SYLLABUS, SPECIFICATION GRID AND MODEL QUESTION, 2075

GRADE NINE

Learning Realm International (LRI) School

Kalankisthan, Kathmandu, Nepal

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Syllabus, Specification Grid and Model Questions, 2075

Grade Nine

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SYLLABUS

FIRST UNIT TEST

S. No.	Chapters	Estimated periods	Objectives After Completion of this chapter Students will be able to
1.	Sets	10	a) Explain the concept of sets specification of sets types of sets and relations. b) Use Venn-diagrams to show the relationsship between the given sets. c) Use Venn-diagram to find the number of elements of sets.
2.	Area of path	6	a) Find the area of pathways. b) Tell how many stones,tiles,marbles,brick,etc are required to pave a given area.
3.	Factorisation	8	a) Explain the concept of factorization of algebraic expressions. b) Apply algebraic formulae for factorizatonof algebraic expressions.
4	Triangles	8	a) Prove that the sum of interior angles of triangle is supplementary. b) Prove that the exterior angle of triangle is equal to the sum of non adjacent interior angles.

FIRST TERM

S. No.	Chapters	Estimated periods	Objectives After Completion of this chapter Students will be able to
1	Set*	10	a)Explain the concept of sets specification of sets types of sets and relations. b) Use Venn-diagrams to show the relationship between the given sets. c) Use Venn-diagram to find the number of elements of sets.
2	Mensuration*	6	a) Find the area of pathways. b) Explain how many stones, tiles, marbles, brick, etc. are required to pave a given area.
3	Indices	10	a) Explain the concept of indices. b) Apply laws of indices for simplifying the given algebraic expressions. c) Solve the exponential equations.
4	Area of 4 walls, floor and ceiling	10	a) Find the area of 4 walls floor and ceiling. b) Find the cost of carpeting , plastering ,painting etc. of a room.
5	Profit and loss	9	a) Explain the concept of selling price, costprice, profit and loss. b) Calculate the profit and loss in amount and percentage. c) Solve daily life problems related to profit and loss.
6	Factorisation*	8	a) Explain the concept of factorization of algebraic expressions. b) Apply algebraic formulae for factorizatonof algebraic expressions.

			b) Find the coordinates of a point which divides the line joining two points internally and externally in the given ratio.
7	Statistics(Mean and Median)	6	a) Explain the concept of measures of central tendency. b) Find the mean , median of individual ,discrete and continous series. c) Explain the concept of various types of matrices.
8	Ratio and Proportion	10	a) Find the unknown quantity by ratio method. b) Explain the concepts of different types of ratios. c) Find the unknown quantity by proportion method. d) Find the unknown quantity by "k" method.
9	Isosceles triangles	8	a) To prove different theorems related to isosceles triangles experimentally as well as theoretically. b) Apply the learned theorems to solve problems.
10	Trigonometry	6	

Chapters with * sign are taught for **First Unit Test**

SECOND UNIT TEST

S. No.	**Chapters**	**Estimated periods**	**Objectives** After Completion of this chapter Students will be able to
1.	Commission and Tax	10	a) Explain the concept of commission and its calculation.. b)) Find the discount and discount percent allowed by a seller. c) Explain the concept of tax.
2.	Simultaneous equation(linear only)	10	a) Explain the concept of linear equations in one variable and two variables . b) Tell the principles of solving equations. c) Solve two linear equations by substitution , elimanition and graphical method .
3.	Remaining part of triangles(Mid point theorem).	10	a) To prove mid points theorem and its converse theoretically. b) Apply theorems to solve problems.

SECOND TERM EAMINATION

S. No.	**Chapters**	**Estimated periods**	**Objectives** After Completion of this chapter Students will be able to
1	Set*	10	a) Explain the concept of sets specification of sets types of sets and relations. b) Use Venn-diagrams to show the relationship between the given sets. c) Use Venn-diagram to find the number of elements of sets.
2	Profit and Loss*	9	a) Explain the concept of selling price, cost price, profit and loss. b) Calculate the profit and loss in amount and percentage. c) Solve daily life problems related to profit and loss.

3	Commission and tax*	10	a) Explain the concept of commission and its calculation.. b) Find the discount and discount percent allowed by a seller. c) Explain the concept of tax.
4	Mensuration*	16	a) Find the area of 4 walls floor and ceiling. b) Find the cost of carpeting , plastering ,painting etc. of a room.
5	Factorisation*	8	a) Explain the concept of factorization of algebraic expressions. b) Apply algebraic formulae for factorization of algebraic expressions.
6	Indices*	10	a) Explain the concept of indices. b) Apply laws of indices for simplifying the given algebraic expressions. c) Solve the exponential equations.
7	Ratio and Proportion*	10	a) Find the unknown quantity by ratio method. b) Explain the concepts of different types of ratios. c) Find the unknown quantity by proportion method. d) Find the unknown quantity by "k" method.
8	Simultaneous Equations	10	a) Explain the concept of linear equations in one variable and two variables . b) Explain the principles of solving equations. c) Solve two linear equations by substitution , elimination and graphical method
9	Quadratic Equations	7	a) Explain the different types of Quadratic equations b)Find the roots of Quadratic equations by using formula and without using formula.
10	Triangles	26	a) Prove mid points theorem and its converse theoretically. b) Apply theorems to solve problems. c) Prove theorems related to different types of triangles and apply to solve problems.
11	Parallelogram	15	a) Prove theorems related to Parallelograms experimentally as well as theoretically. b) Apply theorems to solve problems.
12	Simalirity	7	a) Explain the concept of similarity of triangles. b) Carry tests for similarity of triangle. c) Apply results on similar triangle. d) Solve simple problems related to similar polygons.
13	Trigonometry*	6	a) Explain the concept of fundamental trigonometric ratios. b) Find the relation between trigonometric ratios. c) Find the trigonometric ratios of some standard angles.
14	Statistics	10	a) Understand the concept of measures of central tendency. b) To find the mean, median of individual ,discrete and continuous series. c) Understand the concept of various types of matrices

THIRD UNIT TEST 2075

S. No.	Chapters	Estimated periods	Objectives After Completion of this chapter Students will be able to
1.	House hold arithmetic	10	a) Calculate the electricity , telephone and water bill within time and beyond time. b) Calculate taxi fare.
2	Solid Shapes	10	a) Find the T.S.A , L.S.A and Volume of prism . b) Find the number of bricks to build a wall.
3)	Similarity*	10	a) Explain the concept of similarityof triangles. b) Carry tests for similarity of triangle. c) Apply results on similar triangle. d) Solve simple problems related to similar polygons.
4)	Quadratic Equation*	7	a) Explain the different types of Quadratic equations b) Find the roots of Quadratic equations by using formula and without using formula.
5	Profit and Loss*		a) Explain the different types of Quadratic equations b) Find the roots of Quadratic equations by using formula and without using formula.

FINAL TERM EAMINATION

S. No.	Chapters	Estimated periods	Objectives After Completion of this chapter Students will be able to
1	Set*	10	a) Explain the concept of sets specification of sets types of sets and relations. b) Use Venn-diagrams to show the relationsship between the given sets. c) Use Venn-diagram to find the number of elements of sets.
2	Profit and loss*	9	a) Explain the concept of selling price,costprice, profit and loss. b) Calculate the profit and loss in amount and percentage. c) Solve daily life problems related to profit and loss.
3	Commission and tax*	10	a) Explain the concept of commission and its calculation.. b)) Find the discount and discount percent allowed by a seller. c) Explain the concept of tax.
4	Household Arithmetic*	10	a) Calculate electricity , telephone and water bill within time and beyond time. b) Calculate taxi fare .
5	Mensuration*	16	a) Find the area of 4 walls floor and ceiling. b) Find the cost of carpeting , plastering ,painting etc. of a room.
6	Solid Shapes*	10	a) Find the T.S.A , L.S.A and Volume of prism . b) Find the number of bricks to build a wall.
7	Factorisation*	8	a) Explain the concept of factorization of algebraic expressions. b) Apply algebraic formulae for factorizaton of algebraic expressions.
8	Indices*	10	a) Explain the concept of indices. b) Apply laws of indices for simplifying the given algebraic expressions. c) Solve the exponential equations.
9	Ratio and Proportion*	10	a) Find the unknown quantity by ratio method. b) Explain the concepts of different types of ratios. c) Find the unknown quantity by proportion method. d) Find the unknown quantity by "k" method.
10	Simultaneous Equation*	10	.a) Explain the concept of linear equations in one variable and two variables . b) Explain the principles of solving equations. c) Solve two linear equations by substitution , elimination and graphical method
11	Quadratic Equation*	7	a) Explain the different types of Quadratic equations b) Find the roots of Quadratic equations by using formula and without using formula.
12	Triangles*	26	a) Prove mid points theorem and its converse theoretically. b) Apply theorems to solve problems. c) Prove theorems related to different types of triangles and apply to solve problems
13	Parallelogram*	15	a) Prove theorems related to Parallelograms experimentally as well as theoretically. b) Apply theorems to solve problems.

14	Construction	10	a) Construct different types of Quadrilateral with different measurements.
15	Similarity*	17	a) Explain the concept of similarity of triangles. b) Carry tests for similarity of triangle. c) Apply results on similar triangle. d) Solve simple problems related to similar polygons.
16	Circle	15	a) Explain the basic terms involved in circle. b) Prove theorems experimentally as well as theoretically. c) Apply theorems to solve problems.
17	Trigonometry*	7	a) Understand the concept of fundamental trigonometric ratios. b) Find the relation between trigonometric ratios. c) Find the trigonometric ratios of some standard angles .
18	Statistics*	10	a) Explain the concept of measures of central tendency. b) To find the mean, median of individual, discrete and continuous series. c) Explain the concept of various types of matrices
19	Probability	7	a) Explain the elementary concept of probability . b) Explain the concept of terms involved in probability . c) Find the probability of an event . d) Explain the concept of probability scale (0- 1)

SPECIFICATION GRID FOR FIRST UNIT TEST

S. No.	**Chapters**	**No of questions each of 1 Marks**	**No of questions each of 2 Marks**	**No of questions each of 4 Marks**	**No of questions each of 5 Marks**
1.	Sets		1 (KB)	1 (PS)	
2.	Area of path	1(KU)		1(PS)	
3.	Factorisation		1 (UB)		
4	Triangles	1(KU)	1(UB)	1(PS)	
Total Marks		2 Marks	6Marks	12 Marks	

SPECIFICATION GRID FOR FIRST TERM

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 2 Marks	No of questions each of 4 Marks	No of questions each of 5 Marks
1	Set*		1 (UB)	1 (AB)	
2	Mensuration*	1(KB)	1(UB)		
3	Indices	1(KB)	2 (UB)	2 (AB)	1(HB)
4	Area of 4 walls, floor and ceiling	1(KB)	2(UB)	1 (AB)	1(HB)
5	Profit and loss	1(KB)	2 (UB)	1(AB)	1(HB)
6	Factorisation*		2 (UB)		
7	Statistics(Mean and Median)	1(KB)	2 (UB)	1(AB)	
8	Ratio and Proportion		2(UB)	1(AB)	
9	Isosceles triangles	1(KB)	2(UB)	2(AB)	1(HB)
10	Trigonometry		1(UB)	1(AB)	
Total Marks		$6\times1=6$ Marks	$17\times2=$ 34 Marks	$10\times4=$ 40 Marks	$5\times4=20$ Marks

Chapters with * sign are taught for **First Unit Test**

SPECIFICATION GRID FOR SECOND UNIT TEST

S. No.	Chapters	No of questions each of 1 Marks	No of questions each of 2 Marks	No of questions each of 4 Marks	No of questions each of 5 Marks
1.	Commission and Tax	1 (KB)	1 (KB)	1 (PS)	
2.	Simultaneous equation(linear only)		1 (KB)	1 (PS)	
3.	Remaining part of triangles(Mid point theorem).	1(KB)	1 (UB)	1(PS)	
Total Marks		$2\times1=2$ Marks	$3\times2=$ 6Marks	$3\times4=12$ Marks	

SPECIFICATION GRID FOR SECOND TERM EAMINATION

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 2 Marks	No of questions each of 4 Marks	No of questions each of 5 Marks
1	Set*			1(PS)	
2	Profit and Loss*	1(KB)	1(UB)	1(AB)	
3	Commission and tax*		2 (UB)	1(AB)	1(HA)
4	Mensuration*	1(KB)	1(UB)	1 (AB)	1(HB)
5	Factorisation*		1 (UB)		
6	Indices*	1(KB)	2 (UB)	1(AB)	
7	Ratio and Proportion*	1(KB)	1 (UB)	1(AB)	
8	Simultaneous Equations		1(UB)		
9	Quadratic Equations		1(UB)	1(AB)	1(PS)
10	Triangles	1(KB)	2(UB)		
11	Parallelogram		1(UB)	1(AB)	1(HB)
12	Simalirity		1(UB)		
13	Trigonometry*	1(KB)	1(UB)	1(PS)	
14	Statistics		2(UB)	1(AB)	
Total Marks		$6\times1=6$ Marks	$17\times2=$ 34 Marks	$10\times4=40$ Marks	$5\times4=20$

SPECIFICATION GRID FOR THIRD UNIT TEST 2075

S. No.	Chapters	No of questions each of 1 Marks	No of questions each of 2 Marks	No of questions each of 4 Marks	No of questions each of 5 Marks
1.	House hold arithmetic	1 (KB)	1 (KB)		
2	Solid Shapes	1 (KB)	1 (UB)	1 (PS)	
3)	Similarity*		1(UB)		
4)	Quadratic Equation*			1(PS)	
5	Profit and Loss*			1(UB)	
Total Marks		$2\times1=2$ Marks	$3\times2=6$Marks	$3\times4=12$ Marks	

Note: KB= knowledge based, SB= Skill based, UB= Understanding based, PS= Problem solving capacity

SPECIFICATION GRID FOR FINAL TERM EAMINATION TEST

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 2 Marks	No of questions each of 4 Marks	No of questions each of 5 Marks
1	Set*			1(UB)	
2	Profit and loss*	1(KB)	1(UB)	1(UB)	1(PS)
3	Commission and tax*		1 (UB)		
4	Household Arithmetic*		1(UB)		
5	Mensuration*	1(KB)	1 (UB)	1(AB)	
6	Solid Shapes*		1 (UB)		1(UB)
7	Factorisation*		1 (PS)		
8	Indices*	1(KB)	1(UB)	1(AB)	
9	Ratio and Proportion*		1(PS)	1(UB)	
10	Simultaneous Equation*		1(UB)	1(PS)	
11	Quadratic Equation*				1(PS)
12	Triangles*	1(UB)	1(UB)	1(UB)	
13	Parallelogram*		1(KB)		
14	Construction			1(UB)	
15	Similarity*		1(PS)		
16	Circle	1(UB)	1(UB)	1(PS)	1(HB)
17	Trigonometry*		1 (UB)		
18	Statistics*	1(UB)	1(SB)	1(PS)	
19	Probability		2(UB)		
Total Marks		$6\times1=$ 6Marks	$17\times2=34$ Marks	$10\times4=$ 40Marks	$5\times4=20$

Note: KB= knowledge based, SB= Skill based, UB= Understanding based, PS= Problem solving capacity

MODEL QUESTION BASED ON FIRST UT

Model Question

Subject : Compulsory Mathematics Full Marks : 20

Time : 40 minutes

Attempt all the questions:

Group A [2×1 = 2]

1. A rectangular garden has length'l'breadth'b'and 'd'units wide path is surrounding outside the garden, then write the formula to calculate the area of path.

   Ans:2d(l+b+2d)

2. One of the angles of a right angled triangle is 60°,find the other angle.

   Ans: 30°

Group B [3×2 = 6]

3. If U={1,2,3,4……,10},A={2,4,5,7}, B={1,3,5,8}then find (A ∪ B) and A-B.
   Ans: {1,2,3,4,5,7,8}
4. Factorize:$18x^2-32y^2$ Ans: $2(3x+4y)(3x-4y)$

5. A path of 0.5m wide runs round within a square garden of side 15m,find the area of the path .

   Ans: $37m^2$

Group C [3×4 = 12]

6. In a survey of a group of students, it was found that 60 liked to listen the poems,45 liked to listen stories,25 liked to listen both and 10 did not like to listen both. Then

   (a) Draw a Venn diagram to illustrate the above information.

   (b) How many students were surveyed?
   Ans: 90

   (c) How many students liked to listen the story only?
   Ans:20

7. The cost of plastering the 4 walls of a room 18m long and 4m high at Rs 6 per sq.m is Rs 1200.Find the breadth of the room.

   Ans: 7m.

8. Verify experimentally that exterior angle of a triangle is equal to the sum of two opposite interior angles.(Draw two figures of different measurements)

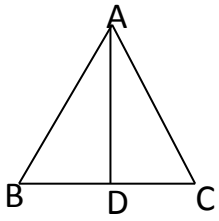
Good Luck

MODEL QUESTION BASED ON FIRST TERMINAL

Subject : Compulsory Mathematics Full Marks : 100
Time : 3 Hours
Attempt all the questions:

Group A [6×1 = 6]

1. What should be the index of a so that its value will be equal to 1?
   Ans:0
2. A room has length'l'breadth'b'and height 'h,then write down the formula to find the area of 4 walls of the room
   Ans:2h(l+b)
3. A watch which was bought for Rs 100 was sold at Rs 120, what will be the gain percent?
   Ans: 20%
4. If the sum of terms($\sum x$) and number of terms (N) are given, then write down the formula for finding the mean($\bar{x}$)
   Ans: $\frac{\sum x}{N}$
5. In triangle ABC,AB=AC and $\angle BAD = \angle CAD$, then write the relation between BD and AC.
   Ans:BD=DC
6. Find the value of $\sin^2 45°$



Group B [17×2 = 34]

7. If U={1,2,3,4,5,6,7,8,9,10},A={prime numbers},B={even numbers},find $\left(\overline{A \cup B}\right)$
   Ans:{1,9}
8. Two paths of width 2m each across the middle of a rectangular garden of length 60m and breadth 40m.Find the area of the path.
   Ans: 196m^2.
9. Solve: $2^{x+2}+2^x = 5$
   Ans:0
10. Evaluate: $\frac{4^{x+2}-4^x}{4^x}$
    Ans:15
11. Find the area of 4 walls of a room of length 8m, breadth 5m and height 4m.
    Ans: 104m^2.
12. How many pieces of carpet 4m square will be required to cover a square room of length 40m?
    Ans:100
13. A watch is sold for Rs 550 at a profit 10%.Find the cost price of the watch?
    Ans:Rs 500

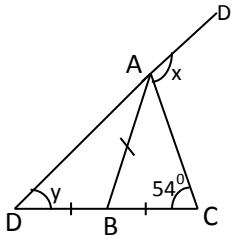
14. If 24m of cloth are bought at Rs 10 per m and sold at Rs 20 per m.How much is gained?
    Ans: Rs 240
15. Factorize: x^2-y^2+2y-1 Ans: $(x+y-1)(x-y-1)$

16. Factorize: $27x^3-64y^3$ Ans: $(3x-4y)(9x^2+12xy+16y^2)$
17. If the mean of 6,8,5,7,x and 10 is 4 is 7,find the value of x.
    Ans:12
18. If $\bar{x}=15$ and $\sum f=10$, find $\sum fx$.
    Ans:150
19. If 2, x, 18 and 54 are in proportion, and then what is the value of x?
    Ans:6

20. If $\frac{7x-3y}{7x+3y}=\frac{5}{9}$, find x: y
    Ans: $\frac{3}{2}$

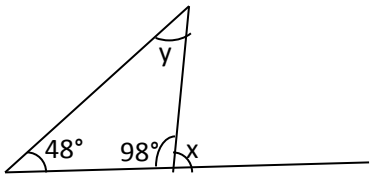
21. Find the value of 'x'and 'y'from the adjoining figure:

    Ans:90° and 36°



22. Find the value of 'x'and 'y'from the adjoining figure:

    Ans:82° and 34°



23. Prove that:cos 60°+sin30°=1

Group C [10×4 = 40]

24. In a survey of a community, 45% of the people like Dashain festival, 65% like Tihar festival and 20% like both festivals. Then

    (a) Draw a Venn diagram to illustrate the above informations.

