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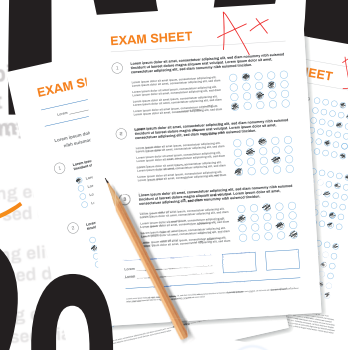

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10th Students by Subject गुरु

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Expert Tips For Best Rank

1. Get your self ready for board exams by practician Most Exam papers
   - Read All instructions Carefully
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3. Manage your time
4. Structure your Answer.
5. Draw diagrams with pencil only.
6. Review your paper thoroughly
7. try not to panic
8. Do your Best
9. Bring all your instruments

D. M. BHATT ENGLISH MEDIUM

STD: 10TH **BASIC MATHS**

PAPER – 1 **Marks: 80**

SECTION - A

- **Answer the following questions as instructed. (Question no. 1 to 16)[1 Mark Each]** **[16]**

➢ **Whether the following statements are True or False.**

1.The sum or difference of rational number and irrational numbers is irrational.

2.The cubic polynomial p(a)= a^3 - a has three real zeroes.

3.In ΔABC; ∠C = 90° then $\sec^2 A - \tan^2 B = 1$

4.If 2 sin 2θ =$\sqrt{3}$ then θ = 30°

➢ **Answer each of the following statement correctly by selecting the options.**

5. H.C.F. (120, 20) =_____.

(A) 2 (B) 4 (C) 10 (D) 20

6. If the zeroes of the polynomial $p(x) = 2x^2 + 5x + K$ are inverse of each other, then K =

(A) 2 (B) 3 (C) 4 (D) 5

7. Equation$\frac{x}{3} - \frac{y}{2}$= 5 can be written as standard_____.

(A) 3x - 2y - 30 =0 (B) 2x - 3y-30=0 (C) 3x+2y -30 = 0 (D) 3x + 2y - 30 = 0

8. The tangents drawn to the circle from point P outside the circle with centre O are Q and R. If the radius of the circle 5 cm and OP = 13 cm, find the areas of the quadrilateral PQOR.

(A) 60 cm^2 (B) 65 cm^2 (C) 30 cm^2 (D) 32.5 cm^2

9. The first four terms in a AP, whose first term is -2 and common difference is -2 are

(A) -2, 0, 2, 4 (B) -2, 4, 8, 16 (C) -2,-4, -6, -8 (D)-2,-4,-8,-16

10. If the perpendicular drawn to the y-axis from P(2, -3) is M, then the coordinates of point M is_____.

(A) (0, 3) (B) (0, -3) (C) (3, 0) (D) (-3, 0)

➢ **Fill in the blanks as the statements become true.**

11. If the mode of an information is 25 and the mean is 25, then its median is_____.

12. The probability of event E+ the probability of event 'not E' is_____.

➢ **Answer the following questions in one word / sentence / statistics.**

13. What is the intersection of the radii of a circle called?

14. State the formula for finding the volume of a five rupee coin.

15. If the sector of a circle with radius R Is P°, then the formula for finding the area of sector is

16. What is the maximum area of the inner triangle in a semicircle with diameter 10 cm ?

Section - B

- **Calculate and answer the questions given below. [17 to 26] [2 marks each]** **[20]**

17. Find the zeroes of x^2-2x-8 quadratic polynomial and verify the relationship between the zeroes and the coefficients.

OR

17. Find the quadratic polynomial with the given numbers 1/4 and -1 as the sum and product of its zeroes respectively.

18. Find the zeroes of $4u^2+8u$ quadratic polynomial and verify the relationship between the zeroes and the coefficients.

19. Find the first four terms of the AP when the first term a = -2 and the common difference d = 0.

20 Evaluate : $\frac{tan^2 60° + 4\ sin^2\ 45° + 3\ sec^2\ 30° + 5\ cos^2 90°}{cosec\ 30° + \sec 60° - cot^2\ 30°}$

OR

20. Given 15 cot A = 8, find sin A and sec A

21. Show that the points (1, 7), (4, 2), (-1, -1) and (-4, 4) are the vertices of a square.

22. A tower stands vertically on the ground. From a point on the ground, which is 15 m away from the foot of the tower, the angle of devation of the top of the tower is found to be 60°. Find the height of the tower.

23. A tangent PQ at a point P of a circle of radius 5 cm meets a line through the centre O at a point Q so that OQ = 12 cm. Find length PQ.

OR

23. P if tangets PA and PB from a point P to a circle with center O are inclined to each other at angle of 80°, then∠POA is equal to _____ .

