is gutter margin & mirror margin?**
3. **What is alignment? Name the different types of alignment.**
4. **How you insert a picture / clip art in the word document?**
5. **Explain the following options, used for formatting text in MS Word:**
6. **Font color**
7. **Font style**
8. **Font size**
9. **Strikethrough & double strikethrough**
10. **Subscript/ superscript**
11. **How you apply a shadow to the text**
12. **What is the difference between a memory and a storage?**
13. **MICR stands for**
14. **Microprocessors can be used to make**
15. **Computer**
16. **Calculator**
17. **Digital system**
18. **All of these**
19. **Which computer, memory is used for storing programs & data currently being processed by the CPU?**

**SUB- SCIENCE**

**Project work:**

1. Write a report on different types of animal tissues .Draw diagrams also.
2. Make a *model of* Plant cell or Animal cell.
3. Make a working model of vacuum cleaner.
4. Make a working model of electric generator using environment friendly items.
5. Make five useful items from waste product in your house.
6. **Learn the chapters ;**
7. The cell
8. Tissues
9. Motion
10. Matter in our surroundings
11. **Worksheet**

**Q1. Fill in the blanks**

1. The largest cell in the human body is………….
2. Golgi apparatus was discovered by………..
3. Protoplasm was discovered by………….
4. Plants are flexible due to…………..tissue.
5. The walls of sclerenchymatous tissue are thickened due to a chemical called……….

Q2.What is transpiration?

Q3.Which complex permanent tissue conducts material in both directions?

Q4. Name the types of complex permanent tissues?

Q5. Name the type of muscles which show rhythmic contraction and relaxation.

Q6. Differentiate between ;

1. Simple tissue and complex tissues
2. Meristematic tissues and permanent tissues
3. Xylem and phloem
4. Voluntary and involuntary muscles

Q7. Explain whether the walls of the room are at rest or in motion?

Q8. Define scalar and vector quantity.

Q9. When do we say that an object has positive acceleration?

Q10. What is the average speed?

Q11. Why does a solid change into liquid on heating

Q12. Define latent heat of fusion

Q13. Why are clothes spread out for drying?

Q14. What is the difference between evaporation and boiling?

Q15. What is dry ice?

**SUB- ENGLISH**

1. Write 2 new words daily from any English newspaper and write its meaning after searching in dictionary.
2. Write Diary Entry on:
3. Your Birthday Celebration.
4. Prize Distribution Function in your school.
5. Marriage function of your sister.
6. Write and learn first 3 poems of your syllabus and identify literary devices used in the poems.
7. Write a short note on the life of Bismillah Khan.
8. Solve exercises on Determiners, Prepositions (Exercise of 10 sentences per week)
9. Prepare a tense chart and learn it and write 5 examples for each kind.
10. Collect 5 news items on “Environmental Issues” paste them on notebook and comment on them in 50-80 words.
11. Write an article on any issue/topic daily.

## SUB-MATHS

## PROJECT WORK

## Complete the following charts, projects and models assigned to the respective student in the class

### Models

* 1. To prepare model of Number System.

## Projects

1. Origin and development of Number System.

## Charts

1. Algebraic Identities
2. Formulae related to Surface area and volume.

### ASSIGNMENT

**(1 mark)**

1. If 8x+1=64, what is the value of 3 2x+1? (i) 1 (ii) 3 (iii) 9 (iv) 27
2. Which of the following is irrational

(i) 0.14 (ii) 0.1416 (iii) 0.1416 (iv) 0.1014001400014….

1. Which of the following is rational? (i) Ö 3 (ii) p (iii) 4/0 (iv) 0/4
2. √2 is a polynomial of degree?

(i) 1 (ii) 2 (iii) 0 (iv) 3

1. Every rational number is a
   1. natural number (ii) real number (iii) integer (iv) whole number
2. Express 0.3 in p / q form.
3. Find the value of (30 + 20) / 50 8.Find the decimal expansion of:

a) 8/3 b) 2/11 c) -16/45 d) 22/7

1. Find the degree of the following polynomial :
   1. 15 (ii) x (iii) x + x2 (iv) y 10. Simplify 131/5 / 13 1/3

## (2 m

**arks)**

1. Represent √6, √7 & √8 on the number line.
2. Is the expression 3√t +t√2 polynomial in one variable or not?Give reasons.
3. Check whether -2 and 2 are zeros of the polynomial x + 2
4. Find the remainder when x3 – ax2 + 6x – a is divided by x-a.
5. Use factor theorem to determine that x-3 is factor of x3-4x2+x +6
6. Insert 10 rational numbers between -3/11 and 8/11
7. Express each in p/q form: (2 marks each) a) 15.725 b) 8.0025 c) -25.6875 d) 0.585 e) 23.43
8. Find the value of k if x-3 is a factor of k2x3 – kx2 + 3kx – k
9. Find the dimensions of a cuboid if its volume is 3x2 – 12x

20. Evaluate (i) (30)3 +(20)3 –(50)3 (ii) (-12)3 + (7)3 +(5)3 (2 marks each)

## (3 marks)

1. Simplify the following expressions:

(3 marks each)

a) (√3 +√7)2 b) (√5 -√3)2 c) (2√5 + 3√2)2

1. Rationalise the denominator and simplify:

a) (√3 -√2)/( √3+√2) b) (5+2√3)/(7+4√3) c) (1+√2)/(3 -2√2)

1. Write in expanded form: (3 marks each)

a) (2x + 3y)3 b) (3x-2y)3 c) (7a+5b)3

1. If 2x +3y = 13 and xy = 6,find the value of 8x3 + 27y3

25. Evaluate: a) (1002)3 b) (999)3 c) (598)3 (3 marks each)

1. Find the following products: (3 marks each) a) (x+3y)(x2 -3xy + 9y2) b) (7a -5b)(49a2 +35ab + 25b2)
2. Find the following products: (3 marks each) (i) (x+y+2z)(x2 + y2+4z2-xy -2yz -2zx)

(ii) (2x-y+3z)(4x2+y2+9z2+2xy+3yz-6xz)

28. Factorise : a) 4√3x2 + 5x-2√3 b) 5√5x2+30x+8√5 (3 marks each)

1. Factorise : a) p3-512q3 b)2√2a3 +8b3 -27c3 + 18abc (3 marks each)
2. Find the remainder when f(x) = x3 -6x2 +2x -4 is divided by g(x)=1-3x

## (4 marks)

31. If x = 3 + √ 8, find x2 + (1/x2)

32. Solve [ (√5 – 2)/( √5 + 2)] – [( √5 + 2) / (√5 -2)]

1. Factorise a7 – ab6
2. Simplify :

(i) [1/ (1+Ö 2)] + [1/ (Ö 2+Ö3)] + [1/ (Ö 3+ Ö 4)] + [1/ (Ö 4+Ö 5)] (4 marks each)

(ii) 4+Ö 5 + 4-Ö 5

4-Ö 5 4+Ö 5

1. If (x + 5) is a factor of x3 + 2x2 – 13x + 10,find other factors.
2. Rationalise (4 marks each)

(i) [4 / (2 + √3 + √7) ] (ii) [(3Ö 2 – 2Ö3) / (3Ö2 + 2 Ö3)] + [Ö12 / (Ö3 - Ö2)]

1. If (x + y + z) = 0,show that x3 + y3 + z3 = 3xyz
2. Factorise (i)4a2 – 9b2 – 2a – 3b (ii) a2 – b2 -2(ab –ac + bc) (4 marks each) 39.Without actual division , prove that 2x4 – 6x3 + 3x2 + 3x – 2 is exactly divisible by x2 – 3x +2
3. Plot the following points on the graph and write in which quadrant or on which axis they lie. (2,3),(3,-4),(7,-2),(3,0)(4,7),(5,-5),(2,0),(0,5),(0,-2),(0,0),(1,4),(3,4),(-5,4)

**SUBJECT: SOCIAL STUDY**

* Write all the events of French revolution on the Time line and explain them.
* Do the survey of your village and find out the Farming and Non- farming activities.
* On the outline map of india, show

1. Neighbouring countries

2.States on coastal area

3. States through which troic of cancer passes

( on Classwork notebook)

* Prepare a file on Disaster management.
* Prepare the syllabus of periodic- I.