    (b) What percent of them don't like both?
        Ans:10%

25. Simplify: $\left(\frac{x^a}{x^b}\right)^{a^2+ab+b^2} \times \left(\frac{x^b}{x^c}\right)^{b^2+bc+c^2} \times \left(\frac{x^c}{x^a}\right)^{c^2+ca+a^2}$

Ans:1

26. If $a^3+b^3+c^3=1$then prove that: $\left(\frac{x^a}{x^{-b}}\right)^{a^2-ab+b^2} \times \left(\frac{x^b}{x^{-c}}\right)^{b^2-bc+c^2} \times \left(\frac{x^c}{x^{-a}}\right)^{c^2-ca+a^2} = x^2$

27. A square room contains $180m^3$of air. If the cost of painting its 4 walls at Rs20 per m^2be Rs2400, find the height of the room.

Ans:5m

28. Manas bought two articles which cost him Rs 480.He sold one of them at a loss of 15% and at a gain of 19%.If the selling price of both the articles are equal; find the cost price of the article.

Ans:Rs 280

29. Find the mean from the following data:

Marks Obtained	45	35	25	15	5
No of students	2	7	12	9	1

Ans:25

30. If $\frac{a}{b}=\frac{b}{c}=\frac{c}{d}$, prove that: $\frac{a+b}{c+d}=\frac{a^2+b^2+c^2}{b^2+c^2+d^2}$

31. Verify experimentally that base angles of an isosceles triangle are equal (Draw two figures of different measurements)
32. Prove that if the base angles of a triangle are equal then the sides opposite to them are also equal.
33. Prove that: $\frac{1+\tan 30^\circ}{1-\tan 30^\circ}=\frac{1+\sin 60^\circ}{1-\sin 30^\circ}$

Group D [$4\times5=20$]

34. If a+b+c=0,prove that: $\frac{1}{1+x^a+x^{-b}}+\frac{1}{1+x^b+x^{-c}}+\frac{1}{1+x^c+x^{-a}}=1$
35. The length of a room is two times its breadth and 5 times its height. If the volume of the room is $800cm^3$, find the cost of papering its walls at Rs 20 per square mere.

Ans:Rs 4800

36. When an article is sold at a discount of 10% on the marked price, a profit of Rs 8 is earned by the seller. If the same article is sold without allowing a discount, there will be a profit of Rs 20.What should be the cost price of the article?

Ans:Rs 100

37. ABC is an isosceles triangle. The equal sides AB and AC are produced to D and E respectively. Prove that OBC is an isosceles triangle.

Good Luck

A. MATHS

CONTRIBUTOR

SURENDRA SINGH THAGUNNA

SPECIFICATION GRID FOR FIRST UNIT TEST 2075

S. No.	Chapters	No of questions each of 1 Marks	No of questions each of 2 Marks	No of questions each of 4 Marks	No of questions each of 5 Marks	Estimated periods	Objectives After Completion of this chapter Students will be able to
1.	Trigonometrical Identity	1	1 (KB)	1 (PS)		14	a) Understand trigonometrical ratio of an angle. b) Find the fundamental relations of trigonometrical ratios. c) Prove the trigonometrical Identities.
2.	Section Formula, Centroid, Distance between two points	1	1 (KB)		1 (PS)	10	a) Find the distant between two points. b) Find the coordinates of a point which divides the line joining two points internally and externally in the given ratio.
4.	Matrices	1	1 (UB)	1(PS)		12	a) Understand the concept of matrices. b) Find the elements and order of a matrix. c) Understand the concept of various types of matrices. d) Find the transpose of a matrices. e) Understand the concept of properties of transpose of matrices. f) Understand the concept of operations on matrices. g) Find the multiplications of matrices.
Total Marks		3 Marks	6Marks	8 Marks	5 marks		

Note: KB= knowledge based, SB= Skill based, UB= Understanding based, PS= Problem solving capacity

SPECIFICATION GRID FOR FIRST TERM

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 2 Marks	No of questions each of 4 Marks	No of questions each of 5 Marks	Estimated periods	Objectives After Completion of this chapter Students will be able to
1	Conversion of Trigonometrical Ratios, Trigonometrical ratios of some standard angle	2(KB)	2 (UB)	1 (AB)		12	a) Convert trigonometrical ratio in terms of any other ratio for the same angle. b) Find the trigonometrical ratios of the standard angles lying in the first quadrant geometry.
2	LOCUS	1(KB)	1(UB)	1(AB)	1(HB)	6	Find the equation of a locus of a moving point.
3	Statistics	1(KB)	2 (UB)	2 (AB)	1(HB)	12	a) Understand the concept of

							dispersion. b) Find the quartile deviation and coefficient of quartile deviation of individual series, discrete series and continuous series. c) Find the Partition values, Deciles and Percentiles of individual series, discrete series and continuous series. d) Find the QuartileDeviation, Mean Deviation form mean , Mean Deviation from median and Standard Deviation of individual series, discrete series and continuous series.
4	Transformations	2(KB)	3(UB)	2 (AB)	1(HB)	12	a) Understand the concept of reflection, rotation, translation and enlargement (reduction). b) Find the image of geometrical figures after reflection in the lines such as x-axes, y-axes, y = x = -x etc. by using co-ordinates. c) Find the images of the objects by the rotation through a given angle using co-ordinates. d) Find the images of the objects under translation through translation vector with the help of coordinate. e) Find the images of the objects under enlargement (reduction) using co-ordinates.
5	Trigonometry Identities *	1(KB)	2 (UB)	2(AB)		14	a) Understand trigonometrical ratio of an angle. b) Find the fundamental relations of trigonometrical ratios. c) Prove the trigonometrical Identities.
6	Section Formula	2(KB)	1 (UB)	2(AB)	1(HB)	10	a) Find the distant between two points. b) Find the coordinates of a point which divides the line joining two points internally and externally in the given ratio.
7	Matrices*	1(KB)	2 (UB)	1(AB)		12	a) Understand the concept of matrices. b) Find the elements and order of a matrix. c) Understand the concept of

							various types of matrices. d) Find the transpose of a matrices. e) Understand the concept of properties of transpose of matrices. f) Understand the concept of operations on matrices. g) Find the multiplications of matrices.
Total Marks		$10\times1=$ 10 Marks	13 $\times2=$ 26 Marks	$11\times4=$ 44 Marks			

Note: KB= knowledge based, AB= Application based, UB= Understanding based, HB=High ability
Chapters with * sign are taught for **First Unit Test**

SPECIFICATION GRID FOR SECOND UNIT TEST

S. No.	**Chapters**	**No of questions each of 1 Marks**	**No of questions each of 2 Marks**	**No of questions each of 4 Marks**	**No of questions each of 5 Marks**	**Estimated periods**	**Objectives** After Completion of this chapter Students will be able to
1.	Trigonometrical Ratio of any angle	1 (KB)	1 (KB)	1 (PS)		14	a) Find the trigonometrical ratio of any angle. b)) Find the trigonometrical ratio of complementary angle and supplementary angle. c) graph trigonometrical function
2.	Area of Triangle	1 (KB)	1 (KB)	1 (PS)		8	a) Find the area of triangle and quadrilateral.
4.	Equation of straight line	1 (KB)	1 (UB)		1 (PS)	12	a) Find the equation of straight line in double intercept form, slop intercept form and normal form. b) Find the equation of straight line in point slop form and two point form.
Total Marks		3 Marks	6 Marks	8 Marks	5 marks		

Note: KB= knowledge based, SB= Skill based, UB= Understanding based, PS= Problem solving capacity

SPECIFICATION GRID FOR SECOND TERM EAMINATION

S. No.	**Chapters**	**No of questions each of 1 Mark**	**No of questions each of 2 Marks**	**No of questions each of 4 Marks**	**No of questions each of 5 Marks**	**Estimated periods**	**Objectives** After Completion of this chapter Students will be able to
1	Conversion of	1(KB)				12	a) Convert trigonometrical

	Trigonometrical Ratios, Trigonometrical ratios of some standard angle						ratio in terms of any other ratio for the same angle. b) Find the trigonometrical ratios of the standard angles lying in the first quadrant geometry.
2	LOCUS		1(UB)	1(AB)		6	Find the equation of a locus of a moving point.
3	Statistics	1(KB)	1 (UB)	1(AB)		12	a) Understand the concept of dispersion. b) Find the quartile deviation and coefficient of quartile deviation of individual series, discrete series and continuous series. c) Find the Partition values, Deciles and Percentiles of individual series, discrete series and continuous series. d) Find the QuartileDeviation, Mean Deviation form mean , Mean Deviation from median and Standard Deviation of individual series, discrete series and continuous series.
4	Transformations	1(KB)	2(UB)	1 (AB)	1(HB)	12	a) Understand the concept of reflection, rotation, translation and enlargement (reduction). b) Find the image of geometrical figures after reflection in the lines such as x-axes, y-axes, y = x = -x etc. by using co-ordinates. c) Find the images of the objects by the rotation through a given angle using co-ordinates. d) Find the images of the objects under translation through translation vector with the help of coordinate. e) Find the images of the objects under enlargement (reduction) using co-ordinates.
5	Trigonometry Identities *	1(KB)	1 (UB)	1(AB)	1(HB)	14	a) Understand trigonometrical ratio of an angle. b) Find the fundamental relations of trigonometrical ratios. c) Prove the trigonometrical Identities.
6	Section	1(KB)	1 (UB)	1(AB)		10	a) Find the distant between

	Formula						two points. b) Find the coordinates of a point which divides the line joining two points internally and externally in the given ratio.
7	Matrices*	1(KB)	1 (UB)	1(AB)		12	a) Understand the concept of matrices. b) Find the elements and order of a matrix. c) Understand the concept of various types of matrices. d) Find the transpose of a matrices. e) Understand the concept of properties of transpose of matrices. f) Understand the concept of operations on matrices. g) Find the multiplications of matrices.
8	Trigonometrical Ratio of any angle	1(KB)	1(UB)	1(AB)		14	a) Find the trigonometrical ratio of any angle. b)) Find the trigonometrical ratio of complementary angle and supplementary angle. c) graph trigonometrical function
9	Area of Triangle			1(AB)		8	a) Find the area of triangle and quadrilateral
10	Equation of straight line	1(KB)	2(UB)	1(AB)	1(HB)	12	a) Find the equation of straight line in double intercept form, slop intercept form and normal form. b) Find the equation of straight line in point slop form and two point form.
11	Relation and Function	1(KB)	1(UB)	1(AB)	1(HB)	17	a) Understand the concept of ordered pair b) Understand the concept of Cartesian products of two seats and their representation c) Understand the concept of relation and its representation. d) Find the domain and range of a relation e) Find the inverse relation f)Understand the concept of function and its representations g) Find domain, co-domain and range of a function. h)Find the image and pre image of the function i) Understand the concept of

							types of function.
12	Polynomials		1(UB)			5	a) Understand the concept of a polynomials b)find the degree of a polynomials c)Understand the concept of algebraic operations and polynomials d) Understand the concept of equal polynomials
13	Sequence and series		1(UB)			8	a) Distinguish between sequence and series b)Understand the concept of sigma notation and partial sum c) Find n^{th} term of sequence d) Understand the concept of quadratic sequence
14	Limit and continuity	1(KB)		1(AB)		12	a) Understand the concept and notation of Limit. b) Find the value of limit of sequence in number and pictorial sequence.
Total Marks		$10\times1=$ 10 Marks	$13\times2=$ 26 Marks	$11\times4=$ 44 Marks			

SPECIFICATION GRID FOR THIRD UNIT TEST

S. No.	Chapters	No of questions each of 1 Marks	No of questions each of 2 Marks	No of questions each of 4 Marks	No of questions each of 5 Marks	Estimated periods	Objectives After Completion of this chapter Students will be able to
1.	Length of the perpendicular from a point on a straight line.	1 (KB)	1 (KB)	1 (PS)		10	a) Find the reduction of general equation of first degree in slope intercept form double intercept form.
2	SURDS	2 (KB)	2 (UB)	1 (PS)	1 (PS)	14	a) Understand the concept of number system and surds. b) Use law of surds to simplify surds in easer form c)Understand the concept of types of surds d) Change one type of surd to another d) Compare one surd with other. e) Understand the concept of four simple operations on surds f) Understand the concept of rationalization of surds g) Solve an equation involving surds.
Total Marks		3 Marks	6 Marks	8 Marks	5 marks		

Note: KB= knowledge based, SB= Skill based, UB= Understanding based, PS= Problem solving capacity

SPECIFICATION GRID FOR THIRD TERM EAMINATION

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 2 Marks	No of questions each of 4 Marks	No of questions each of 5 Marks	Estimated periods	Objectives After Completion of this chapter Students will be able to
1	Conversion of Trigonometrical Ratios, Trigonometrical ratios of some standard angle					12	a) Convert trigonometrical ratio in terms of any other ratio for the same angle. b) Find the trigonometrical ratios of the standard angles lying in the first quadrant geometry.
2	LOCUS			1(AB)		6	Find the equation of a locus of a moving point.
3	Statistics		2 (UB)	1(AB)		12	a) Understand the concept of dispersion. b) Find the quartile deviation and coefficient of quartile deviation of individual series, discrete series and continuous series. c) Find the Partition values, Deciles and Percentiles of individual series, discrete

							series and continuous series. d) Find the QuartileDeviation, Mean Deviation form mean , Mean Deviation from median and Standard Deviation of individual series, discrete series and continuous series.
4	Transformations	1(KB)		1 (AB)	1(HB)	12	a) Understand the concept of reflection, rotation, translation and enlargement (reduction). b) Find the image of geometrical figures after reflection in the lines such as x-axes, y-axes, y = x = -x etc. by using co-ordinates. c) Find the images of the objects by the rotation through a given angle using co-ordinates. d) Find the images of the objects under translation through translation vector with the help of coordinate. e) Find the images of the objects under enlargement (reduction) using co-ordinates.
5	Trigonometry Identities *	1(KB)	1 (UB)	1(AB)		14	a) Understand trigonometrical ratio of an angle. b) Find the fundamental relations of trigonometrical ratios. c) Prove the trigonometrical Identities.
6	Section Formula	1(KB)	1 (UB)			10	a) Find the distant between two points. b) Find the coordinates of a point which divides the line joining two points internally and externally in the given ratio.
7	Matrices	1(KB)	2 (UB)	1(AB)		12	a) Understand the concept of matrices. b) Find the elements and order of a matrix. c) Understand the concept of various types of matrices. d) Find the transpose of a matrices.

							e) Understand the concept of properties of transpose of matrices. f) Understand the concept of operations on matrices. g) Find the multiplications of matrices.
8	Trigonometrical Ratio of any angle	1(KB)	1(UB)	1(AB)		14	a) Find the trigonometrical ratio of any angle. b)) Find the trigonometrical ratio of complementary angle and supplementary angle. c) graph trigonometrical function
9	Area of Triangle			1(AB)		8	a) Find the area of triangle and quadrilateral
10	Equation of straight line	1(KB)	1(UB)		1(HB)	12	a) Find the equation of straight line in double intercept form, slop intercept form and normal form. b) Find the equation of straight line in point slop form and two point form.
11	Relation and Function	1(KB)	1(UB)	1(AB)		17	a) Understand the concept of ordered pair b) Understand the concept of Cartesian products of two seats and their representation c) Understand the concept of relation and its representation. d) Find the domain and range of a relation e) Find the inverse relation f)Understand the concept of function and its representations g) Find domain, co-domain and range of a function. h)Find the image and pre image of the function i) Understand the concept of types of function.
12	Polynomials		1(UB)			5	a) Understand the concept of a polynomials b)find the degree of a polynomials c)Understand the concept of algebraic operations and polynomials d) Understand the concept of equal polynomials

13	Sequence and series	1(KB)				8	a) Distinguish between sequence and series b)Understand the concept of sigma notation and partial sum c) Find n^{th} term of sequence d) Understand the concept of quadratic sequence
14	Limit and continuity	1(KB)		1(AB)		12	a) Understand the concept and notation of Limit. b) Find the value of limit of sequence in number and pictorial sequence.
15	Length of the perpendicular from a point on a straight line.			1(AB)		10	a) Find the reduction of general equation of first degree in slope intercept form double intercept form.
16	SURDS		1(UB)		1(HB)	14	a) Understand the concept of number system and surds. b) Use law of surds to simplify surds in easer form c)Understand the concept of types of surds d) Change one type of surd to another d) Compare one surd with other. e) Understand the concept of four simple operations on surds f) Understand the concept of rationalization of surds g) Solve an equation involving surds.
17	VECTOR	1(KB)	2 (UB)		1(HB)		a) Understand the concept of scalar and vector. b) represent a vector by a directed line segment c)represent a vector in terms of coordinates d) Find the magnitude and direction of vector e) Understand the concept of different kinds of vector. f) Apply operations such as addition and multiplication of vectors to get single vector.
Total Marks		10×1 = 10 Marks	13 ×2 = 26 Marks	11×4 = 44 Marks			

Note: KB= knowledge based, SB= Skill based, UB= Understanding based, PS= Problem solving capacity

MODEL QUESTIONS BASED ON FIRST UT

GRADE : NINE FULL MARKS : 20

SUBJECT : A. MATHEMATICS [SET-APASS MARKS : 10

GROUP – A [1× 3 = 3 MARKS]

1. a) Prove that: $(1 + tan^2A)\times cos^2A = 1$

b) Define diagonal matrix.

c) Find the coordinate of the midpoint of the line joining points$(2, 3) and\ (6, 1)$.

GROUP – B [2×2 = 4 MARKS]

2. Prove that: $sec^4\beta - sec^2\beta = tan^4\beta + tan^2\beta$

3. Find the value of x and y from given matrix.

$$\begin{bmatrix} x+y & 4 \\ 2 & x-y \end{bmatrix} = \begin{bmatrix} 4 & 4 \\ 2 & 6 \end{bmatrix}$$

GROUP – C[2×4 = 8 MARKS]

4. Prove that:$(1 + \text{sinA} + \text{CosA})^2 = 2(1 + sinA)(1 + cosA)$

5. If $A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix} and\ B = \begin{bmatrix} 4 & 5 \\ 1 & 2 \end{bmatrix}$ verify that: $(AB)' = B'A'$.