24. 2 cubes each of volume 64 cm^3 are joined end to end. Find the surface area of the resulting cuboid.

OR

24.find the CSA pf foot ball with a radius of 14 cm

25. A survey conducted on 20 households in a locality by a group of students resulted in the following frequency table for the number of family members in a households :

Family size	1 – 3	3 – 5	5 – 7	7 – 9	9 – 11
No. of Families	7	8	2	2	1

Find the mode of this data.

26. A bag contains 3 red balls and 5 black balls. A ball is drawn at random from the bag. What is the probability that the ball drawn is:

(i) red ?

(ii) not red ?

Section - C

- **Answer the questions out of the following questions as required. [27 to 34] [3 marks each]** **[24]**

27. 5 pencils and 7 pens together cost 50₹. Where as 7 pencils and 5 pens together cost 46₹. Find the cost of one pencil and that of one pen by graphically.

OR

27. Solve the following pair of linear equations by the substitution method:

$0.2x + 0.3y = 1.3$

$0.4x + 0.5y = 2.3$

28. Find the roots of the quadratic equation $3x^2 - 2\sqrt{6}x + 2 = 0$

OR

28. Find the value of k of quadratic equation $kx(x-2)+6=0$, so that they have two equal roots.

29. If the $3^{rd}$and the 9^{th} terms of an AP are 4 and -8 respectively, which term of this AP is zero ?

30. Check whether 301 is a term of the list of numbers 5, 11, 17, 23, ...

31. If Q(0, 1) is equidistant from P(5, -3) and R(x, 6). Find the value of x. Also find the distances QR and PR.

OR

31. Find the ratio in which the y-axis divides the line segment joining the points (5, -6) and (-1, -4). Also find the point of intersection.

32. A bag contains a red ball, a blue ball and a yellow ball, all the balls being of the same size. Kritika takes out a ball from the bag without looking into it. What is the probability that she takes out the (1) yellow ball? (i) red ball? (ii) blue ball ?

33. One card is drawn from a well shuffled deck of 52 card . Find the probability of getting (i) a black face card (ii) the jack of black (iii) a red king

34. The table below gives the percentage distribution of female teachers in the primary schools of rural areas of various states and union territories (U.T.) of India. Find the mean percentage female teachers.

Percentage of female teachers	15-25	25-35	35-45	45-55	55-65	65-75	75-85
Number of states / U.T.	6	11	7	4	4	2	1

Section – D

- **Answer the questions as requested. [35 to 39] [4 marks each]** **[20]**

35. If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.

OR

35. In triangle MNO, $\angle O = 90°$, then prove that $MN^2 = NO^2 + MO^2$.

36. A survey regarding the heights (in cm) of 51 girls of class X of a school was conducted and the following data was obtained: find the median height.

Height (in cm)	Less than 140	Less than 145	Less than 150	Less than 155	Less than 160	Less than 165
Number of girls	4	11	29	40	46	51

37. Draw a pair of tangents to circle of radius 4 cm which are inclined to each other at an angle at 60°. Also the justification of the construction.

OR

37. Draw a line segment of length 7.6 cm and divide it in the ratio 5 : 8 Measure the two parts

38. find the mean of below given information

Class	5-15	15-25	25-35	35-45	45-55	55-65
f	6	11	21	23	14	5

39. A well of diameter 3 m is dug 14 m deep. The earth taken out of it has been spread evenly all around it in the shape of a circular ring of width 4 m to form an embankment. Find the height of the embankment.

OR

39 From a solid cylinder whose height is 2.4 cm and diameter 1.4 cm, a conical cavity of the same height and same diameter is hollowed out. Find the total surface area of the remaining solid to the nearest cm^2.

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D. M. BHATT ENGLISH MEDIUM

STD: 10TH **BASIC MATHS**

PAPER – 2 **Marks: 80**

Section – A

- **Answer the following questions as instructed. (Question no. 1 to 16)[1 Mark Each]** **[16]**

➢ **Whether the following statements are true or false.**

1. The decimal representation of $\frac{73}{8}$ is infinitely many solution.

2. If any two zeroes of the cubic polynomial are 0 then it does not have linear and constant terms.

3.If $\sin\theta = \frac{4}{5}$ then $\tan\theta = \frac{4}{3}$.

