CLASS – 9TH

PHYSICS (1ST UNIT TEST)

SYLLABUS:

Periodical assessment 1 (July)

- Chapter 8- Motion

Half yearly

- Chapter 8- "motion"
- Chapter 9- " force and laws of motion"
- Chapter 10- "gravitational " (mass and weight)

Holiday's homework:-

1. Using basic concepts of physics make a working model on any renewable sources of energy. Solar energy, hydro energy, wave energy, wind energy, geothermal energy, biogas plant, tidal energy.
2. Practice numerical of chapter- 8 "motion".

CLASS – 9TH

(CHEMISTRY)

SYLLABUS:

Chapter-1 Matter in our surroundings.

Practical: 1. Types of chemical reaction.

3. Study of properties of compound and mixture.

Holiday's homework

1. Prepare a model (working) of water filter by using earthen pot, sand and gravel, charcoal powder.
2. Prepare a working model to demonstrate movement of particles in solid, liquid and gas.
3. Prepare a working model to explain working of desert cooler.

CLASS – 9TH

SUBJECT: ENGLISH

BEEHIVE

Chapter 1- The Fun They Had.

Poem – The Road Not Taken Wind

MOMENTS

Chapter 1- The Lost Child

Grammar – Tense- present, past and future. Verb agreement.

Writing – Article writing, dairy entry

HOLIDAYS HOMEWORK

1. Prepare a magazine using your own creativity, write two poems, a mysterious story and put some clicks of your special moments during holidays in the magazine. Don't forget to make a beautiful cover page and give a suitable name to your magazine.
2. Question answer should be done in c.w. notebook for all chapters taught in class.
3. Make 5 language games, (based on grammar topics), e.g- play cards, puzzles etc.

CLASS- 9TH

SUBJECT – SOCIAL SCIENCE

GEOGRAPHY

Lesson 1- 2:- Up to northern plain.

History

Chapter 1- The French Revolution

CIVICS

Chapter 2- What is Democracy?
Why Democracy?

Fill page 30 (till Zimbabwe)

ECONOMICS

Chapter 1- The story of the village Palampur.

CLASS 9TH

SUBJECT: - SOCIAL SCIENCE

HOLIDAYS HOMEWORK

1. Prepare a project on "Disaster MANAGEMENT."
2. Use spiral (A-4) file (not less than 15 pages)
3. Do Ques/Ans of chapter -2 what is Democracy? Why Democracy?
4. Prepare for the first term exam?

CLASS 9TH

SUBJECT: - MATHS

- Chapter 1- Number system
- Chapter 2- Polynomial
- Chapter 3- Co-ordinate Geometry
- Chapter 4- linear equation in two variable
- Chapter 5- Euclid Geometry

CLASS 9TH A (HOLIDAY HOMEWORK)

1. Assignment of extra question for chapter

- Chapter 1- Number system
- Chapter 2- Polynomial
- Chapter 3- Co-ordinate Geometry
- Chapter 4- linear equation in two variable
- Chapter 5- Euclid Geometry

2. Project

1. For roll no 1-14 (spiral stairs using congruent triangle)
2. For roll no 15-28 (spiral roots)
3. For roll no 29-43 (project of identity $(a+b)^2$)

CLASS 9TH B (HOLIDAY HOMEWORK)

1. Assignment of extra question for chapter
   - Chapter 1- Number system
   - Chapter 2- Polynomial
   - Chapter 3- Co-ordinate Geometry
   - Chapter 4- linear equation in two variable
   - Chapter 5- Euclid Geometry

2. Project
   - For roll no 1-14 (project of identify $(a+b)^3$)
   - For roll no 15-28 (identifying the shapes using co-ordinate on cartesian plane geo-board)
   - For roll no 29-43 (Mathematics in real Life)

CLASS 9TH C (HOLIDAY HOMEWORK)

1. Assignment of extra question for chapter
   - Chapter 1- Number system
   - Chapter 2- Polynomial
   - Chapter 3- Co-ordinate Geometry
   - Chapter 4- linear equation in two variable
   - Chapter 5- Euclid Geometry