GROUP – D[1×5 = 5 MARKS]

6. Three consecutive vertices of a parallelogram ABCD are A(1, 2), B(1, 0)

and C(4, 0). Find the fourth vertex D.

"Good Luck"

GRADE : NINE FULL MARKS : 20

SUBJECT : A. MATHEMATICS [SET-B]PASS MARKS : 10

GROUP – A [1× 3 = 3 MARKS]

1. a) Prove that: $(1 + cot^2 A) \times sin^2 A = 1$

b) Define identity matrix.

c) Find the coordinate of the midpoint of the line joining points$(4, 8) and\ (2, 4)$.

GROUP – B [2×2 = 4 MARKS]

2. Prove that: $cosec^4\beta - cosec^2\beta = cot^4\beta + cot^2\beta$

3. Find the value of x and y from given matrix.

$$\begin{bmatrix} x+y & 4 \\ 2 & x-y \end{bmatrix} = \begin{bmatrix} -15 & 4 \\ 5 & 6 \end{bmatrix}$$

GROUP – C[2×4 = 8 MARKS]

4. Prove that:$(1 - \sin A - \cos A)^2 = 2(1 - sinA)(1 - cosA)$

5. If $A = \begin{bmatrix} 3 & 6 \\ 1 & 7 \end{bmatrix} and\ B = \begin{bmatrix} 5 & 0 \\ 6 & 8 \end{bmatrix}$ verify that: $(AB)' = B'A'$.

GROUP – D[1×5 = 5 MARKS]

6. Three consecutive vertices of a parallelogram ABCD are A(3, 7),

B(5, -7) and C(-2, 5). Find the fourth vertex D.

"Good Luck"

MODEL QUESTION FOR FIRST TERMINAL

Subject : Additional Mathematics Full Marks : 100

Time : 3 Hours

Attempt all the questions:

GROUP – A [(8×(2 + 2) = 32MARKS]

1. a) Find the distance between two points$(0, 0)$ and $(acos\theta,\ asin\theta)$.

   b) If R(2, 2) be the mid-point of the line joining the points P(4, 3) and Q (a, b), find the value of Q (a, b).

2. a) Show that (2, 3), (3, -1) and (4, -5) are collinear.

   b) The co-ordinates of the vertices of a triangle are (2, 8), (3, 4) and (4, 3), find the co-ordinates of its center of gravity.

3. a) Define diagonal matrix with an example.

   b) Find the additive inverse of $\begin{bmatrix} 4 & 2 \\ 4 & -1 \end{bmatrix}$.

4. a) Find the translation vector which translates a point $A(7, 3)$ to the point $A'(9, 6)$.

   b) Define isometric transformation with examples.

5. a) Find the equation of the locus of point which is as a distance 7 units from the point (1, 6).

   b) Find the image of the point P(4, 5) under the enlargement [(1, 2) -2] .

6. a) Prove that: $cosec^4A - cosec^2A = cot^2A + cot^4A$.

   b) Prove that:$\frac{1}{1-sin} + \frac{1}{1+\sin\theta} = 2sec^2\theta$

7. a) Find the value of: $cos60^o - tan^245^o + cos^230^o - sin30^o + \frac{3}{4}tan^230^o$

   b) If $cos\beta = \sqrt{3}sin\beta$ find the value of $sin\beta$.

8. a) Find quartile deviation from given data.

   12, 10, 24, 9, 16, 18, 20

   b) Find range and coefficient of range from given data.

   30, 46, 25, 34, 13, 86, 23, 45

GROUP – B [17×4 = 68 MARKS]

9. If (a, b) is equidistance rom the point $(-x, y)$ and $(y,\ x)$, then show that$a(x + y) = b(y - x)$.

10. In what ratio does the point (5, y) divides the line joining the points P (2, 3) and Q (7, 3)? Also find the value of y.

11. Find the co-ordinates of points of trisection of the line joining M(-5, -5) and N(25, 10).

12. Prove that: $\frac{tan\beta}{sec\beta-1}-\frac{sin\beta}{1+cos\beta}=2cot\beta.$

13. Prove that: $\frac{SecA-tanA+1}{1+secA+tanA}=\frac{1-sinA}{cosA}$.

14. Prove that:$(3-4sin^2\theta)(sec^2\theta-4tan^2\theta)=(3-tan^2\theta)(1-4sin^2\theta)$

15. If$3sin\theta=5-4cos\theta$ then find the value of cosθ .

16. If $A=45^o\ and\ B=15^o$, prove that:$\frac{cotA}{2cotA-tan3B}+\frac{tanA}{3tanA-tan3B}=\frac{3}{2}$

17. A (a, 0) and (-a, -5) are two fixed points and P is a moving point. Find the equation of a locus of a point P

If $PA^2+PB^2=18.$

18. Construct 3x3 matrix whose elements are in the form of 2i+3j .

19. If (x,y) be any point on a straight line which passes through $(a,0)$ and $(0,b)$, prove that $\frac{x}{a}+\frac{y}{b}=1.$

20. ABC is a triangle with vertices A(-1, 1), B(6, 3) and C(4, 7). If triangle ABC is mapped onto triangle A'B'C' by the translation vector$\binom{3}{5}$. Find the coordinate of A'B'C' and show in graph.

21. $A(3,2),B(2,1)and\ C(4,1)$ are the vertices of a triangle ABC. Plot these points on the graph paper. Reflect these points in the line y = x to find images A'B'C' and plot these images on the same graph paper.

22. Find the co-ordinates of the images of $A(0,-2),B(2,1)\ and\ C(-1,2)$ under the rotation about Centre $(2,1)$ through positive quarter turn.

23. Draw the$\Delta PQR\ at\ P(2,4),Q(4,2)\ and\ R(6,4)$ and its images$\Delta P'Q'R'at\ P'(-4,-8),Q'(-8,-4)$ and $R'(-12,-8)$. Find the centreof enlargement and scale factor.

24. Find quartile deviation and its coefficient from given data.

    78, 80, 80, 82, 82, 84, 84, 86, 88, 88, 90.

25. Find quartile deviation from given data.

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50
No of students	7	8	15	16	6

"Good Luck"

SOCIAL

CONTRIBUTORS

DEEPAK PANERU

BASHU DEV BHATT

SYLLABUS FOR GRADE NINE

NAME OF LESSON FIRST UNIT	WORKING DAYS	OBJECTIVES
Development of society Types of society Development Prior conditions for Development Nepali painting Nepali Sculpture (Murtikala) Social problems their identification and solutions Corruption Introduction to Constitution Constitutional Development in Nepal Longitude and Time Physical features of Nepal	39	On completion of this lesson the students will be able to: Define society, its importance and development of society. Highlight the concept development and state the prerequisite for development. Figure out the meaning of art and Nepali handicrafts with their characteristics and need of preservation. State the meaning of corruption, its causes and consequences. Explain the meaning of constitution, its characteristics and trace the history of constitutional development in Nepal. Explain local and standard time and describe the physical features of Nepal.
FIRST TERM Sources of History in Nepal Shakya Dynasty Agriculture Modernization and commercialization of Agriculture Donor countries and agencies in Nepal Nepal in United Nations Organization Elements of good society Socialization Public Participation Infrastructures of Development Nepalese architecture (Bastukala) Religious tolerance and Secularism Other Social Problems Constituent assembly Fundamental rights Climate and Vegetation in Nepal	41	Figure out the sources of history and origin of Shakya dynasty. Define agriculture, its importance, problems of agriculture and their solutions. Name donor nations and their contribution for socio-economic growth of Nepal. State the contributions of Nepal to the United Nations. Point out the components of a good society and state the process of socialization. Show the importance of public participation in development. State the meaning of secularism, its need and importance in Nepal. Explain the physical features of Africa, draw the outline map and plot various facts on it. Describe the formation, functions and importance of CA. State the meaning of fundamental rights and be familiar with rights provisioned in the constitution. Explain the contribution made by Nepal to UN and UN activities in Nepal for our Socio-economic growth.
SECOND UNIT Geographical Diversity and Life Style in Nepal Efforts of unification campaign Reforms on Obstacles: Beginning of Victory Industry Medium and Large scale Industries Contribution of Nepal in international peace establishment Diplomatic Missions Our National Identity National Pride Creative use of Traditional skill and technology	34	State the efforts made for Unification and clarify defeats and victories of PN Shah. Define industry, its importance, problems of industry and their solutions. Explain diplomatic missions of Nepal. Figure out National Identity of Nepal and explain the items of national glory. Identify national heroes and their contributions. State the meaning and importance of compassion and cooperation.

Our National Heroes and their contributions Compassion and co-operation		
SECOND TERM Role of local and national level organization for social reformation Efforts made for social Reforms in Nepal Fundamental Rights and duties Right to Information Water resources of Nepal and its uses Cartography Defeat on Kirtipur and Conquest over Makawanpur Defeat Followed by Victory Trade Problems of Foreign trade Contemporary Issues	41	Identify the roles of global organizations in combating social problems. State the meaning, importance of Right to Information. Point out the status and utility of water resource in Nepal. Define industry, its importance, problems of industry and their solutions. State the importance of being informed with contemporary events.
THIRD UNIT Peace Culture Conflict Cycle and Its management Good Governance Rule of Law Consequences of unification campaign Anglo- Nepal war Trade diversification in Nepal Democratic Conduct Role of civil society Free hand map work Elements on Map Contribution of Nepalese warriors in Anglo Nepal war Rise and fall of Rana rule Unity in Diversity Subject of National concern Physical Features of Asia Physical features of Europe Industrial Revolution Our ancestors: Our Pride		Highlight the importance of peace and ways to achieve it. Clarify the meaning of conflict and its management. Explain the meaning of good governance, challenges and ways to achieve it. Present the causes and consequences of Anglo-Nepal war. List the roles of Civil Societies in Nepal. Explain the elements in the Map. Explain the physical features of Asia, draw the outline map and plot various facts on it. State the causes for rise and downfall of Rana Regime in Nepal. Explain the physical features of Europe, draw the outline map and plot various facts on it. Justify the statement our ancestors our pride.
THIRD TERM Physical features of Australia Asia, Europe, Australia and Nepal Genealogy Relation among Agriculture and Industry Economic Planning Entreprenuership Poverty Alleviation and Employment generation Labour		Explain the physical features of Australia, draw the outline map and plot various facts on it. Show tripartite relation among agriculture, industry and trade. State the meaning and importance of economic planning. Figure out the ways to employment generation. Describe labor and its importance.

SPECIFICATION GRID

SPECIFICATION GRID FOR UT

Unit	Area/ Scope	No of questions each of 1 Mark	No of questions each of 3 Marks	No of questions each of 7 Marks	Estimated periods	Remarks
1	We and Our Society	1(VB)	1((KB)		6	
2	Development and Infrastructure of Development	1(KB)			6	
3	Our Social Values and Norms	1(KB)	1(VB)		6	
4	Social Problems and Solutions	1(PS)	1(PS)		6	
5	Civic Consciousness			1(PS)	8	
6	Our Earth					
7	Our Past					
8	Our Economic Activities					
9	Our International Relation and Cooperation					
Total Marks		4	9	7		

Note: KB= knowledge based,PS= Problem solving, RB=Research based, VB=Value Based

SPECIFICATION GRID FOR TERM PAPER

Unit	Area/ Scope	No of questions each of 1 Mark	No of questions each of 4 Marks	No of questions each of 7 Marks	Estimated periods	Remarks
1	We and Our Society	1(VB)	2((KB & PS)		6+8	
2	Development and Infrastructure of Development	1(KB)				
3	Our Social Values and Norms	1(KB)	2(PS &VB)			
4	Social Problems and Solutions	1(PS)				
5	Civic Consciousness		3(KB,PS &RB)	1(PS)	8	
6	Our Earth			1(RB)	6	
7	Our Past	1(KB)	2(RB &VB)	2(KB &PS)	6	
8	Our Economic Activities	1(KB)			6	
9	Our International Relation and Cooperation	1(RB)	1(KB)		6	
Total Marks		7	40	28		

Note: KB= knowledge based,PS= Problem solving, RB=Research based, VB=Value Based

MODEL QUESTIONS BASED ON FIRST UT

Write very short answers : (4×1=4)

1. Write one feature of Pastoral based socities.
2. What do you mean by PCI?
3. Mention any two importances of Nepali art works.
4. Write a slogan to raise awareness against social evils existing in your locality.

Give short answers to the following questions. (3×3=9)

5. What is peace and order? Why is peace and order considered as important prerequisite for development? Explain in short.
6. The average marks of science is given below. Show the data in a bargraph.

Year	Marks
2066	56
2067	62
2068	70

7. Write in brief about Scroll and wall painting.

Give long answer of the following question. (1×7=7)

8.Constitution should reflect the sentiments of the people. Justify and explain any two characteristics of a good constitution.

MODEL QUESTION BASED ON FIRST TERM

Write very short answers : (7×1=7)

1. Write one feature of hunting and gathering socities.
2. Mention any two prerequisite for development.
3. Write a key difference between Mandalla and Patta painting.
4. Write any two major effects of corruption.
5. Suggest a measure to preserve the sources of history?
6. How can subsistance farming be modified into modern farming? Write in a sentence.

7.State any two major functions carried out by UN peace keeping force.

Give short answers to the following questions. (10×4=40)

8. Explain the need and importance of society in brief.
9. What are the advantages of entrepreneurship? Mention any four.
10. What do you mean by painting? Suggest any three ways to preserve and promote Nepali painting.
11. Social problems and evils are the obstacles for the development of society. Justify this statement.
12. When was the present constitution promulgated? Write any three features of it.
13.What will be the time in Japan located at 135º E longitude when it is 12 noon in India located at 75º E longitude?
14. Write any four key differences between local time and standard time.
15. In your view, what should be done for development of agriculture in Nepal?
16. Show the following in a timeline.

Dates in B.S.	Events
2007	Democracy was established
2015	General election to the parliament
2020	Muluki Ain was amended
2037	Referendum was held

17. What role Nepal has played in maintaining international peace and cooperation? Write in four points.

Give long answer of the following question. (4×7=28)

18. What is constitution? Explain any three features of an ideal constitution.

19. Draw an outline map of Nepal and show the following using suitable index.

a) Mahakali river b) Jute cultivation area

c) Ghandruk d) Bhimdutta highway

OR

Draw an outline map of Australia and show the following.

a) Gulf of Carpentaria b) Great dividing Range

c) Canberra d) Lake Eyre

20. Compose a dialogue on condition of Nepal before unification and efforts made by PN Shah in building a greater Nepal.

21. What are the major problems faced by industries in Nepal? Explain any three and suggest four measures to overcome the problems.

ENGLISH

CONTRIBUTOR

BIMALA Ma'am

SYLLABUS

UNIT	PERIODS	ACTIVITIES	JECTIVES
	8 3	Composition: Paragraph writing	- to make students comfortable to adjust with the new teacher -to review the previously learnt contents
1	4 3 4	Comprehension / Essay writing Fill in the blanks Making sentences	Students will be able to: -do the activities given from the comprehension passages - write essay
2	4 3 4	Drama, Poem writing Fill in the blanks Making sentences	Students will be able to: - act the text out - write poem - use prepositions correctly
	5	Exercises	
	1		
3	3+2 4	Preparing questionnaire and taking interview, Changing voice of the given sentences	Students will be able to: - prepare questions for an interviev - change the voice
4	3+3 2	Role Play Story writing Making sentences and changing the voice	Students will be able to: - act and write the story -change voice
5	3+2 3	Debate Word formation	Students will be able to: - present their arguments both verbally and in writing - identify suffixes and prefixes and use them in forming words
6	3+3 5	Job application letter with CV	Students will be able to: - write job application writing with CV - pronunce the sounds individually and then the words properly
	5	Exercises	
	2		
7	4+2	Implementation of email, facebook	Students will be able to: - open email and Facebook id and at the same time they will discuss about cyber crime and use and abuse of social media
8	4+2 5	Memoir writing/Essay writing	Students will be able to: - write a memoir and an essay - elucidate past tense with examples
9	3+2 5	Sketch map/ Composing Dialogue	Students will be able to: - draw sketch map - compose dialogue - elucidate present tense with examples
	5		

	1		
10	4 3	Commentary	Students will be able to: -write commentary of the match - use if conditionals in sentences
11	2 2	Descriptive essay	Students will be able to: -write descriptive essay - use relative clauses in the sentences
12	3 3	Collecting real information and expressing inability,	Students will be able to: collect real information and express ability and inability -use connectives in the sentences
13	3 5	Film/Book Review argumentative writing	Stidents will be able to: - write book/film review and argumentative writing with proper elaboration of their logical points - transform the sentences
14	2 5	Comparing and contrasting	Students will be able to: -compare and contrast the idea -report the sentences
	5		
	4		
15		News report and news articles	Students will be able to write news reports/ news articles.
THIRD TOTAL WORKING DAYS:		39	

SPECIFICATION GRID FOR UNIT TEST

Listening	Speaking	Reading (5 marks)	Writing(5 marks)
Not included in Unit Test	Not included in Unit Test	Purpose: to find out whether the students have obtained the learning outcomes of reading mentioned in the curriculum.	Purpose: to find out whether the students have obtained the learning outcomes of writing mentioned in the curriculum.
		Number and type of texts	Number and type of texts
		1. Seen/Unseen text (which can be news, story, diary entry, historical texts, notices)	1. Free writing (letter, essay, short story, argumentative writing,)
		Type of test item 1. Question-Answer 2. True /False 3.Synonyms/Antonyms	

Grammar

Question Types:

Type I: Reproduction (1x6=6 marks)

Type II: Fill in the gaps with grammar items in a contextual passage. (0.5x10=5 marks)

S.No.	Contents	Number of questions Type I	Type II
1	Articles	-	1
2	Prepositions	-	1
3	Tags	1	1
4	Concord	-	1
5	Transformation	2	-
6	Tense	1	1
7	Reported Speech	1	1
8	Voice	1	1
9	Connectives		1
10	Conditionals		1
11	Causative verbs		1
	Total number of questions	6	10
	total marks	6	5

SPECIFICATION GRID for Terminal Examination Grade 9 &10

Listening(10 marks)	**Speaking (15 marks)**	**Reading (40marks)**	**Writing(35 marks)**
Purpose: to find out whether students have obtained the learning outcomes of listening mentioned in the curriculum.	Purpose: to find out whether students have obtained the learning outcomes of speaking mentioned in the curriculum.	Purpose: to find out whether the students have obtained the learning outcomes of reading mentioned in the curriculum.	Purpose: to find out whether the students have obtained the learning outcomes of writing mentioned in the curriculum.
Number and type of texts	Number and type of texts	Number and type of texts	Number and type of texts
1. Any authentic interviews, conversation, short discussion/talks, advertisements, recorded or broadcast material	1. General Interview(3 marks) 2. Describing Pictures(4 marks) 3. Cued Situation(4 marks) 4. Speaking on a given topic(4 marks)	1. Two seen texts (5+10 marks) Text type= texts given in the textbook) 2. One unseen text (10 marks) Text type =news, story, emails, time table, product guide, diary entry, historical texts, notices) 3. One unseen text (15 marks) Text type= story, essay, letter, science article, newspaper article, book/film review etc.	1.Guidedwriting(1x5=5marks) Areas to be covered: direction, instruction, electronic text message, advertisement, message of congratulation/condolence, menus, recipes, (Ask one question with the limit of 75-100 words) 2.Guidedwriting(1x5=5marks) Areas to be covered: chart, graph, table, skeleton story, invitation card, thank you letter, regret letter, news stories, paragraphs(Ask one question with the limit of 75-100 words) 3. Free writing(1x6=6) Area to be covered: Dialogue with situation, story with either beginning or ending, paragraphs on personal experience(Ask one question with the limit of 100-120 words) 4. Free writing(1x8=8) Area to covered: Letter, email, news article, book/film review, brochure/leaflet(Ask one question with the limit of 150-200 words)
Criteria for marking: While marking focus should be given on the learner's ability to understand the content and context rather than their ability to write.	Criteria for marking: While marking focus on the grammatically correct sentences which are situationally appropriate. Fluency, accuracy, clarity and pronunciation too need to be considered.	Type of test item 1. Question-Answer 2. True /False 3.Synonyms/Antonyms 4. Matching 5. Ordering 6. Multiple choice 7. Fill in the blanks (except short answer question, the types of questions should not be repeated in the comprehension passages.) Criteria for marking: Reading constructs	

		should be considered while awarding marks.	

Grammar

Question Types:

Type I: Reproduction (1x6=6 marks)

Type II: Fill in the gaps with grammar items in a contextual passage. (0.5x10=5 marks)

S.No.	Contents	Number of questions Type I	Type II
1	Articles	-	1
2	Prepositions	-	1
3	Tags	1	1
4	Concord	-	1
5	Transformation	2	-
6	Tense	1	1
8	Voice	1	1
9	Connectives		1
10	Conditionals		1
11	Causative verbs		1
	Total number of questions	6	10
	total marks	6	5
7	Reported Speech		1

MODEL QUESTIONS BASED ON FIRST UT

FULL MARKS : 20

PASS MARKS : 10

[SET – A]

1.Read the given passage and do the activities that follow.

International law consists of rules and principles which govern the relations and dealings of nations with each other. Public International Law concerns itself only with questions of rights between several nations or nations and citizens or subjects of other nations. In contrast, Private International Law deals with controversies between private persons, natural or juridical, arising out of situations having significant relationship to more than one nation. In recent years the lines between public and private international law have become increasingly uncertain. Issues of private international law may also implicate issues of public international law, and many matters of private international law have substantial significance for the international community of nations.

a. Answer these questions: 1x3=3

i. What is international law made up of?

ii. What does private International Law deal with?

iii. How have the lines between public and private international law become uncertain?

b. Find the synonyms of the following in the text: 1x2=2

regulate in contrast

2. Write a job application letter to the Manager of Vogue Industry for the post of a Fashoin Designer. 5

3. Write a news article on "Condition of Roads in Kathmandu" 5

4. Rewrite the following sentences as per the instructions in the brackets. 5

i. Julia is ..... American. (insert article)

ii. Let's play the games,.....(add question tag)

iii. They never pay attention in class. (change into affirmative)

iv. Thomas has carried the bottle. (change into passive voice) v. They will never shout at others. (change into past perfect)

GOOD LUCK

FULL MARKS : 20

PASS MARKS : 10

[SET – B]

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1. Read the following text and do the activities given below:-

International law consists of rules and principles which govern the relations and dealings of nations with each other. Public International Law concerns itself only with questions of rights between several nations or nations and citizens or subjects of other nations. In contrast, Private International Law deals with controversies between private persons, natural or juridical, arising out of situations having significant relationship to more than one nation. In recent years the lines between public and private international law have become increasingly uncertain. Issues of private international law may also implicate issues of public international law, and many matters of private international law have substantial significance for the international community of nations. International Law includes basic, classic concepts of law in national legal systems-status, property,obligation,and tort. It also includes substansive law, procedure, process and remedies.

a. Answer these questions: 1x3=3

i. What is Public International Law connected with?

ii. Where are basic classic concepts of national legal system included ?

iii. Give the text a suitable title?

b. Find the synonyms of the following in the text: 1x2=2

material debates

2. Write a lettert to the Editor of a national daily complaining the difficulties faced by the pedestrains in the name of road construction. 5

3. Write a news article on "Property Gutted on Fire in Sarlahi". 5

4. Rewrite the following sentences choosing the best alternative for the brackets: 5

i. Smith is .....European. (insert article)

ii. Let me go away,.....(add question tag)

iii. I have already seen that film. (change into negative)

iv. The glass container was broken by the boy.(change into active voice) v. Shruti will always bunk the class. (change into past perfect)

GOOD LUCK

MODEL QUESTION BASED OF FIRST TERMINAL

FULL MARKS : 75

PASS MARKS : 37.5

[SET – A]

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1. Read the following poem and answer the questions that follow:-

Did I Miss Anything? 5

Nothing. When we realized you weren't here
we sat with our hands folded on our desks
in silence, for the full two hours

Everything. I gave an exam worth
40 percent of the grade this term
and assigned some reading due today
on which I'm about to hand out a quiz worth 50 percent

Nothing. None of the content of this course has value or meaning
Take as many days off as you like:
any activities we undertake as a class
I assure you will not matter either to you or me
and are without purpose

Everything. A few minutes after we began last time
a shaft of light suddenly descended and an angel
or other heavenly being appeared
and revealed to us what each woman or man must do
to attain divine wisdom in life and the hereafter
This is the last time the class will meet
before we disperse to bring the good news to all the people on earth

Nothing. When you are not present

how could something significant occur?

Everything. Contained in this classroom

is a microcosm of human experience

assembled for you to query and examine and ponder

This is not only place such an opportunity has been gathered

but it was one place

And you weren't here

a. Find the synonyms of the given words in the text:- 4x0.5=2

mind innegligible aim favourable circumstance

b. Answer the following questions:- 3×1=3

i. What does classroom teaching provide students?

ii. How did the students feel in absence of a teacher?

iii. What does "this is not the only place" suggest?

2. Read the passage carefully and do the activities that follow.

This morning the city of Paris looks slightly fuming; the sky is overcast, and it is drizzling too. But it does no harm to me. I have decided to go out for a visit or an observation tour. I had asked *Nirmal bhaai* for a list of museums in the vicinity of Paris yesterday. He bought me some brochures with the names and addresses, and street maps of Paris Museums in the evenings. Paris has more museums than temples and gods in Kathmandu, he says. I am new to Paris, staying here for only one week. Hope these maps and brochures will show me Paris metro zones and guide me to some museums today. Last week Nirmal *bhaai* showed me Pompidou Centre, 'a complex building of high-tech structure'. This visit has emboldened me to explore further.

I guess I can cover maximum of two museums today. It means just giving a cursory glance. This is my plan. They say Cezanne is quite far away, Paul Cezanne, the post-impressionist painter, may be in the outskirts. I cannot visit him all alone, and cannot cover two museums in a day. So I chose to visit museum nearby in the heart of the city. Likewise, Braque is far, Du Champ is farther away. So I have decided as per Nirmal's suggestion to start with Rodin's. Maybe I will go to Monet's next.

People know I am never a painter, nor a sculptor, nor a connoisseur of art, or a professional, but then, the world knows that my interest in the lives of great artists and their lasting works is growing deeper. So wherever I go, I prefer to visit art museums first of all. In Russia, in Greece, in England, in America—I did so. I move merely a dilettante, however, with a deep sense of awe and reverence. I have no words to express how I felt upon seeing Mona Lisa in Louvre yesterday. I must say why my interest in this is growing gradually in this way.

a. Find the words from the passage that are similar in meaning to the following words:-

light rain very angry pamphlets expert $0.5 \times 4 = 2$

b. State whether the following statements are true or false:- $0.5 \times 4 = 2$

i. The writer is the painter and an artist.

ii. He went out with Nirmal bhaai.

iii. Nirmal had bought him tickets and shown the routes.

iv. The writer loves to visit art museums first.

c. Answer the following questions:- 2 × 3 = 6

i. What was the weather like?

ii. Why did he think of visiting Monet's next?

iii. Describe Paris as Nirmal told the writer.

3. Read the following passage and do the activities that follow:-

Many years later, as he faced the firing squad, Colonel Aureliano Buendia was to remember that distant afternoon when his father took him to discover ice. At that time Mocondo was a village of twenty adobe houses, built on the bank of a river of clear water that ran along a bed of polished stones, which were white and enormous, like prehistoric eggs. The world was so recent that many things lacked names, and in order to indicate them it was necessary to point. Every year during the month of March a family of ragged gypsies would set up their tents near the village, and with a great uproar of pipes and kettledrums they would display new inventions. First they brought the magnet. A heavy gypsy with an untamed beard and sparrow hands, who introduced himself as Melquiades, put on a bold public demonstration of what he himself called the eighth wonder of the learned alchemists of Macedonia. He went from house to house dragging two metal ingots and everybody was amazed to see pots, pans, tongs, and braziers tumble down from their places and beams creak from the desperation of nails and screws trying to emerge, and even objects that had been lost for a long time appeared from where they had been searched for most and went dragging along in turbulent confusion behind Melquiades' magical irons. "Things have a life of their own," the gypsy proclaimed with a harsh accent. "It's simply a matter of waking up their souls." Jose Arcadio Buendia, whose unbridled imagination always went beyond the genius of nature and even beyond miracles and magic, thought that it would be possible to make use of that useless invention to extract gold from the bowels of the earth. Melquiades, who was an honest man, warned him: "It won't work for that." But Jose Arcadio Buendia at that time did not believe in the honesty of gypsies, so he traded his mule and a pair of goats for the two magnetized ingots. Ursula Iguaran, his wife, who relied on those animals to increase their poor domestic holdings, was unable to dissuade him.

a. Answer the following questions: 3x2=6

i. Describe Mocondo in few lines.

ii. What would the family of ragged gypsies do every March?

iii. Who is the central character here?

b. Write antonyms of the following words. 4x1=4

vanished dropped clear insertion

4. Read the text carefully and do the activities that follow.

Wanted Urgently

A reputed English medium boarding school located at the heart of Kathmandu valley is looking for a qualified teacher with two years experience for the following post to teach in High School Level.

Social Studies ……1

Qualification: M.A. or equivalent in related subject.

Interested and qualified candidates are requested to contact at school for an interview and observation class by 7th August, 2016.

Newton High School

Baluwatar, Kathmandu

Phone: 01-4432961

email: newton@hotmail.com

a. Read the above advertisement and match the words in column 'A' with their meaning in column 'B'. 1x3=3

A	B
a. interview	1. having gained knowledge or skill through work
b. experienced	2. the action of watching somebody carefully to notice things.
c. observation	3. a meeting at which somebody is asked question to discover whether they are suitable

b. Answer the following questions. 1x4=4

i Where to apply?

ii When to apply?

iii Who can apply?

iv What is the vacant post?

c. Write the synonyms of the followings from the advertisement. 1x3=3

well known highly educated appealed

d. Read the text again and fill in the gaps with appropriate words. 1x5=5

This is an example of an advertisement. It is for a teacher. A person who has passed …… in …… can contact. They are requested to take …… classes for class 10. They must have two years of experience. They can …… with their application by …….

5. Make recipe for preparing vegetable momo. 5

6. Write a set of rules and regulations for National museum. 5

7. Write a story on 'Greediness' and give a suitable moral and title. 5

   or give a short character sketch of Jem Finch.

8. Write an essay in about 150 words on 'Influence of Mobile Phones on Youth'.8

9. Rewrite the following sentences as indicated in brackets:- 6×01=6

   a. One should be trustworthy in life,.....? (add question tag)

   b. I am a gardener. (into who question)

   c. We worked very hard. (into negative)

   d. We had to do everything. (into simple present tense)

   e. She wished that she would be a doctor. (into direct speech)

   f. They were changing rooms. (into passive voice)

10. Rewrite the following sentences choosing the best alternative given in the brackets:- 0.5 × 10 = 5

    Once three friends were walking through the forest on …… way (a/an/the) they found a bag full of money. They agreed to divide the money among themselves. They were tired….. (with/of/off) walking ….. (but/as well as/to) hungry. So one of them….. (is made/ was made/ has been made) …… (to go/ go/went) to bazaar to buy food. He made a plan to kill his friends. He brought food mixing poison. He said to himself, I am much clever than them, …… ?" (amn't I/am I/aren't I) . Before he arrived, the two friends……. (made/ had made/were made) another plan to kill him. When he arrived the two friends asked him why…… (are you late/he was late/was he late). The boy did not ….. (spoke/speak/speaking) anything. Immediately he was killed by the two friends. Then they ate the food. They also died. It shows that if they were not crooked, they …..(won't/ wouldn't/ may not die).

''Good Luck''

FULL MARKS : 75

PASS MARKS : 37.5

[SET – B]

Did I Miss Anything? 5

Nothing. When we realized you weren't here

we sat with our hands folded on our desks

in silence, for the full two hours

Everything. I gave an exam worth

40 percent of the grade this term

and assigned some reading due today

on which I'm about to hand out a quiz worth 50 percent

Nothing. None of the content of this course has value or meaning

Take as many days off as you like:

any activities we undertake as a class

I assure you will not matter either to you or me

and are without purpose

Everything. A few minutes after we began last time

a shaft of light suddenly descended and an angel

or other heavenly being appeared

and revealed to us what each woman or man must do

to attain divine wisdom in life and the hereafter

This is the last time the class will meet

before we disperse to bring the good news to all the people on earth

Nothing. When you are not present

how could something significant occur?

Everything. Contained in this classroom

is a microcosm of human experience

assembled for you to query and examine and ponder

This is not only place such an opportunity has been gathered

but it was one place

And you weren't here

a. Find the synonyms of the given words in the text:- 4x0.5=2

satisfied miniature world rating afterlife

b. Answer the following questions:- 3×1=3

i. What is the message of the poem?

ii. What did the angel reveal to the students?

iii. What is meant by 'microcosm of human experience'?

2. Read the following passage carefully and do the activities given below:- 10

This morning the city of Paris looks slightly fuming; the sky is overcast, and it is drizzling too. But it does no harm to me. I have decided to go out for a visit or an observation tour. I had asked *Nirmal bhaai* for a list of museums in the vicinity of Paris yesterday. He bought me some brochures with the names and addresses, and street maps of Paris Museums in the evenings. Paris has more museums than temples and gods in Kathmandu, he says. I am new to Paris, staying here for only one week. Hope these maps and brochures will show me Paris metro zones and guide me to some museums today. Last week Nirmal *bhaai* showed me Pompidou Centre, 'a complex building of high-tech structure'. This visit has emboldened me to explore further.

I guess I can cover maximum of two museums today. It means just giving a cursory glance. This is my plan. They say Cezanne is quite far away, Paul Zezanne, the post-impressionist painter, may be in the outskirts. I cannot visit him all alone, and cannot cover two museums in a day. So I chose to visit museum nearby in the heart of the city. Likewise, Braque is far, Du Champ is farther away. So I have decided as per Nirmal's suggestion to start with Rodin's. Maybe I will go to Monet's next.

People know I am never a painter, nor a sculptor, nor a connoisseur of art, or a professional, but then, the world knows that my interest in the lives of great artists and their lasting works is growing deeper. So wherever I go, I prefer to visit art museums first of all. In Russia, in Greece, in England, in America—I did so. I move merely a dilettante, however, with a deep sense of awe and reverence. I have no words to express how I felt upon seeing Mona Lisa in Louvre yesterday. I must say why my interest in this is growing gradually in this way.

a. Find the words from the passage that are similar in meaning to the following words:-

brief look admiration pamphlets naive $0.5 \times 4 = 2$

b. State whether the following statements are true or false:- $0.5 \times 4 = 2$

i. The writer is neither a painter nor an artist.

ii. It was so sunny that day.

iii. He will visit Rodin at first.

iv. Paul Cezanne is a post-impressionist painter.

c. Answer the following questions:- 2 × 3 = 6

i. What made him visit Rodin at first?

ii. Why could not he express his feelings after visiting Louvre?

iii. Describe the writer's interest.

3. Read the following text and do the activities given below:

Many years later, as he faced the firing squad, Colonel Aureliano Buendia was to remember that distant afternoon when his father took him to discover ice. At that time Mocondo was a village of twenty adobe houses, built on the bank of a river of clear water that ran along a bed of polished stones, which were white and enormous, like prehistoric eggs. The world was so recent that many things lacked names, and in order to indicate them it was necessary to point. Every year during the month of March a family of ragged gypsies would set up their tents near the village, and with a great uproar of pipes and kettledrums they would display new inventions. First they brought the magnet. A heavy gypsy with an untamed beard and sparrow hands, who introduced himself as Melquiades, put on a bold public demonstration of what he himself called the eighth wonder of the learned alchemists of Macedonia. He went from house to house dragging two metal ingots and everybody was amazed to see pots, pans, tongs, and braziers tumble down from their places and beams creak from the desperation of nails and screws trying to emerge, and even objects that had been lost for a long time appeared from where they had been searched for most and went dragging along in turbulent confusion behind Melquiades' magical irons. "Things have a life of their own," the gypsy proclaimed with a harsh accent. "It's simply a matter of waking up their souls." Jose Arcadio Buendia, whose unbridled imagination always went beyond the genius of nature and even beyond miracles and magic, thought that it would be possible to make use of that useless invention to extract gold from the bowels of the earth. Melquiades, who was an honest man, warned him: "It won't work for that." But Jose Arcadio Buendia at that time did not believe in the honesty of gypsies, so he traded his mule and a pair of goats for the two magnetized ingots. Ursula Iguaran, his wife, who relied on those animals to increase their poor domestic holdings, was unable to dissuade him.

a. Answer the following questions: 3x2=6

i. Describe Jose Arcadio Buendia.

ii. What did Melquiades do?

iii. How did the village look like?

b. Write antonyms of the following words. 4x1=4

pushing dissuade useless silent

4. Read the advertisement carefully and do the activities that follow.

Liberty Leather and Shoes Factory Biratnagar, Nepal

Post Box 568, Biratnagar

WANTED IMMEDIATELY

Position: Sales Manager

Qualification and Experience Required:

B.A. or equivalent with Economics as a major subject. Master degree is preferable. Previous working experience in the field of sales and marketing will be an added advantage.

Interested qualified Nepali citizens may send the hand written application along with the personal bio-data including contact telephone number or email address, copies of academic certificates and testimonials to the above address on or before May 5, 2009.

Note: Short list of the candidates will be published on the factory's notice board on August 7, 2016.