2. Project
   - For roll no 1-14 (to design a crossword/puzzle with Mathematical terms)
   - For roll no 15-28 (project on π pi)
   - For roll no 29-43 (parallel and transversal lines in real life)

CLASS 9TH D (HOLIDAY HOMEWORK)

1. Assignment of extra question for chapter
   - Chapter 1- Number system
   - Chapter 2- Polynomial
   - Chapter 3- Co-ordinate Geometry
   - Chapter 4- linear equation in two variable
   - Chapter 5- Euclid Geometry

2. Project
   - For roll no 1-14 (verifying congruent rules of triangle for real life object)
   - For roll no 15-28 project on surface area (prepare a cube and cuboids, cute the alongside way and find lateral surface area)
   - For roll no 29-43 (using histogram and frequency table draw marks obtain by student in a class)

CHAPTER:-1 NUMBER SYSTEMS

ONE MARKS QUESTION

1. $[7(81¼+256¼)¼]^4$
2. Find the value of $(81)^{0.16}\times(81)^{0.09}$
3. $(14641)^{0.25}$ find its value.
4. Simplify $\sqrt[4]{(\frac{132}{143})^{-2}}$
5. Identify a rational no. among the no.

   $\sqrt{\frac{25}{6}}, \sqrt{\frac{20}{4}}, 2.\overline{27}, \sqrt{2}, \sqrt{3}$
6. If x=8, find value of $\sqrt[3]{x} + x - 5$.
7. Simplify $\sqrt[4]{\sqrt[3]{2}^2}$
8. Express in $\frac{p}{q}$ form

   1. 8181
9. Find one irrational no. between 2013 and 2014
10. Simplify $(\frac{64}{729})^{-\frac{1}{6}}$

Two marks questions:

11. Show $\frac{x}{x}^{\frac{a(b-c)}{b(a-c)}}\times(\frac{x}{x}\frac{b}{a})^{c}=1$
12. Simplify, $8⅔ - \sqrt{9}\times10^0+(\frac{1}{144})^{-}½$
13. Find value of $\frac{4}{(216)^{-⅔}} - \frac{1}{(256)^{-¾}}$
14. Simplify $\sqrt[3]{45} - \sqrt{125} + \sqrt{200} - \sqrt{50}$
15. If x= $3+2\sqrt{2}$ find $x+\frac{1}{x}$
16. ———

Three and Four marks Questions

17. $\frac{1}{1+\sqrt{2}}+\frac{1}{\sqrt{2}+\sqrt{3}}+\frac{2}{\sqrt{3}+\sqrt{5}}$, find value.
18. Simplify $\frac{\sqrt{72}}{\sqrt[5]{72}+\sqrt[3]{288}-\sqrt[2]{648}}$
19. If $x=\frac{\sqrt{5}-\sqrt{2}}{\sqrt{5}+\sqrt{2}}$ and $y=\frac{\sqrt{5}+\sqrt{2}}{\sqrt{5}-\sqrt{2}}$, find value x^2+xy+y^2
20. Rationalize, $\frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}+\frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$
21. If $(5)^{x-3}\times(3)^{2x-8}=225$, find the value of x.
22. Find a and b, $\frac{5+\sqrt{6}}{5-\sqrt{6}}=a+b\sqrt{b}$.
23. Rationalize $\frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}+\frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$
24. Show on no. line $\sqrt{9.3}$
25. Prove that $\frac{a-1}{a-1+b-1}+\frac{a-1}{a-1+b-1}=\frac{2b2}{b2-a2}$
26. Express $^{p}/_{q}$ form2. $\overline{36}+0.\overline{23}$.
27. If $x=2-\sqrt{3}$, find

    (1) $x+\frac{1}{x}$ (2) $x^2+\frac{1}{x2}$ (3) $x^3+\frac{1}{x3}$
28. If $x=\frac{\sqrt{p+2q}+\sqrt{p-2q}}{\sqrt{p+2q}-\sqrt{p-2q}}$, show that $q(x^2+1)=px$.
29. $X^a=y$, $y^b=z$ and $z^c=x$, then prove abc=1.
30. $5^{2x-1}-(25)^{x-1}=2500$, find x.
31. Prove that $\left(\frac{x^a}{x^b}\right)a^2+ab+b^2$, $\left(\frac{x^b}{x^c}\right)b^2+bc+c^2$, $\left(\frac{x^c}{x^a}\right)c^2+ac+a^2=1$.