Women candidates are encouraged to apply.

a. Read the above advertisement and match the words in column 'A' with their meaning in column 'B'. 1x3=3

A	B
a. equivalent	1. to demand someone to do something
b. short list	2. a list of selected candidates from which final choice is made
c. require	3. similar or identical in value

b. Answer the following questions. 1x4=4

i Where to apply?

ii When to apply?

iii Who can apply?

iv What is the vacant post?

c. Write the antonyms of the followings from the advertisement. 1x3=3

distantly later ignored

d. Read the text again and fill in the gaps with appropriate words. 1x5=5

This is an example of an advertisement. It is for a sales manager. A person who has passed …… in …… can contact. They are requested to send…… application along with the personal..... including contact number or email address to the office before.....

5. Make recipe for preparing pasta 5

6. Write a set of rules and regulations for National Library. 5

7. Write a story on 'Poverty' and give a suitable moral and title. 5

or give a short character sketch of Atticus Finch.

8. Write an essay in about 150 words on 'My Favourite Food'. 8

9. Rewrite the following sentences as indicated in brackets:- 6×01=6

a. There are many students in our school,.....? (add question tag)

b. She works in the airport. (into where question)

c. He lives in a rented house. (into negative)

d. My uncle bought a car. (into simple present tense)

e. Hindrina asked Indrina if she smiled at her. (into direct speech)

f. Simon taught us painting. (into passive voice)

10. Choose the correct words from the brackets and complete the passage given below:
0.5 × 10 = 5

One day a young donkey saw a wolf coming. …..(a/an/the) donkey was much frightened. But he at once thought……. (of/in/at) a trick. Walking away slowly he began to limp badly. The wolf came up and asked him…… (why he is/why am I/why he was) so lame. The donkey said he had a thorn in his hind-limb. The wolf…….

(requested /was requested/ is requested) to pull it out for him. I the donkey had not pretended so, the wolf…….. (had attacked/would attack/would have attacked) on him. The wolf, on the other hand, was thinking he could in this way get the donkey's foot between his teeth and…… (have/ has/had) a delicious meal. T he wolf ran round behind the donkey…… (because/because of/in spite of) happiness. But as soon as he…… (comes/came/has come) near the donkey's heels, the donkey kicked the wolf in the mouth. This made the wolf……. (ran/run/to run) away. the donkey was really clever, …… ? (was he/wasn't he/ wouldn't he).

“Good Luck”

SCIENCE

CONTRIBUTOR

UMAKANTA JOSHI

Syllabus

First UT

S.N.	Topic	Estimated Period	Objectives
1	Measurement	4	1. Fundamental unit and derive unit. 2. Relation between fundamental unit and derive unit. 3. Obtain units of some derived quantity in term of fundamental quantity.
3	Classification of element	7	1. Atom, molecule Element, compound, radical, valence, ion 2. Bond, electronic configuration and molecular formula.
5	Classification of plants and animals	7	1. Classify plants and animals with example 2.Invertebrate and vertebrate 3. Life cycle of mosquito.

First Term

S.N.	Topic	Estimated Period	Objectives
1	Measurement	4	1. Fundamental unit and derive unit. 2. Relation between fundamental unit and derive unit. 3. Obtain units of some derived quantity in term of fundamental quantity.
2	Force	7	1. Relation among velocity, acceleration ,displacement and time Numerical related to motion 3.Balance and imbalance force 4. Inertia and laws of motion
3	Classification of element	7	1. Atom, molecule Element, compound, radical, valence, ion 2. Bond, electronic configuration and molecular formula.
4	Chemical reaction	3	1. Physical change, chemical change and their difference. 2. Types of chemical reaction 3. balance the chemical equation

Second UT exam

S.N	Topic	Estimated period	Objectives
1	Simple machine	5	1. Define MA,VR and efficiency of simple machine 2. Define liver, pulley, inclined plane, wheel and axle. Numerical problem related to simple machine.
2	Work, energy and power	5	1. Different form of energy 2. relation among work, energy and power 3. conservation of energy
3	solubility	4	1. Define different types of solution 2. define solubility and solubility curve 3. Relation between solubility and temperature.
4	Some gases	5	1. chemical equations 2. preparation of H_2, O_2 and N_2 gas 3. Physical and chemical properties of gases 4. Uses of above gases.

5	Tissues	9	1. Define tissue and its necessity 2. different types and function 3. Diagram of different types of tissue 4. Relation between cell, tissue, organ, system and organism.

Second Term

S.N	Topic	Estimated period	Objective
1	Measurement	4	1. Fundamental unit and derive unit. 2. Relation between fundamental unit and derive unit. 3. Obtain units of some derived quantity in term of fundamental quantity
2	Force	7	1. Relation among velocity, acceleration ,displacement and time 2. Numerical related to motion 3. Balance and imbalance force 4. Inertia and laws of motion
3	Simple machine	5	1. Define MA,VR and efficiency of simple machine 2. Define liver, pulley, inclined plane, wheel and axle. Numerical problem related to simple machine.
4	Work, energy and power	5	1. Different form of energy 2. relation among work, energy and power 3. conservation of energy
5	Light	7	1. Describe the reflection, refraction and dispersion of light 2. Explain electromagnetic spectrum and mention the use of x-ray and UV rays.
6	Sound	8	1. Explain sound as a wave and describe infrasonic, audible and ultrasonic sound. 2. Explain the reflection and refraction of sound wave. 3. define intensity, loudness and pitch of sound 4. Relation of wavelength and frequency with velocity of sound.
7	Classification of element	7	1. Atom, molecule Element, compound, radical, valence, ion 2. Bond, electronic configuration and molecular formula.
8	Chemical reaction	4	1. Physical change, chemical change and their difference. 2. Types of chemical reaction 3. balance the chemical equation
9	solubility	4	1. Define different types of solution 2. define solubility and solubility curve 3. Relation between solubility and temperature.
10	Some gases	5	1. chemical equations 2. preparation of $H_2, O_2 \; and \; N_2$ gas 3. Physical and chemical properties of gases 4. Uses of above gases.
11	Metals	4	1. General properties of metal 2. Difference between metal and non metal 3. Physical and chemical properties metal.
12	Carbon and its compounds	4	1. Carbon and its various substance 2. Physical and chemical properties 3. Organic and inorganic compound.
13	Classification of plants and animals	8	1. Classify plants and animals with example 2. Invertebrate and vertebrate 3. Life cycle of mosquito.
14	Adaptation of organism	4	1. Define adaptation, terrestrial and aquatic plant and animal 2. Adaptation features of plant and animal 3. Name of some micro-organism
15	Tissues	8	1. Define tissue and its necessity 2. different types and function 3. Diagram of different types of tissue

			4. Relation between cell, tissue, organ, system and organism.
16	Skeletal system of human body	6	1. Describe the function of human skeleton. 2. Classify the name, location, structure and function 3. Different types of joint present in human skeleton.
17	Sense organ	5	1. Describe the structure and function of sense organ. 2. Tell the general method of taking proper care of sense organ.
18	Life process	7	1. Define Nutrition and importance of Nutrition. 2. Describe human digestive system and physiology of digestion 3. Describe different type of metabolic activities.
19	Natural Hazards	3	1. Define national hazards and manmade hazards 2.Managements of hazards 3. Types and effects of hazards
20	Green House	2	1. Define green house effect 2. Explain the impact of green houses gases 3. Describe artificial green house and its advantage.

THIRD UNIT TEST

S.N	Topic	Estimated period	Objective
1	Sound	7	1. Explain sound as a wave and describe infrasonic, audible and ultrasonic sound. 2. Explain the reflection and refraction of sound wave. 3. define intensity, loudness and pitch of sound 4. Relation of wavelength and frequency with velocity of sound.
2	Carbon and its compound	4	1. Carbon and its various substance 2. Physical and chemical properties 3. Organic and inorganic compound.
3	Life process	7	1. Define Nutrition and importance of Nutrition. 2. Describe human digestive system and physiology of digestion 3. Describe different type of metabolic activities.

Third Term

S.N	Topic	Estimated period	Objective
1	Measurement	38	1. Fundamental unit and derive unit. 2. Relation between fundamental unit and derive unit. 3. Obtain units of some derived quantity in term of fundamental quantity
2	Force		1. Relation among velocity, acceleration ,displacement and time 2. Numerical related to motion 3. Balance and imbalance force 4. Inertia and laws of motion
3	Simple machine		1. Define MA,VR and efficiency of simple machine Define liver, pulley, inclined plane, wheel and axle. Numerical problem related to simple machine.
4	Work, energy and power		1. Different form of energy 2. relation among work, energy and power 3. conservation of energy
5	Light		1. Describe the reflection, refraction and dispersion of light 2. Explain electromagnetic spectrum and mention the use of x-ray and UV rays.
6	Sound		1. Explain sound as a wave and describe infrasonic, audible and ultrasonic sound. 2. Explain the reflection and refraction of sound wave. 3. define intensity, loudness and pitch of sound 4. Relation of wavelength and frequency with velocity of sound.
7	Electricity		1. Define ampere, Volt, Watt, and ohm and use them 2. State and demonstrate Ohms law 3. Describe the factor affecting resistance in an electric circuit 4. Define conductivity and resistivity 5. Define magnetic field and magnetic lines of force.
8	Classification of element	36	1. Atom, molecule Element, compound, radical, valence, ion 2. Bond, electronic configuration and molecular formula.
9	Chemical reaction		1. Physical change, chemical change and their difference. 2. Types of chemical reaction 3. balance the chemical equation
10	solubility		1. Define different types of solution 2. define solubility and solubility curve 3. Relation between solubility and temperature.
11	Some gases		1. chemical equations 2. preparation of H_2, O_2 and N_2 gas 3. Physical and chemical properties of gases 4. Uses of above gases.
12	Metals		1. General properties of metal 2. Difference between metal and non metal 3. Physical and chemical properties metal.
13	Carbon and its compounds		1. Carbon and its various substance 2. Physical and chemical properties 3. Organic and inorganic compound.
14	Water		1. State the properties of water 2. Sources of water 3. Soft and hard water. 4. removal of hardness of water
15	Chemical		1. Organic and chemical fertilizer

	fertilizer used in agriculture		2. difference between organic and chemical fertilizer 3. NPK fertilizer
16	Classification of plants and animals	40	1. Classify plants and animals with example 2. Invertebrate and vertebrate 3. Life cycle of mosquito.
17	Adaptation of organism		1. Define adaptation, terrestrial and aquatic plant and animal 2. Adaptation features of plant and animal 3. Name of some micro-organism
18	Tissues		1. Define tissue and its necessity 2. different types and function 3. Diagram of different types of tissue 4. Relation between cell, tissue, organ, system and organism.
19	Skeletal system of human body		1. Describe the function of human skeleton. 2. Classify the name, location, structure and function 3. Different types of joint present in human skeleton.
20	Sense organ		1. Describe the structure and function of sense organ. 2. Tell the general method of taking proper care of sense organ.
21	Life process		1. Define Nutrition and importance of Nutrition. 2. Describe human digestive system and physiology of digestion 3. Describe different type of metabolic activities.
22	Evolution		1. Define the term evolution and describe the various evidence of organic evolution 2. Name and describe various theory of organic evolution.
23	Nature and environment		1. Define the term ecosystem and described abiotic and biotic component of ecosystem. 2. Different between autotrophs and heterotrophs 3. Explain the dependence of human on plant and animals.
24	Natural Hazards	15	1. Define national hazards and manmade hazards 2.Managements of hazards 3. Types and effects of hazards
25	Green House		1. Define green house effect 2. Explain the impact of green houses gases 3. Describe artificial green house and its advantage.
26	The earth in the Universe		1. Explain rotation and Revolution motion of earth. 2.describe the phase of moon 3. describe the formation of shadow (umbra and penumbra) 4. Explain solar eclipse and lunar eclipse with diagram.

SPECIFICATION GRID
FIRST UNIT TEST

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 2 Marks	No of questions each of 4 Marks	No of questions each of 5 Marks	Estimated periods	Total marks
1	Measurement	1 (K)		1 (A)		4	4 marks
2	Force		1 (U)	1 (A)		6	5 marks
3	Classification of elements	1 (K)			1 (U, A, HA)	10	5 marks
4	Classification of plants and animals	2 (K)	2 (K, U)			11	6 marks
Total questions		4	3	2	1		20 marks

Note: K= Knowledge Based, U= Understanding Based, A= Application Based, H= Higher Ability Based

First Term

S.N.	**Topic**	**No. Of question**				**Total**	**Objectives**
		1 mark	**2mark**	**3mark**	**4mark**		
1	Measurement	1	1			3	1. Fundamental unit and derive unit. 2. Relation between fundamental unit and derive unit. 3. Obtain units of some derived quantity in term of fundamental quantity.
2	Force	4	3	2	1	20	1. Relation among velocity, acceleration ,displacement and time Numerical related to motion 3.Balance and imbalance force 4. Inertia and laws of motion
3	Classification of element	2	2	1	1	13	1. Atom, molecule Element, compound, radical, valence, ion 2. Bond, electronic configuration and molecular formula.
4	Chemical reaction	2	2	1		9	1. Physical change, chemical change and their difference. 2. Types of chemical reaction 3. balance the chemical equation
5	Classification of plants and animals	3	2	1	1	14	1. Classify plants and animals with example 2.Invertebrate and vertebrate 3. Life cycle of mosquito.
6	Adaptation of organism	2	2	1		9	1. Define adaptation, terrestrial and aquatic plant and animal Adaptation features of plant and animal Name of some micro-organism
7	Natural hazards	1	1		1	7	1. Define national hazards and manmade hazards Managements of hazards Types and effects of hazards

Second Unit Test

S.N	Topic	Marks	Objectives
1	Simple machine	3	1. Define MA,VR and efficiency of simple machine 2. Define liver, pulley, inclined plane, wheel and axle. Numerical problem related to simple machine.
2	Work, energy and power	4	1. Different form of energy 2. relation among work, energy and power 3. conservation of energy
3	solubility	3	1. Define different types of solution 2. define solubility and solubility curve 3. Relation between solubility and temperature.
4	Some gases	3	1. chemical equations 2. preparation of $H_2, O_2 \; and \; N_2$ gas 3. Physical and chemical properties of gases 4. Uses of above gases.
5	Tissues	7	1. Define tissue and its necessity 2. different types and function 3. Diagram of different types of tissue 4. Relation between cell, tissue, organ, system and organism.

Second Term

S.N	Topic	Marks	Objective
1	Measurement	3	1. Fundamental unit and derive unit. 2. Relation between fundamental unit and derive unit. 3. Obtain units of some derived quantity in term of fundamental quantity
2	Force	5	1. Relation among velocity, acceleration ,displacement and time 2. Numerical related to motion 3. Balance and imbalance force 4. Inertia and laws of motion
3	Simple machine	5	1. Define MA,VR and efficiency of simple machine Define liver, pulley, inclined plane, wheel and axle. Numerical problem related to simple machine.
4	Work, energy and power	5	1. Different form of energy 2. relation among work, energy and power 3. conservation of energy
5	Light	5	1. Describe the reflection, refraction and dispersion of light 2. Explain electromagnetic spectrum and mention the use of x-ray and UV rays.
8	Classification of element	5	1. Atom, molecule Element, compound, radical, valence, ion 2. Bond, electronic configuration and molecular formula.
9	Chemical reaction	2	1. Physical change, chemical change and their difference.

			2. Types of chemical reaction 3. balance the chemical equation
10	solubility	5	1. Define different types of solution 2. define solubility and solubility curve 3. Relation between solubility and temperature.
11	Some gases	5	1. chemical equations 2. preparation of H_2, O_2 and N_2 gas 3. Physical and chemical properties of gases 4. Uses of above gases.
12	Metals	5	1. General properties of metal 2. Difference between metal and non metal 3. Physical and chemical properties metal.
16	Classification of plants and animals	5	1. Classify plants and animals with example 2. Invertebrate and vertebrate 3. Life cycle of mosquito.
17	Adaptation of organism	3	1. Define adaptation, terrestrial and aquatic plant and animal 2. Adaptation features of plant and animal 3. Name of some micro-organism
18	Tissues	5	1. Define tissue and its necessity 2. different types and function 3. Diagram of different types of tissue 4. Relation between cell, tissue, organ, system and organism.
19	Skeletal system of human body	5	1. Describe the function of human skeleton. 2. Classify the name, location, structure and function 3. Different types of joint present in human skeleton.
20	Sense organ	5	1. Describe the structure and function of sense organ. 2. Tell the general method of taking proper care of sense organ.
24	Natural Hazards	3	1. Define national hazards and manmade hazards 2.Managements of hazards 3. Types and effects of hazards
25	Green House	4	1. Define green house effect 2. Explain the impact of green houses gases 3. Describe artificial green house and its advantage.

Third UT

S.N	Topic	Marks	Objective
1	Sound	7	1. Explain sound as a wave and describe infrasonic, audible and ultrasonic sound. 2. Explain the reflection and refraction of sound wave. 3. define intensity, loudness and pitch of sound 4. Relation of wavelength and frequency with velocity of sound.
2	Carbon and its compound	6	1. Carbon and its various substance 2. Physical and chemical properties 3. Organic and inorganic compound.
3	Life process	7	1. Define Nutrition and importance of Nutrition. 2. Describe human digestive system and physiology of digestion 3. Describe different type of metabolic activities.

Third Term Exam

S.N	Topic	Marks	Objective
1	Measurement	23	1. Fundamental unit and derive unit. 2. Relation between fundamental unit and derive unit. 3. Obtain units of some derived quantity in term of fundamental quantity
2	Force		1. Relation among velocity, acceleration ,displacement and time 2. Numerical related to motion 3. Balance and imbalance force 4. Inertia and laws of motion
3	Simple machine		1. Define MA,VR and efficiency of simple machine Define liver, pulley, inclined plane, wheel and axle. Numerical problem related to simple machine.
4	Work, energy and power		1. Different form of energy 2. relation among work, energy and power 3. conservation of energy
5	Light		1. Describe the reflection, refraction and dispersion of light 2. Explain electromagnetic spectrum and mention the use of x-ray and UV rays.
6	Sound		1. Explain sound as a wave and describe infrasonic, audible and ultrasonic sound. 2. Explain the reflection and refraction of sound wave. 3. define intensity, loudness and pitch of sound 4. Relation of wavelength and frequency with velocity of sound.
7	Electricity		1. Define ampere, Volt, Watt, and ohm and use them 2. State and demonstrate Ohms law 3. Describe the factor affecting resistance in an electric circuit 4. Define conductivity and resistivity 5. Define magnetic field and magnetic lines of force.

8	Classification of element	22	1. Atom, molecule Element, compound, radical, valence, ion 2. Bond, electronic configuration and molecular formula.
9	Chemical reaction		1. Physical change, chemical change and their difference. 2. Types of chemical reaction 3. balance the chemical equation
10	solubility		1. Define different types of solution 2. define solubility and solubility curve 3. Relation between solubility and temperature.
11	Some gases		1. chemical equations 2. preparation of H_2, O_2 and N_2 gas 3. Physical and chemical properties of gases 4. Uses of above gases.
12	Metals		1. General properties of metal 2. Difference between metal and non metal 3. Physical and chemical properties metal.
13	Carbon and its compounds		1. Carbon and its various substance 2. Physical and chemical properties 3. Organic and inorganic compound.
14	Water		1. State the properties of water 2. Sources of water 3. Soft and hard water. 4. removal of hardness of water
15	Chemical fertilizer used in agriculture		1. Organic and chemical fertilizer 2. difference between organic and chemical fertilizer 3. NPK fertilizer
16	Classification of plants and animals	23	1. Classify plants and animals with example 2. Invertebrate and vertebrate 3. Life cycle of mosquito.
17	Adaptation of organism		1. Define adaptation, terrestrial and aquatic plant and animal 2. Adaptation features of plant and animal 3. Name of some micro-organism
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26	The earth in the Universe		1. Explain rotation and Revolution motion of earth. 2.describe the phase of moon 3. describe the formation of shadow (umbra and penumbra) 4. Explain solar eclipse and lunar eclipse with diagram.

MODEL QUESTIONS BASED ON FIRST UT

SClass 9

Subject : Science Full Marks: 20

Time : 40 minutes Pass Marks: 10

Attempt all the questions:

GROUP – A [4×1=4]

1) Where and when SI units was invented?

2) What is a notochord?

3) Classify mushroom.

4) Write any two methods of controlling mosquitoes.

GROUP – B [3×2=6]

5) Why is it difficult to walk on sand?

6) How is the five kingdom system advantageous over the two kingdom system?

7) Mention any two characteristics of the following:

a) Gymnosperms

b) Angiosperms

GROUP – C [2×3=6]

8) Show that joule is a derived unit.

9) A ball of mass 1 kg is thrown with a force of 10 N. Calculate the acceleration and the final velocity of the ball after 2 seconds.

GROUP – D [4×1=4]

10) Observe the electronic configuration and answer the following questions.

$A = 1s^2, 2s^2\ 2p^6, 3s^1$

$B = 1s^2, 2s^2\ 2p^6, 3s^2\ 3p^5$

a) Write the name of A and B.

b) Which chemical compound is formed when A and B combine together? Also write the type of chemical bond present in that compound.

c) Draw the molecular structure of the compound formed from the combination of A and B.

Good Luck

MODEL QUESTION BASED ON TERMINAL EXAMINATION

GROUP – A (15 x 1 = 15)

1. a) Define one standard Kelvin?

   b) Write the unit of acceleration.

   c) Define inertia motion.

   d) Define uniform motion.

   e) Write the SI unit of temperature?

   f) Write the atomic mass of calcium.

   g) Define radical.

   h) Write the molecular formula of potassium sulphate.

   i) Write one difference between positive and negative catalyst.

   j) Define unisexual animal.

   k) Define dicotyledonous plants.

   l) Write one characters of tape worm.

   m) Write one example of xerophytes.

   n) Define cyclone.

   o) What is glacier?

GROUP – B (13 x2 =26)

2. The unit of force is derive unit, why?
3. State the law of inertia.
4. What is vector quantity?
5. Prove that: $s = ut + \frac{1}{2}at^2$
6. What is an atom? Write sub atomic particle of an atom.
7. Write the difference between 2H andH_2.
8. Write one difference between H^+ and H.
9. Define molecules. Write one example of positive catalyst.
10. Write two features of honey bee.

11. Write one difference between earth worm and tape worm.

12. Write two characters of fungus.

13. What is parasitic animal? Write one example of parasitic animal.

14. Write two activities conducted during disaster.

GROUP – C (6 x3 = 18)

15. When a person moves in a circular track of radius 16m then calculated the displacement and distance cover by him.

16. A car started from rest , its velocity become 60m/s in 10 second calculated the acceleration of car.

17. Write the molecular formula of the compounds:-

    a) calcium hydroxide b) sodium nitrate

    c) acetic acid.

18. Balance the chemical reaction.

a) $CaCO_3 \longrightarrow CaO + CO_2$

b) $Fe + O_2 \longrightarrow Fe_2\ O_3$

c) $H_2 + N_2 \longrightarrow NH_3$

19. Write the difference between bryophyte and pteriodophyta.

20 study the diagram and answer the following quotation

a) Identify the types of habitat where this organism found.

b) List two adaptation feature of given organism.

GROUP – D (4 x4 = 16)

21. A train is moving with a velocity of 90 km/hr. the driver jammed the brakes and train comes to rest after travelling a distance of 100m. Calculate the retardation of train and time take by a train to travel the distance.

22. On the basis of given electronic configuration, answer the following:-

A= $1s^2$, $2s^2$ $2p^6$ $3s^2$ B= $1s^2$, $2s^2$ $2p^6$, $3s^2$ $3p^5$

a) Name the element A and B.

b) Write the valency of element B.

c) Write name and molecular formula of the compound formed by the combination of above elements.

d) What type of bond exists in above formed compound?

23. Difference between Bacteria and virus.

24. What are the causes of GLOFs? Write the effects GLOFs.

"Good Luck"

नेपाली

निर्माणकर्ता

तीर्थराज जोशी

हुमाकान्त बेल्बासे

विशिष्टीकरण तालिका

एकाइ परीक्षाको लागि विशिष्टीकरण तालिका

क्षेत्र	प्रश्न सङ्ख्या	अङ्क भार	समय	स्पष्टीकरण
शब्द भण्डार(अर्थ लेखन)	१	१.५	३ मिनट	पाठमा प्रयोग भएका शब्दमध्येबाट ३ वटा शब्द दिई अर्थ लेख्न लगाउने अर्थ विकल्पमा २ अतिरिक्त शब्द दिने
वाक्य प्रयोग	१	२	२ मिनट	उखान, टुक्का र पारिभाषिक शब्दमध्येबाट २ वटा शब्द दिई वाक्य प्रयोग गर्न लगाउने
व्याकरण	१	१.५	३ मिनट	काल, पक्ष र भावमध्येबाट सङ्केतका आधारमा वाक्य पूरा लगाउने
शब्दवर्ग	१	२	३ मिनट	विकारी र अविकारी शब्दवर्गबाट ४ वटा पर्ने गरी एउटा वाक्य दिएर रेखाङ्कन गरी पहिचान गर्न लगाउने
पाठगत बोध	१	४	१० मिनट	पढेको पाठमध्येबाट एउटा अनुच्छेद दिई २ वटा प्रश्न दिएर उत्तर लेख्न लगाउने
पठनबोध	१	५	९ मिनट	एउटा अनुच्छेद दिई बोधसम्बन्धी २ र व्याकरण सम्बन्धी ३ प्रश्न सोध्ने
सप्रसङ्ग व्याख्या	१	४	१०मिनट	कविताबाट १ र अन्य पाठबाट १ गरी २ प्रश्न दिएर १ लेख्न लगाउने
जम्मा	७	२०	४० मिनट	

त्रैमासिक परीक्षाका लागि विशिष्टीकरण तालिका

(सैद्धान्तिक मूल्याङ्कन)

क्षेत्र	ीवधा	प्रश्न सङ्ख्या	अङ्कभार	समय (मिनटमा	स्पष्टीकरण
१.शब्द भण्डार	अर्थ लेखन	१	२	४	पाठमा प्रयोग भएका कुनै ४ ओटा शब्द(तत्सम-२, तद्भव-१ र आगन्तुक-१ रतिनको अर्थबिच जोडा मिलाउन लगाउने । जोडा मिलाउन दि"दा शब्द सङ्ख्याभन्दा अर्थ बढी दिने

	शब्द पहिचान	१	२	४	पाठ्य पुस्तकमा प्रयोग भएका विपरीतार्थी-१, पर्यायवाची-१, अनेकार्थी-१ र श्रुतिसमभिन्नार्थी-१ शब्द पर्ने गरी दिएर सङ्केतबमोजिम खाली ठाउ भर्न लगाउने ।
	वाक्यमा प्रयोग	१	२	४	पाठ्य पुस्तकमा प्रयोग भएका अनुकरणात्मक, प्राविधिक/पारिभाषिक, उखान, टुक्का र निपात मध्येबाट कुनै २ओटा दिई वाक्यमा प्रयोग गर्न लगाउने ।
२.हिज्जे	शुद्धीकरण	१	१	२	ब/व, श/ष/स र पञ्चम वर्ण प्रयोग भएकाशब्दहरूमध्ये कुनै दुई शब्दको शुद्ध रूप छानेर लेख्ने २ ओटा बहु वैकल्पिक प्रश्न सोध्ने ।
	वाक्यमा	१	२	४	एउटा शब्दमा एउटा मात्र अशुद्धि पर्ने गरीलेख्य चिह्न-१, पदयोग र पद वियोग -१, ह्रस्व-१ र दीर्घ-१ पर्ने गरी ४ ओटा अशुद्धि भएको वाक्य दिई शुद्ध पार्न लगाउने ।
३.व्याकरण	शब्दवर्ग	१	३	५	नाम, सर्वनाम, विशेषण, क्रियापदबाट ४ ओटा र अव्यय (नामयोगी, क्रियायोगी, संयोजक, निपात, विस्मयादि बोधक) बाट २ गरी फरक फरक वर्गका कुनै ६ ओटा शब्द पर्ने गरी एउटा अनुच्छेद दिने र रेखाङ्कन गरीपहिचान गर्न लगाउने ।
	शब्द निर्माण(उपसर्ग प्रत्यय समास विग्रह	१	२	४	कुनै छोटो गद्यांश दिई कम्तीमा दुई ओटा उपसर्ग लागेका र कम्तीमा दुई ओटा प्रत्यय लागेर बनेका शब्द दिएर तिनको पहिचान गरी लेख्न लगाउने वा दुई ओटा उपसर्ग र दुई ओटा प्रत्यय दिई शब्द निर्माण गर्न लगाउने विग्रह भएको शब्द एउटा र समस्त शब्द एउटा दिई समास वा विग्रह गर्न लगाउने
	काल, पक्ष, भाव	१	२	४	काल र पक्षबाट २ र भाव/अर्थबाट २ ओटा धातु सङ्केत गरी वाक्य पुरा गर्न लगाउने ।
	वाक्य परिवर्तन	१	४	७	कोष्ठकमा निर्देश गरेर निम्नबमोजिम ४ वाक्य परिवर्तन गर्न लगाउने :(वाक्य, वाच्य, लिङ्ग, करण, पुरुष)

	स्वतन्त्र वाक्य रचना	१	३	५	क्रियाको खास काल, पक्ष वा क्रियाको अर्थ/भावमध्ये कुनै एकको कोटी तोकेर ३ वाक्यमा कुनै विषयको वर्णन गर्न लगाउने ।
४. पठनबोध	(क) बोधसम्बन्धी प्रश्न(दृष्टांश)	१	५	९	कुनै गद्यांश दिई निम्नबमोजिम ५ ओटा प्रश्न सोध्ने : (क) पाठमा (गद्याशं आधारित भई एउटा तथ्यपरक र अर्को अनुमानात्मक गरी दुईप्रश्न सोध्ने । (ख) कारकहरूमध्ये कुनै एक कारक र विभक्ति प्रयोग भएको वाक्य पाठ (गद्याशंबाट खोजेर लेख्न लगाउने । (ग) पाठ (गद्यांश) मा प्रयोग भएका सरल, संयुक्त वा मिश्र वाक्यलाई सरल भए मिश्र वा संयुक्तमा, मिश्र भए सरल वा संयुक्तमा र संयुक्त भए मिश्र वा सरलमा परिवर्तन गर्न लगाउने । (घ) अनुच्छेदबाट विपरीतार्थी, पर्यायवाची र अनेकार्थी शब्द पहिचान गर्न लगाउने र त्यसशब्दलाई वाक्यमा प्रयोग गर्न लगाउने ।
	(ख) बोध सम्बन्धी प्रश्नोत्तर (अदृष्टांश)	१	५	९	गद्य विधाबाट बढीमा १५० शब्दसम्मको अनुच्छेद दिई एक वा दुई वाक्यमा उत्तर आउने तथ्यपरक, सन्दर्भ बोधक, प्रक्रिया बोधक आदि ५ ओटा प्रश्न सोध्ने ।
५. बु"दा टिपोट र सारांश (दृष्टांश)		१	५	९	गद्य विधाका पाठबाट बढीमा १५० शब्दसम्मको दृष्टांश दिई ४ ओटा बुदा टिपेर सारांश लेख्न लगाउने ।
६. निर्देशित रचना	कथा/जीवनी, एकाङ्की/मनो वाद/वाद विवाद/चिठी	१	४	७	बु"दा दिई कथा/जीवनीबाट एक र एकाङ्की/मनोवाद/वाद विवाद/चिठीबाट एक गरी दुई प्रश्न सोधेर कुनै एक प्रश्नको उत्तर दिन लगाउने ।
७. भाव विस्तार/ व्याख्या / सप्रसङ्ग व्याख्या		१	४	७	कथा/कविता/निबन्ध/ जीवनी विधाबाट कुनै दुई विशिष्ट पङ्क्ति दिई कुनै १ को भाव विस्तार, व्याख्या वा सप्रसङ्ग व्याख्या गर्न लगाउने ।
८. पाठगत बोध	(क) कथा, कविता,	२	८	१४	निम्नबमोजिम तिन प्रश्न सोधी कुनै दुई प्रश्नको उत्तर दिन लगाउने (क) पाठ्य पुस्तकका कथाबाट कुनै अंश उद्धृत गरी त्यसका आधारमा विषय वस्तु लेख्ने, घटना वर्णन, मूल भाव वा सन्देश, चरित्र चित्रण सम्बन्धी कम्तीमा ५

	जीवनी, प्रबन्ध/निबन्ध (सन्दर्भमा आधारित सङ्क्षिप्त उत्तरात्मक)				वाक्यमा उत्तर दिने खालका सङ्क्षिप्त उत्तरात्मक २ प्रश्न सोध्ने (ख) पाठ्य पुस्तकका कविताबाट कुनै अंश उद्धृत गरी त्यसका आधारमा विषय वस्तु उल्लेख, वर्णन, मूल भाव वा सन्देश सम्बन्धी कम्तीमा ५ वाक्यमा उत्तर दिने खालका सङ्क्षिप्त उत्तरात्मक २ प्रश्न सोध्ने । (ग) पाठ्य पुस्तकका जीवनी, निबन्ध/प्रबन्धमध्ये कुनै एक विधाबाट गद्यांश उद्धृत गरी त्यसका आधारमा विषयवस्तु लेख्ने, घटना वर्णन गर्ने, मूल भाव वासन्देश उल्लेख गर्ने, चरित्र चित्रण सम्बन्धीकम्तीमा ५ वाक्यमा उत्तर दिने खालका सङ्क्षिप्त उत्तरात्मक २ प्रश्न सोध्ने ।
	(ख) तार्किक शिल्प/समस्या समाधानात्मक	१	४	७	पाठ्य पुस्तकभित्रका कथा, जीवनी, प्रबन्ध/निबन्धको कुनै सन्दर्भ दिई आफ्ना विचारले पुष्टि गर्ने, तर्क दिने वा कुनै समस्या देखाई समस्या समाधान गर्ने खालका प्रश्न सोध्ने ।
९. पाठगत बोध (लामो उत्तरात्मक)	कथा, कविता, जीवनी, प्रबन्ध/निबन्ध	१	८	१४	पाठ्य पुस्तकभित्र समावेश गरिएका कथा, कविता, जीवनी, प्रबन्ध/निबन्धमध्ये कुनै दुई विधाबाट पाठगत अंश वा सूचना दिई त्यसका आधारमा विश्लेषणात्मक, सिर्जनात्मक तथा समीक्षात्मक क्षमता परीक्षण गर्ने किसिमका कुनै दुई प्रश्न सोधी एकको उत्तर दिन लगाउने ।
१०. स्वतन्त्र रचना (सिर्जनात्मक)		१	८	१४	एक आत्मपरक र दुई वस्तुपरक गरी तिन शीर्षक दिने र कुनै एउटामा कम्तीमा १५० शब्दसम्मको निबन्ध लेख्न लगाउने ।

खण्ड परीक्षामा आधारित नमूना प्रश्नपत्र

१ **शब्द र अर्थका बीच जोडा मिलाउनुहोस् :-** १.५

माघी	राम्रो
सम्यक	विकास नभएको
अचेत	माघ
	थारुहरुले मनाउने पर्व
	बेहोस

२ **अर्थ स्पष्ट हुनेगरी वाक्यमा प्रयोग गर्नुहोस् :-** २

सेवा गरे मेवा मिल्छ, प्रचार

३ **कोष्ठकमा दिइएका धातु र सङ्केतका आधारमा वाक्य पूरा गर्नुहोस् :-** १.५

क) मोहन विद्यालय.....। (जाः अपूर्ण वर्तमान)

ख) भाइ उत्तीर्ण .....। (हुःअज्ञात भूत)

ग) उनी.....। (आउः सामान्य भविष्यत्)

४ रेखाङ्कित शब्दहरुको पदवर्ग छुट्याउनुहोस्: २

आहा †बगै"चामा अति सुन्दरफूलफुलेछन् ।

५ तल दिइएको कथांश पढी उत्तर दिनुहोस्:- ४

सहरदेखि धेरै टाढा एउटा सुन्दर गाउ" थियो । गाउ"को छेउबाट बग्ने नदी, वनका रुख तथा ससाना छहराले त्यसलाई आकर्षक बनाएका थिए । सहरको गन्धसमेत नपाएको त्यो गाउ" सफा मात्र थिएन, सबै खाले प्रदूषणबाट समेत मुक्त थियो । गाउ"लेहरु पनि निकै उदार, श्रमशील र सरल थिए । उनीहरुले बाटोघाटो र पाटीपौवाका साथै ठाउ" ठाउ"मा मठ मन्दिर पनि बनाएका थिए ।

(क) गाउ" र गाउ"लेका के के विशेषता थिए ?

(ख) कथांशमा उल्लिखित गाउ" र आफू बस्ने ठाउ"को तुलना गर्नुहोस् ।

६ तलको अनुच्छेद पढी सोधिएका प्रश्नको उत्तर दिनुहोस्:- ५

'हिंसा नगर्नु, असत्य नबोल्नु, कसैको सम्पत्ति चोरी नगर्नु, ब्रह्मचार्य व्रतको पालना गर्नु, आवश्यकताभन्दा बढी धन सङ्ग्रह नगर्नु' गौतम बुद्धका यी प्रमुख उपदेश हुन् । संसारमा उनका उपदेशको व्यापक रुपमा प्रचार प्रसार छ । उनका उपदेशले विश्वलाई नै मार्ग निर्देश गरेको छ । बुद्धका दृष्टिमा सबै मानिस समान मानिन्थे । सबै प्राणीको कल्याण गर्नु बुद्धको प्रमुख उदेदश्य थियो ।

(क) हिंसा शब्दको अर्थ लेख्नुहोस् ।

(ख) अनुच्छेदबाट कम र सीमित शब्दको विपरीतार्थी शब्द लेख्नुहोस् ।

(ग) दर्शन र सबै शब्दलाई वाक्यमा प्रयोग गर्नुहोस् ।

(घ) केलाई बुद्धले प्रमुख उद्देश्य बनाएका थिए ?

(ङ) आवश्यकभन्दा बढी धन किन सङ्ग्रह नगर्ने होला ?