CHAPTER:-2 POLYNOMIAL

ONE MARKS QUESTION

1. Find f ($\sqrt{2}$)
   (x) = $x^2+\sqrt{2}\,x+1$
2. If $P(x)=x^3+x^2-x+1$, find P(1)+P(-1)
3. Find 0 of P(x)=3x+7
4. Find k if P is a zero of $P(x)= x^3-3x^2+3x+k$
5. If $x^{49}+49$ is divided by (x+1), then find its reminder.
6. Write degree of $P(x) = 7x^3(x^2-5)$
7. Find the value of $(x-y)^3+(y-z)^3+(z-x)^3$
8. If x+y+2=0, then write value of x^3+y^3+8
9. If x+1 is a factor of $ax^3+2x^2-x+3a-7$, find a.
10. Find value 249^2-248^2.

TWO MARKS QUESTIONS

11. Using factor theorem, show that x-y is a factor of $x(y^2-z^2)+y(z^2-x^2)+z(x^2-y^2)$.
12. Factorize: $x^2+3\sqrt{2x}+4$
13. Factorize: $(x-2)^2+P^2+2P(x-2)$
14. If $P(x)=x^4-2x^3+3x^2-ax+8$ is divided by (x-2). It leaves a reminder 10. Find value of a.
15. Factorize:$4a^2-ab^2-2a-3b$
16. Factorize: M(M-1)-n(n-1)
17. If $x+\frac{1}{x}=3$, find $x^2+\frac{1}{x}2$
18. If 2x+3y=8 and xy=4, find value of $4x^2+9y$

THREE AND FOUR MARKS QUESTIONS

19. Find the product of $(x-\frac{1}{x})(x+\frac{1}{x})(x^2+\frac{1}{x}2)(x^4+\frac{1}{x}4)$
20. If $x-\frac{1}{x}=3$, find value $x^3-\frac{1}{x}3$
21. Find value of $x^3+y^3-12xy+6y$, when $x+y=-4$
22. Factorize: $(x-y)^3=(y-z)^3+=(z-x)^3$
23. Simplify $(x=y=z)^2-(x+y-z)^2$
24. Factorize: $P(x)=x^3=6x^2+11x+6$
25. F both (x-2) and (x-½0 are factor of Px^2+5x+r show that P=r.
26. Find the value of a and b; if $x^3+ax^2=bx+6$ s divided by x-2 leaves remainder 3. When t divided by x-3 leaves remainder 5.
27. If 2x=y=-5, prove that $x^3+=y^3-30xy125=0$
28. If a+b+c=0, prove that $\frac{a^2}{bc}+\frac{b^2}{ca}+\frac{c^2}{ab}=3$
29. If a+b+c=0, $a^2+b^2+c^2=90$ find value of $a^3+b^3+c^3-3abc$
30. Factorize $(p+q)^2-20(p+q)-125$
31. Simplify $\frac{(a^2-b^2)^3+(b^2-c^2)^3+(c^2-a^2)^3}{(a-b)^3+(b-c)^3+(c-a)^3}$
32. Find the value of $(x-a)^3+(x-5)^3+(x-c)^3-3(x-a)(x-b)(x-c)$, if a+b+c=3x.
33. If a,b,c are real no $a^2+b^2+c^2-ab-bc-ca=0$, prove a=b=c.
34. If a+b+c= prove that $\frac{(b+c)^2}{3bc}+\frac{(c+a)^2}{3ac}+\frac{(a+b)^2}{3ab}=1$