७ <u>सप्रसङ्ग व्याख्या गर्नुहोस्</u> :- ४

क) अब एउटा नया" जीवन सुरु गरौ"

जहा"बाट हामी थकान रोपेर भागेका थियौ"

त्रैमासिक परीक्षामा आधारित नमूना प्रश्नपत्र

१ **समूह 'क' मा दिइएका शब्दको अर्थ समूह 'ख' बाट पहिचानगरी जोडा मिलाउनुहोस् :-** २

समूह 'क'		**समूह 'ख'**
वन्दना		छाडा
शुष्क		बेहोस
अश्लील	प्रार्थना	
अचेत		चासो
		सुख्खा
		आशा

२ **खाली ठाउ"मा उपयुक्त शब्द भर्नुहोस् :-** २

क) अनेकार्थी शब्द .....हो । (मास, एक्लै, पाप)

ख) परोक्ष शब्दको पर्यायवाची शब्द.....हो । (अप्रत्यक्ष, प्रत्यक्ष, बिचल्ली)

ग) आरम्भ शब्दको विपरीतार्थी शब्द.....हो । (प्रारम्भ, विलम्ब, अन्त्य)

घ) दिन-दीन शब्द.....हुन् । (श्रुतिसमभिन्नार्थक, पर्यायवाची, अनेकार्थी)

३ **अर्थ स्पष्ट हुने गरी वाक्यमा प्रयोग गर्नुहोस् :-** २

:jKg;l/, :kz{ ug'{

४ **(क) दिइएको वाक्यलाई शुद्ध पारी सार्नुहोस् ।** २

म ले पकृर्तिबाट धैरे भाव चोरेकि छु ।

(ख) शुद्ध शब्द छान्नुहोस् । १

अ) प्रशासन	प्रशाशन	प्रसाशन	प्रषासन
आ) अधिकाङ्श	अधीकांश	अधिकांश	अधिकांस

५ **रेखाङ्कित शब्दहरुको शब्दवर्ग छुट्याउनुहोस् :-** ३

आहा †तिमीत कस्तो राम्रो चित्र बनाउ"दा रहेछौ ।

६ **(क) तलका उपसर्ग र प्रत्ययबाट एक एक ओटा शब्द निर्माण गर्नुहोस्:-** २

उपसर्गः प्र

प्रत्ययः इलो

(ख) समास वा विग्रह गर्नुहोस् । १

लामपुच्छे, नौ रसको समूह

७ **धातु र सङ्केतका सहायताले खाली ठाउ" भर्नुहोस् :-** २

(क) मदन फुटबल.....।(खेल्: अभ्यस्त भूत)

(ख) सबै घर..... ।(जाः सामान्य भविष्यत्)

(ग) म मामाघर..... ।(पुग्: पूर्ण वर्तमान)

(घ) त“ घर.....।(जाः आज्ञार्थ)

८ **कोष्ठमा दिएको सङ्केतका आधारमा वाक्य परिवर्तनगर्नुहोस् :-** ४

(क) तिमी असल छ्यौ । (पुलिङ्ग)

(ख) उनीहरु आए । (प्रथम पुरुष)

(ग) दाइले गीत गाउनुभयो । (बहुवचन)

(घ) तिमी कक्षाकार्य लेख । (उच्च आदर)

९ सामान्य भविष्यत् कालको प्रयोग गरी आफ्नो जीवनको लक्ष्यका बारेमा तिन वाक्यमा लेख्नुहोस्:- ३

१० तल दिइएको अनुच्छेद पढी सोधिएका प्रश्नहरुको उत्तर दिनुहोस्:- ५

कल्पलताले ती छिमेकीस“ग अनार टिप्न सहयोग मागिन् । छिमेकीले सबै अनार टिपिदिए । उनले सबै अनार टिपेर घरभित्र लगिन् । भित्र गएर अनार फुटाइन् । अनारभित्र हिरै हिरा रहेछन् ।त्यसपछि सबै अनार बहुमूल्य रहेछन् भन्ने कुरा उनलाई लाग्यो । उनले आफ्नो पटुकाबाट झिकेर त्यहा“ आएका छिमेकीलाई एक एक ओटा हिरा दिइन् । हिरा पाउ“दा छिमेकीहरु पनि दङ्ग परे र उनलाई धन्यवाद दि“दै घर फर्के ।

(क) रेखाङ्कित विभक्तिका नाम लेख्नुहोस् ।

(ख) सामान्य भूत र अज्ञात भूतका एक एक किया टिप्नुहोस् ।

(ग) सहयोग र बहुमूल्य शब्दलाई वाक्यमा प्रयोग गर्नुहोस् ।

(घ) अनार किन बहुमूल्य रहेछन् ?

(ङ) कल्पलताले के कारणले धन्यवाद पाइन् ?

११ तल दिइएको अनुच्छेद पढी सोधिएका प्रश्नहरुको उत्तर दिनुहोस्:- ५

नेपालमा खेतीलाई व्यवसायका रुपमा बुझ्न र ग्रहण गर्न सकिएको छैन । संसार जतिसुकै अगाडि बढे पनि मानिसको प्राण बचाउने खानेकुरा अन्ततः खेतीबाटै आउ“छ भन्ने कुरा हामीले मनन गर्न सकेका छैनौ“ । खेतीलाई व्यवसाय नै नमान्नु, हेला र उपेक्षाको पेसा मान्नु हाम्रो ठुलो कमजोरी हो । खेती वनस्पतिको उत्पादन र उपयोग गर्ने महान् पेसा हो । वनस्पति मानिसलाई बा“च्नका लागि नभई नहुने सास, गा“स, कपास, बास, इन्धन, ओखती, पानी आदिको मूल स्रोत हो । यो आफू बा“च्ने र दुनिया“लाई बचाउने पेसा हो । यसैले खेती हेय नभएर सबैको प्रिय पेसा बन्नुपर्छ । नेपाल जस्तो कृषि प्रधान देशमा त झन् जैविक खेती नै सबैभन्दा मुख्य पेसा हो र हुनु पनि पर्छ ।

(क) हामीले के कुरा मनन गर्न सकेका छैनौ“?

(ख) खेती किन प्रिय पेसा बन्नुपर्छ ?

(ग) खेती के के कुराहरुको स्रोत हो ?

(घ) नेपालमा जैविक खेती किन मुख्य पेसा बन्नुपर्छ ?

(ङ) हेय र उपयोग शब्दको अर्थ लेख्नुहोस् ।

१२ दिइएका गद्यांशबाट चारवटा बु“दा टिपी सारांश लेख्नुहोस् :- ५

पर्यटकहरुका लागि हाम्रो देश हरेक दृष्टिले आकर्षक मानिन्छ । यहाको प्राकृतिक सुन्दरता विश्वमा प्रसिद्ध छ । हिमाल, पहाड, उपत्यका र तराईका भु-बनोट, हिमशृङ्खलाको अनुपम सौन्दर्य नदी, ताल, झरना र छा“गाहरुको मनोहारिता अनेकथरी वन्यजन्तु र पशुपन्छीहरुस“गको साक्षात्कार तथा पदयात्राका लागि ठीक ठीक दुरीका प्राकृतिक स्थल यहा“ प्रशस्त छन् । यस बाहेक सामाजिक तथा सांस्कृतिक विविधता, पुरातात्त्विक स्थलहरुको व्यापकता, वास्तुकला, काष्ठकला र मूर्तिकलाका सुन्दर नमुना, सरल सिधा स्वभावका बासिन्दा तथा शान्तिसुरक्षाको उचित प्रबन्धले गर्दा पर्यटकहरुका लागि नेपाल आर्कषणको केन्द्र बन्दै आएको छ । यस आर्कषणलाई हामीले जोगाइराख्न सक्नुपर्छ ।

१३ **दिइएका ब"ुदाका आधारमा छोटो कथा तयार पारी उपयुक्त शीर्षक दिनुहोस् :-४**

कालुले न्याउरी पालेको – कालुको सानो छोरो – कालु न्याउरीलाई छोरो जिम्मा लाएर मेलापात जानु – न्याउरीले बच्चाको रेखदेख गर्नु– एक दिन कालु मेलाबाट फर्कदा न्याउरीको मुखबाट रगत देख्नु – कालुले न्याउरीलाई बच्चा मारेको शङ्का गर्नु – कालु अधर्य भएर न्याउरीमाथि जाइ लाग्नु र न्याउरीलाई मार्नु – कालु कोठाभित्र जानु – बच्चाको छेउमा जा"दा बच्चा सुतिरहेको देख्नु – उसले बच्चाको छेउमा सर्प मरिरहेको देख्नु – न्याउरीले सर्पलाई मारेको थाहा पाउनु – उसलाई न्याउरी मारेकोमा पछुतो हुनु ।

अथवा

वृद्धवृद्धाको सम्मान गरौ" भन्ने शीर्षकमा एउटा वक्तृता तयार पार्नुहोस् ।

१४ **कुनै एकको सपसङ्ग व्याख्या गर्नुहोस् :-** ४

क) राष्ट्र नव निर्माणको यात्रा सुरु गरौ" त्यही"बाट

जहा" हामीले शान्ति र समृद्धिका सपनाहरू सजाएका थियौ" ।

ख) आमाबाबाबाहेक मेरो अर्को ईश्वर छैन ।

१५ **कुनै दुई पश्नको उत्तर लेख्नुहोस् :-** ८

(क) तलको कथांश पढी सोधिएका पश्नको उत्तर लेख्नुहोस्:-

कल्पलताले दिएका हिरा गाउ"लेहरुले केही गहना बनाए र बा"की सबै बेचे । त्यसबाट सबै गाउ"लेहरु सम्पन्न भए । गाउ" पनि स्वर्गजस्तै सुन्दर भयो । त्यस गाउ"का बगै"चा, बाटो र मन्दिर हेर्दा सबैको मन प्रफुल्ल हुन्थ्यो ।

(क) कल्पलताका माध्यमबाट गाउ" कसरी सम्पन्न भयो ?

(ख) हामीले हाम्रो समाज सुन्दर पार्न के गर्नुपर्दो रहेछ ?

(ख) तलको कवितांश पढी सोधिएका पश्नको उत्तर लेख्नुहोस्:-

समयको एउटा लामो झरीपछि

बल्ल घाम उदाएको छ

बिहान भएको छ, घाम उदाएको छ, अब हामीले हाम्रो यात्रा सुरु गर्नुपर्छ

आस्थाको टुकी बाल्नुपर्छ, अब हामीले उज्यालो छर्नुपर्छ

मौसम वसन्तको छ, अब हामीले गीत गुञ्जाउनुपर्छ

फकेका छन् गुरा"सहरु, अब हामीले मालाहरु उन्नुपर्छ

(क) किन कविले अहिले यात्रा सुरु गर्न भनेका हुन् ?

(ख) माला उन्ने पसङ्ग किन उल्लेख गरिएको हो ?

(ग) तलको गद्यांश पढी सोधिएका पश्नको उत्तर लेख्नुहोस्:-

मानव बेचबिखन आजको समाजको जीवन्त समस्या हो । मानव बेचबिखन भनेको कुनै पनि उद्देश्यले मानिसलाई किन्ने वा बेच्ने काम हो । महिलाहरुलाई देहव्यापारमा लगाउनु, बालबालिकालाई श्रममा लगाउनु, घरायसी दास बनाउनु, कानुन विपरीत मानव अङ्गप्रत्यङ्ग किनबेच गर्नु जस्ता गतिविधि यसअन्तर्गत पर्दछन् ।

(क) मानव बेचबिखन किन आजको समाजको जीवन्त समस्या हो ?

(ख) कस्ता गतिविधि मानव बेचबिखन अन्तर्गत पर्दछन् ?

१६ **यदि कुनै व्यक्ति बेचिनमा लागेको थाहा पाउनुभयो भने तपाई के गर्नुहुन्छ ?** ४

१७ कुनै एक प्रश्नको विवेचना गर्नुहोस् :- ८

(क) 'म को हु"?' निबन्धमा निबन्धकारले आफूलाई चोर स्वीकार गरेर अरुलाई पनि चोर्न किन प्रेरित गरेकी होलिन् ?

(ख) अनेकौ" समस्याका बाबजुद पनि रामशरण दर्नाल कसरी सङ्गीत जगत्मा प्रसिद्ध बने ?

१८ कुनै एक शीर्षकमा १५० शब्दमा नघटाई निबन्ध लेख्नुहोस् :- ८

क) इन्टरनेट

ख) बन्द सदाका लागि बन्द गरौ"

ग) मेरो विद्यार्थी जीवन

ACCOUNTS

CONTRIBUTOR

SHUBHA PRADHAN

For First Unit

S.no	Name of Lesson	No. of Periods	Objectives
1.	Office	10	Understand the concept, functions and importance of office. Know the methods of formation and types of office.
2.	Book Keeping	8	Understand the meaning and objectives of book keeping. Know the meaning, feature objectives and importance of accounting. Explain the branches and basic accounting concept. Discuss concept, features, advantages and disadvantages of single entry system, double entry system.
3.	Journal	12	Understand the meaning of journal. Explain the objective and importance of the journal. Prepare journal entries.

For First Term

S.no	Name of Lesson	No. of Periods	Objectives
1.	Office Personnel	8	Understand the meaning & types of office personnel. Write the function of office chief, sectional chief and office assistant. Discuss qualities of office assistant.
2.	Office Resources	10	Understand the meaning importance and types of office resources.
3.	Journal	14	Prepare Journal entries.

For Second Term

Name of lesson	No of periods	Objectives
Correspondence	10	Understand the concept, importance and objectives of correspondence Know the essential qualities, parts and types of letter Understand the procedure of handling inward and outward mail Understand notice, circular and mandatory order
Record keeping	6	Understand the concept and importance of record keeping Know the types of record
Ledger	12	Understand meaning objectives and importance of ledger Know the posting and balancing of ledger

For Second UT

SNO	Name of the lesson	No of periods	Objectives
1	Forms of business organization	8	Understand the meaning and forms of business organization Know the concepts, characterstics, advantages and disadvantages pf all six forms of business
2	Subsidiary book	15	Understand the meaning and types subsidiary books Know the different type of subsdiary books Write the meaning, objectives, importances and advantages of petty cash book

For Third UT

SNO	Name of the lesson	No of periods	Objectives
1	Postal and electronic communication service	8	Understand the meaning importance and development of postal service in Nepal Explain the methods of sending letters Write the meaning of electronic means of communication
2	Business	10	Understand the concept, characterstics and importance of business Know the scope, components, types and evolution of business
3	Trial balance	10	Understand the meaning objectives and advantages of trial balance Know the methods of preparing trial balance Write the meaning of suspense account
4	Government accounting	8	Understand the concept and characterstics of government accounting Know the objectives of government accounting Explain the origin and growth of government accounting in Nepal Write about the accounting system used before introduction of present accounting system

Third Term

SNO	Name of the lesson	No of periods	Objectives
1	Assembly, meeting and seminar	6	Understand the meaning and types of assembly, meeting and seminar. Understand the meaning of minute and consideration for drafting a minute
2	Final Accounts	10	Understand the meaning and concept of final accounts Know the meaning and preparation of trading account, profit and loss account and balance sheet

SPECIFICATION GRID FOR FIRST UNIT TEST 2075

S.N	Chapter	No. of question Each of 1 mark	No. of question Each of 5 mark	Estimated Period	Total Marks
1	Office	2	1	10	7
2	Book Keeping	2	1	8	7
3	Journal	1	1	12	6
	Total Question	5	3	30	20

SPECIFICATION GRID FOR FIRST TERM 2075

S.N	Chapter	No. of question Each of 1 mark	No. of question Each of 5 marks	No. of question Each if 10 marks	Estimated Period	Total Marks
1	Office	1	2	1	-	21
2	Office Personnel	1	3		8	16
3	Office	1	3		8	16
4	Resources	1	1	1	15	16
5	Journal Book Keeping	1	1		-	6
	Total Question	5	10	2		75

SPECIFICATION GRID FOR SECOND UT

S.No.	Chapter	No. of questions each of 1 mark	No. of questions each of 5 marks	No. of questions each of 10 marks	Total Marks
1.	Correspondance	2	1		7
2.	Record Keeping	3	1		8
3.	Journal+Ledger		1		5
	Total=				20

SPECIFICATION GRID FOR SEOND TERM

S.No.	Chapter	No. of questions each of 1 mark	No. of questions each of 5 marks	No. of questions each of 10 marks	Total Marks
1.	Correspondance		1		5
2.	Record Keeping		2		10
3.	Postal and Electronic Communication Services	2	2		12
4.	Business	2	2		12
5.	Journal			1	10
6.	Ledger		1		5
7.	Trial Balance	1	1		6
8.	Government Accounting		1	1	15
	Total=				75

SPECIFICATION GRID FOR THIRD UT

S.No.	Chapter	No. of questions each of 1 mark	No. of questions each of 5 marks	No. of questions each of 10 marks	Total Marks
1.	Forms of Business Organizations		1		5
2.	Journal+Ledger		1		5
3.	Trial Balance		1		5
4.	Subsidiary Book		1		5
	Total=				20

SPECIFICATION GRID FOR THIRD TERM

S.No.	Chapter	No. of questions each of 1 mark	No. of questions each of 5 marks	No. of questions each of 10 marks	Total Marks
1.	Office Personnel		1		5
2.	Office Resources		1		5
3.	Postal & Electronic communication		1		5
4.	Forms of Business			10	10
5.	Assembly Meeting and Seminar	3	1		8
6.	Book Keeping	2	1		7
7.	Journal		1		5
8.	Ledger		1		5
9.	Subsidiary Book		2		10
10.	Trial Balance		1		5
11.	Final Accounts		2		10
	Total=				75

MODEL QUESTIONS BASED ON FIRST UT

Sub : Account F.M - 20

Time: 40 minutes P.M – 10

Group A (5×1=5)

1) What is an Office ?
2) Mention any two functions of office.
3) What is meant by depreciation ?
4) Define cost concept.
5) What is Journal ?

Group B (2×5=10)

6) Explain any five importance of office
7) Write down the rules of Journalizing on the basis of

Group C (1×5=5)

8) Journalize the following transactions:

Jan 1st : Purchased furniture Rs.8,000

Jan 4th : Sold Goods to Arun Rs.10,000

Jan 7th: Purchased goods from Kiran Rs.15,000

Jan 9th: Sold machine Rs.10,000

Jan 12th: Received cheque of Rs.9,000 on sale of goods

MODEL QUESTIONS BASED ON FIRST TERM

Sub : Account F.M - 75

Time: 135 minutes P.M – 37.5

Group A (5×1=5)

9) Why office is regarded as memory house ?
10) Who is office assistant.
11) Give two example of technical manpower ?
12) Write down full form of LF.
13) Explain the term Capital ?

Group B (10×5=50)

14) Explain the basic function of Office.
15) How can office be classified as per its nature and objectives?
16) Write and five essential qualification of office assistant.
17) "Without office assistant, the organization cannot run smoothly." Justify this statement highlighting the duties and responsibilities of office assistant
18) Write down the types of office assistant on the basis of nature of work
19) Describe the types of transportation in brief
20) Mention any five importance of office resources
21) Write down difference between single entry and double entry
22) Write down the rules of debit and credit on the basis of account
23) Write short notes on:
    i) Finance ii) Non-durable Materials

GROUP C (10×2=20)

16) What is communication ? Explain its types in brief.