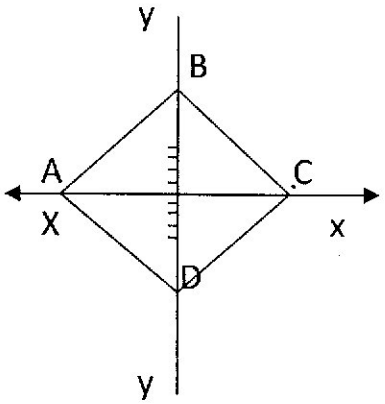
CHAPTER:-3(CO-ORDINATE GEOMETRY)

ONE MARKS QUESTION

1. Plot (6,5) and (-3,4) le n which quadrants
2. If UTO and YCO, then the point (x,y) lies in which quadrants.
3. In which quadrant (x,y) lie f y is negative and x is positive.
4. Name the quadrant/ quadrants n whch the ordinate of a point is negative.
5. What are the distances of point (7 and 26) from x-axis?
6. The perpendicular distance of point from the x-axis is 4 units and the perpendicular distance from the y-axis is 5 units; write the co-ordinates of such a point if it lies in:

A.I *Quadrants* B. II Quadrants C. III Quadrants D. IV Quadrants

7. If a point P (2, 3) lies in first quadrant, then what will be the co-ordinates of a point on opposite to in fourth quadrant having equal distance from x-axis?
8. Plot the points P (-1, 0), Q(0,1), and R(2,3) on the graph paper and check whether they are collinear or not.
9. Draw a quadrilateral whose vertices are (3,2), (2,3), (-4,5) and (5,-3).
10. Plot the points (2,3),(3,-4),(-4,5),(-5,-6), (-2,0),(0,5),(0,-5) and (-5,0)
11. Plot the points A (3, 0), B(0,5), C(-3, -5) AND D(2,4) in the Cartesian plane.
12. In the figure given alongside, PqR is an equilateral triangle in which co-ordinate of q and R are (0, 4) and (0,-4) respectively. Find the co-ordinates of the vertex p.



13. 1. State the quadrant in which the following points lie: A(-3, -1)

    2. Write the absiissce of (-5, 0)

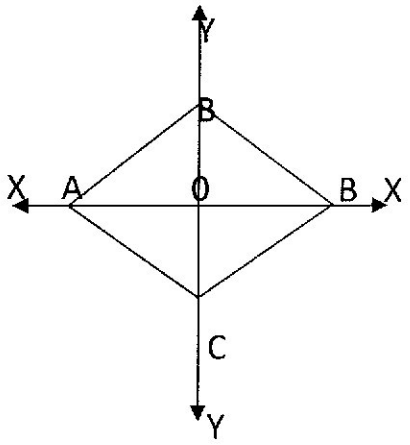
    3. Write the ordinate of (6,7)

14. Draw a square ABCD whose vertices are A (1, 2), B (-7, 2), C (-7,-6) and D (1,-6).

15. Plot the points A (4, 6), B (-2, 3), C (-2,-3) and D (4,-7) on graph paper. On joining the points in order, what figure did you get.

16. Plot the points U (4,-1), N (4, 0), O (0, 0) and P (0, 3). Name the figure obtained by joining UNOP and find the perimeter of the figure.

17. In the given figure, ABCD is a rhombus with diagonals AC=16 cm and BD=8cm. find the co-ordinates of A, B, C and D.



18. Plot the points E(4, 2), I (0,2), L(-1,3) and N(2, 0) on the castesian plane. Join these points in order. Name the shape thus obtained.

CLASS-9TH

BIOLOGY (1ST UNIT TEST)

SYLLABUS:

1. CHAPTER- Fundamental Unit of Life.

Holidays H.W

1. Prepare a model on any one of the following:
   - Plant cell and animal cell
   - Types of plant tissues
   - Types of animal tissues
   - Neuron.

2. Prepare a working model on any one agricultural practice.
3. Make a project on any one communicable disease – causative organisms, model of spread, preventive and control measure.
4. Revise the chapter- fundamental unit of life and write the answer in a separate copy.