17) Journalize the following transactions:

Baisakh 1 : Started business with cash Rs.2,00,000

Baisakh 3 : Deposited Rs.10,000 in bank

Baisakh 4 : Paid salary through cheque Rs.15,000

Baisakh 5 : Received interest Rs.20,000

Baisakh 7 : Purchased goods on cash Rs.25,000

Baisakh 10 : Sold furniture to Prasil Rs.60,000

Baisakh 15 : Withdrawn cash for personal use Rs.10,0000

Baisakh 18 : Paid rent Rs.5,000

Baisakh 23 : Cash sales Rs.8,000

Baisakh 28 : Issues cheque for interest Rs.10,000

HPE

CONTRIBUTORS

SYLLABUS

S.No	Lessons	Page no.	Required period	Objectives
First unit test(Total working days):-			**35+4**	
1	**Concept of Health, Population and Env.Edu**			To know the various aspects of health, population and Environment To know the inter-relationship between HPE
1.1	Introduction of Health education and its importance			
1.2	Introduction of population education and its importance			
1.3	Introduction of env. education and its importance			
1.4	Interdependence with health, population and Environment			
2	**Demography, Populationchange and Management**			To know about the demography and its sources To identify the factors causing change in population To identify the effects of migration
2.1	Introduction to Demography			
2.2	Sources of Population data			
2.3	Factors affecting population change			
2.4	Areas affected by Migration			
First term(Total working days):-			**48+4**	
6.	**Natural Resources and Bio-diversity**			To clarify the concept of natural resources To know about the types of natural resources and their situation To introduce about the strategy of conservation To know about the concept of caring of the earth and relation with man
6.1	Concept of Natural Resources			
6.2	Classification and Situation of Natural Resources			
6.3	Interrelationship between Natural resources and Human beings			
6.4	Conservation of Natural Resources			
6.5	Caring and Conservation of Natural Resources			
6.6	Man and Earth			
7.	**Environmental Health and Diseases**			To know about the concept of environmental health To identify the various factors of environmental health To know about the causes and effects of pollution To know and manage the solid waste
7.1	Concept of Environmental health			
7.2	Pollution and its management			
7.4	Solid Waste Management			
7.5	Management of Human Excreta and Drainage System			
Second unit test(Total working days):-			**38+4**	
3	**Population, Environment and Development**			To identify the concept of development To know about the indicators of development To know the factors of human resource development
3.1	Concept of Development			
3.2	Indicators of Development			
3.3	Human Development Index			
Unit 4.1	Demographic and environmental situation of Nepal			
Second Term (Total working days):-			**38+8**	
9	**Consumer Health and**			To know about the consumer

	Community Health			health and consumer rightd
9.1	Consumer health			To know the various types of nutrients
9.2	Nutrition			To clarify the quake and quackery
9.3	Quality food			
9.4	Protection of consumer Right and Health			
9.5	Harmful Products			
9.6	Planning for Healthy Living			
4	**Demographic and environmental situation of Nepal**			To know about the size of population
				The pattern of population distribution in ecological region
				To identify the effects of urbanization
Third Unit (Total working days):- 51+4				
5	**Family life Education and Quality of Life**			To introduce the concept of family life education and its dimensions
5.1	Introduction to family Life and its aspects			To understand about the roles and responsibilities of parent
5.2	Introduction to Family Life Education and its aspects			To clarify the concept of family planning
5.3	Marriage			To know about the ageing and social security
5.4	Planning for family			
5.5	Ageing and Social Security			
8	**Adolescence Sexual and Reproductive Health**			To clarify the concept of adolescence and the changes
8.1	Adolescence			To know the importance of reproductive health and its ways to protect
8.2	Sexuality Education			
8.3	Reproductive Health			
Third Term (Total working days):- 26				
8	**Adolescence Sexual and Reproductive Health**			To identify the various reproductive rights
8.4	Reproductive Rights			
10	**Primary Health Care and Safety Education**			To introduce the concept of PHC and its Principles
10.1	Primary Health Care			To know about the various types of hazards and their management
10.2	Safety Education			Various safety measures in different situations
10.3	Concept, types and Mitigation of Hazards			

Specification Grid For first UT

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 4 Marks	No of questions each of 7 Marks	Estimated periods	Total marks
1	Concept of Health, Population and Environment Education	2 (K)	1 (A)		14	6 marks
2	Demography, Population Change and Measurement	3(K)	1 (A)	1 (U+K)	16	14 marks
Total questions		5	2	1		20 marks

Note: K= Knowledge Based, U= Understanding Based, A= Application Based, H= Higher Ability Based

Specification Grid for first term

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 4 Marks	No of questions each of 7 Marks	Estimated periods	Total marks
1	Concept of Health, Population and Environment Education	2 (K)	1 (A)		14	6 marks
2	Demography, Population Change and Measurement	3(K)	2 (A+K)	1 (U+K)	16	18 marks
3	Natural Resources and Bio-diversity	3(K)	3 (A+U)	1 (A+U+K)	20	22 marks
4	Environmental Health and Diseases	3(K)	3(A+K)	2 (U+K+H)	22	29 marks
Total questions		11	9	4		75 marks

Note: K= Knowledge Based, U= Understanding Based, A= Application Based, H= Higher Ability Based

Specification Grid for 2nd UT

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 4 Marks	No of questions each of 7 Marks	Estimated periods	Total marks
1	Population, Environment and Development	2 (K)	1 (A) 1 (K)		15	6 marks
2	Demographic and environmental situation of Nepal	3(K)		1 (U+K)	20	14 marks
Total questions		5	2	1		20 marks

Note: K= Knowledge Based, U= Understanding Based, A= Application Based, H= Higher Ability Based

Specification Grid for 2nd term

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 4 Marks	No of questions each of 7 Marks	Estimated periods	REMARKS
1	Concept of Health, Population and Environment Education	1 (K)	1 (A)	1 (U+K)	14	
2	Demography, Population Change and Measurement	1(K)	1 (A+K)		16	
3	Natural Resources and Bio-diversity	2(K)	1 (A+U)	1	20	
4	Environmental Health and Diseases	2(K)	2(A+K)		22	
5	Population, Environment and Development	1 (K)	1 (K)	1	15	
6	Demographic and environmental situation of Nepal	2(K)	1(U)	1 (U+K)	20	
7	Family life Education and Quality of Life	2(U+K)	2(U+A)		16	
Total questions		11	9	4		

Note: K= Knowledge Based, U= Understanding Based, A= Application Based, H= Higher Ability Based

Specification Grid for 3rd UT

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 4 Marks	No of questions each of 7 Marks	Estimated periods	Total marks
1	Adolescence Sexual and Reproductive Health	3 (K)		1(U)	22	10 marks
2	Family life Education and Quality of Life	2(K)	1 (A) 1 (K)		15	10 marks
Total questions		5	2	1		20 marks

Note: K= Knowledge Based, U= Understanding Based, A= Application Based, H= Higher Ability Based

Specification Grid final term

S. No.	Chapters	No of questions each of 1 Mark	No of questions each of 4 Marks	No of questions each of 7 Marks	Estimated periods	REMARKS
1	Concept of Health, Population and Environment Education	1 (K)	1 (K)	1 (U)	15	
2	Demography, Population Change and Management	1(A)	1 (A)		16	
3	Population, Environment and Development	1(U)	1 (A)		13	
4	Demographic and Environmental situation of Nepal	1(A)	1(HS)	1(A)	17	
5	Family life Education and Quality of Life	1 (U)	1 (U)		17	
6	Natural resources and Biodiversity	1(K)	1(U)	1 (K)	17	
7	Environmental Health and disease	1(HS)	2(A)		20	
8	Adolescence, Sexual and reproductive Health Education	1(A)	1(HS)	1(HS)	18	
9	Consumer Health And Community Health	1(U)	1(U)		15	
10	Primary Health care, Precaution on Risk and Safety Measures	1(A)	1(U)		15	
Total questions		11	9	4		

Note: K= Knowledge Based, U= Understanding Based, A= Application Based, H= Higher Ability Based

Model Question based on first UT
Class 9

Subject : HPE Full Marks: 20
Time : 40 minutes Pass Marks: 10
Attempt all the questions:

GROUP – A [4×1=4]

GROUP – A **(5 x 1 = 5)**

1. What are the three dimensions of health?
2. Define environmental education.
3. Write any two examples of secondary sources of population data.
4. Who is known as the father of Demography?
5. Write an example of social taboos.

Short answer questions

GROUP – B **(2 x 4 = 8)**

6. Define health. Write the qualities of a healthy person.
7. Explain the relationship between health, population and environment with a diagram.

Long answer questions

GROUP – C **(7 x 1 = 7)**

8. Define census. Write in short the historical development of census. Also write the differences between De-Facto and De-Jure method of population census.

Good Luck

Model Questions based on first term
Class 9

Subject : HPE Full Marks: 75
Time : 2 hrs minutes Pass Marks: 37.5
Attempt all the questions:

GROUP – A [4×1=4]

GROUP – A **(5 x 1 = 5)**

1. What are the three dimensions of health?
2. Define environmental education.
3. Write any two examples of secondary sources of population data.
4. Who is known as the father of Demography?
5. Write an example of social taboos.

Short answer questions

GROUP – B **(2 x 4 = 8)**

6. Define health. Write the qualities of a healthy person.
7. Explain the relationship between health, population and environment with a diagram.

Long answer questions

GROUP – C **(7 x 1 = 7)**

8. Define census. Write in short the historical development of census. Also write the differences between De-Facto and De-Jure method of population census.

Good Luck

COMPUTER

CONTRIBUTOR

RAVI KANT AWASTHI

SYLLABUS

S.N	Teaching Content (Unit Wise)	Learning Objectives	Estimated Periods
1	History of computer	Upon completing this chapter, student will be able to: 1. Identify and place in proper sequence five of the major inventions in the history of computing. 2. Discuss succinctly the contributions of each of the following individuals to the field of computing: Charles Babbage Herman Hollerith Howard Aiken John Atanasoff John Mauchly and J. Presper Eckert and John Von Neumann 3. Differentiate among the generations of computers according to their technological advances and 4. Be able to list three ways the computer has changed education.	5
2	Computer system	Upon completing this chapter, student will be able to: 1. Define computer system, hardware, input and output devices and other components of the CPU and memory.	2
3	Types of Computers	Upon completing this chapter, student will be able to: 1. Define a computer, Classify the types of computers.	3
4	Computer Software	Upon completing this chapter, student will be able to: 1. Distinguish between Operating Systems software and Application Systems software. 2. Describe commonly used operating systems. 3. Identify the primary functions of an Operating System. 4. Describe the “boot” process. 5. Identify Desktop and Windows features. 6. Use Utility programs.	2
5	Number System	Upon completing this chapter, student will be able to: 1. Recognize different types of number systems as they relate to computers. 2. conversion binary to decimal and vice versa. 3. Binary addition, subtraction, multiplication and division.	3
6	Operating System	Upon completing this chapter, student will be able to: 1. Develop an understanding of the structure and function of operating systems. 2. The User Interface: Task Bar, Icons, Start Menu, Running an Application. 3. Explain file size (bytes, kilo, mega, giga,tera) and abbreviations used, Create a Folder, Move a file (multiple files)into a folder, Delete files and folders, Recovering deleted files, Renaming files, Searching for files, Creating and deleting shortcuts on desktop, How programs may save files in specific location by default. 4. How to find where file is being saved and exploring the desktop, cleaning the desktop.	8
7	Introduction to word processor	Upon completing this chapter, student will be able to: 1. Define word processor and its features. 2. Word Processing Basics: Opening Word Processing Package, Menu Bar, Using The Help, using the icons below menu bar Opening and closing Documents: Opening Documents, Save and Save as, Page Setup, Print	5

		Preview, Printing of Documents Text Creation and manipulation: Document Creation, Editing Text, Text Selection, Cut, Copy and Paste, Spell check, Thesaurus Formatting the Text: Font and Size selection, Alignment of Text, Paragraph Indenting, Bullets and Numbering, Changing case Formatting a document: Set page margin, paragraphs and sections within a document, Adjust indents Table Manipulation: Draw Table, Changing cell width and height, Alignment of Text in cell, Delete/ Insertion of row and column Border and shading, Table Formula Inserting Graphic Elements: Insert a clip art picture, insert symbols and special characters, adding a watermark; Using word art; adding a drop cap	
8	Introduction to presentation software	Upon completing this chapter, student will be able to: 1. Define presentation software and its features. Basic Concepts of presentation: Using PowerPoint, Opening A Power Point Presentation, Saving A Presentation Creation of Presentation: Creating a Presentation Using a Template, Creating a Blank Presentation, Entering and Editing Text, Inserting And Deleting Slides in a Presentation Preparation of Slides: Inserting Word Table or An Excel Worksheet, Adding Clip Art Pictures, Inserting Other Objects, Resizing and Scaling an Object Presentation of Slides: Viewing A Presentation, Choosing a Set Up for Presentation, Printing Slides Slide Show: Running a Slide Show, Transition and Slide Timings, Automating a Slide Show	2
9	Introduction to spreadsheet software	Upon completing this chapter, student will be able to: 1. Define spreadsheet software and its features. 2. Elements of Electronic Spread Sheet: Opening of Spread Sheet, Addressing of Cells, Printing of Spread Sheet, Saving Workbooks Manipulation of Cells: Entering Text, Number Editing Worksheet Data, Inserting and Deleting Rows, Column, Changing Cell Height and Width Formulas and Function: Using Formulas, Function, basic mathematical operators, using AutoSum etc. using formulas with multiple cell references, finding the right function, relative and absolute cell references, fixing formula errors; Charts: learning about charts, creating charts; Working with graphics; Clip Art	2
10	Concept of programming techniques	Upon completing this chapter, student will be able to: 1. Define algorithm and flowchart 2. Flowcharts symbol	2
11	Introduction to QBASIC programming	Upon completing this chapter, student will be able to: 1. Define QBASIC, elements of QBASIC programming 2. CLS statement, REM statement, let statement, IF then statement	5
12	HTML	Upon completing this chapter, student will be able to: 1. Create a webpage using HTML tag. 2. Define HTMl , web browser, webpage, home page, HTTP, URL and Concept of Internet, Applications of Internet 3. Overview of use of search engines and e-mail	4
13	ICT	Upon completing this chapter, student will be able to: Define ICT, and impacts of ICT of Nepal, ICT objectives policy of Nepal, uses of E-government, e-commerce etc.	3

SPECIFICATION GRID

Term	Chapters	Types of Question and Marks for theory subject		Theory Marks	Practical Marks	Total Marks
For 1st Unit Test	1. Introduction to computer	Objectives Question Multiple choices	8	10	10	20
	2. Number System	Subjective Questions Question answer	2			
For 1st Term	1. Evolution of Computer Technology	Objective Matching Multiple choices True and False Technical terms Full forms/number system	32	50	30	80
	2. Types of Computers					
	3. Computer Software	Subjective Question answers	18			
For 2nd Unit Test	1. History and elements of QBASIC	Objectives Question Multiple choices	8	10	10	20
	2. Computer Hardware	Subjective Questions Question answer	2			
For 2nd Term	1. HTML	Objective Matching Multiple choices True and False Technical terms Full forms/number system	32	50	30	80
	2. ICT					
	3. Introduction to Operating System	Subjective Question answers	18			
For 3rdUnit Test	1. Introduction to Word Processor	**Objectives Question** Multiple choices	8	10	10	20
	2. Introduction to Presentation Software	**Subjective Questions** Question answer				
	3.Introduction to Spreadsheet		2			

For Final Term	1. Concept of Computer Graphics	**Objective** Matching Multiple choices True and False Technical terms Full forms/number system	32	50	30	80
	2. Concept of Programming Techniques					
	3. QBASIC Programming	**Subjective** Question answers	18			

UNIT MODEL QUSTION PAPER

FULL MARKS : 20
PASS MARKS : 10

A. Choose the best answer:- 8x1=8

1. Chief component of third generation computer was:
   i. transistors ii. vacuum tubes
   iii. integrated Circuits iv. none of above
2. A computer can solve more than one kind of problem. This is related to which of the following characteristics?
   i. accuracy ii. reliability
   iii. versatility iv. automatic
3. Which of the following is a feature of fifth generation computers?
   i. Use of natural language ii. bio-chips
   iii artificial intelligence iv. All of above
4. Microprocessors as switching devices are for which generation computers?
   i. First Generation ii. Second Generation
   iii. Third Generation iv. Fourth Generation
5. Which is the first electronic digital computer?
   i. ENIAC ii. MARK I
   iii. Z1 iv. ABC
6. The processing speed of first generation computers was:
   i. milliseconds ii. microseconds
   iii. nanoseconds iv. picoseconds
7. The lower deck of an abacus is known as
   i. heaven ii. sky
   iii. earth iv. floor
8. Which of the following is not computer language?
   i. high level language ii.all of the above
   iii. Medium level language
   iv. Low level language/machine level language

B. Convert as instructed:- 2x1=2

i. $(508)_{10}$ into Binary ii. $(1010)_{2}$ into Decimal

Note : 10 marks are allotted for practical.

"Good Luck"

MODEL QUESTION BASED ON FIRST TERM

FULL MARKS : 100
PASS MARKS : 50

A. Answer the following questions: 8x4=32

1. List out the characteristics of a computer? Explain any two of them.
2. Write the characteristics of first generation of computers.
3. What is analog computer? Give two examples of analog devices.
4. Write the characteristics of fifth generation of computers.
5. Who is known as father of modern computers?
   Mention his contributions.
6. What is an input device? Give any three examples of input devices.
7. What is an output device? Give any three examples of output devices.
8. Differentiate between RAM and ROM.

B. State whether the following statements are true or false: 4x1=4

1. PDP- 1 was the first computer in Digital Equipment Corporation's.
2. EDSAC is the first stored program electronic computer.
3. UNIVAC was the second commercial computer.
4. The Mark – I was officially known as the IBM Automatic Sequence Controlled Calculator (ASCC).

C. Match the following: 2x0.5=2

Group 'A'	Group 'B'
1) Blaise Pascal	i) EDSAC
2) Joseph Marie Jacquard	ii) UNIVAC
3) John Eckert and John Mauchly	iii) Stepped Reckoner
4) Professor Maurice Wilkes	iv) Punched Card Loom
	v) Pascaline

D. Write the technical terms of the following:- 4x1=4

1. The calculating device developed by William Oughtred.
2. The processing speed of second generation computer was.
3. A computer can solve more than one kind of problem. This is related to which of the following characteristic.
4. First mechanical calculating machine called.

E. Write the full form of :- 4x1=4

i) EEPROM
ii) VLSI
iii) ABC
iv) BIT

F. Convert as indicated:- 2x1=2

i) $(1011)_2$ into decimal
ii. $(127)_{10}$ into binary

G. Perform the binary calculation:- 2x1=2

i) 11101 + 11101 + 1010 ii. 1110 x 11

Note: 50 marks are allotted for practical.

"Good Luck"