4. $tan^2\,\theta - sec^2\,\theta = 1$

➢ **Answer each of the following statement correctly by selecting the options**

5. If H.C.F (117, 65) = 65x - 117 then x =_____.

(A)1 (B) 2 (C)3 (D) 4

6. If the quadratic polynomial $p(x) = ax^2+bx+c$ has two zeroes α *and* β then $\alpha^2+\beta^2$=_____.

(A) $\frac{b^2+4ac}{2}$ (B) $\frac{b^2-4ac}{2}$ (C) $\frac{b^2-2ac}{a^2}$ (D) $\frac{b^2+2ac}{2a}$

7. If the pair of equation mx - y = 2 and 9x - 3y = 6 have an infinite solution, then m=

(A)12 (B)-12 (C)-3 (D) 3

8. The circle has a maximum of _____ parallel tangents.

(A) 1 (B)2 (C)3 (D)4

9. -10, -6, -2, 2, ____ list of numbers.

(A)if d = -16,there is such an AP. (B)if d = 4,there is such an AP.

(C) if d = -4, there is such an AP. (D) there is no AP.

10. If $\frac{AM}{AB} = \frac{1}{3}$, A – M – B , then point M divides AB from A to _____ ratio.

(A) 1 : 2 (B) 1 : 3 (C) 3 : 1 (D) 2 : 1

➢ **Fill in the blanks as the statement become true.**

11. The formula showing the relationship between $\bar{x}$, M and Z frequency distribution is _____.

12. P(E) = $\frac{14}{27}$ then P($\bar{E}$) = _____.

➢ **Answer the following questions in one word / sentence / statistics.**

13. Find ∠A if the cyclic quadrilateral ABCD has ∠A : ∠C = 7 : 8.

14. If the volume ratio of two spheres is 1 : $2\sqrt{2}$, then what is the ratio of their surface area ?

15. If the difference between the circumference and the radius of the circle 37, what is the circumference of the circle ? ($\pi=\frac{22}{7}$).

16. If the perimeters of a square and a circle are equal, what is the ratio of their areas ?

Section – B

- **Calculate and answer the questions given below. [17 to 26] [2 marks each]** **[20]**

17. Find the zeroes of $4S^2$- 4S + 1 quadratic polynomial and verify the relationship between the zeroes and the coefficients.

OR

17. Find the quadratic polynomial with the given numbers $\sqrt{2}$ and $\frac{1}{3}$ as the sum and product of its zeroes respectively.

18. Find the quadratic polynomial with the given numbers 1and 1 as the sum and product of its zeroes respectively.

19. Find the first four terms of the AP when the first term a = -1 and the common difference d = $\frac{1}{2}$ and write three more terms.

20. If cot θ = $\frac{7}{8}$ then, find $\frac{(1+\sin\theta)(1-\sin\theta)}{(1+\cos\theta)(1-\cos\theta)}$

OR

20. ΔOPQ, right angled at P, OP = 7 cm and OQ - PQ = 1 cm. Determine the value of sin Q.

21. Find a relation between x and y such that the point (x, y) is equidistant from the points (7, 1) and (3, 5).

22. An electrician has to repair an electric fault on a pole of height 5 m. She needs to read a point 1.3 below the top of the pole to undertake the repair work. What should be the length of the ladder that she should use which when inclined at an angle of 60° to the horizontal, would enable has to reach the required position ? Also, how far from the foot of the pole should she place the foot of the ladder ?

23. From a point Q, the length of the tangent to a circle is 24 cm and the distance of Q from the centre is 25 cm. Then find the radius r.

OR

23. If the length of chord of a circle with a radius of 5cm is 8cm find its distance from the center.

24. A cone of height 24 cm and radius of base 6 cm is made up of modeling clay. A child reshapes it in the form of a sphere. Find the radius of the sphere.

OR

24. If the ratio of the volumes of two spheres is 125 :27,then what is the ratio at their areas?

25. A piggy bank contains hundred 50P coins, fifty 1 coins, twenty 2 coins and ten 5 coins. If it is equally likely that one of the coins will fall out when the bank is turned upside down. What is the probability that the coin (i) will be a 50P coin? (ii) Will not be a 5 coin ?

26. The marks distribution of 30 students in a mathematics examination are given below :

Classinterval	10 – 25	25 – 40	40 – 55	55 – 70	70 – 85	85 – 100
Number of students	2	3	7	6	6	6

Find the mode of this data.

Section-C

- **Answer the questions out of the following questions as required. [27 to 34] [3 marks each] [24]**

27. The following pairs of linear equation are consistent / inconsistent ? If consistent, obtain the solution graphically. 2x + y - 6 = 0 and 4x - 2y - 4 = 0

OR

27. The sum of the digits of a two digit number is 9 , also nine times this number is twice the number obtained by reversing the order of the digits find the number.

28. Find two consecutive odd positive integers, sum of whose squares is 650.

OR

28. Find two numbers whose sum is 27 and product is 182

29. In an AP; given a = 2, d = 8, Sn= 90. Find n and a_n.

30. Find the 31st term of an AP whose 11th term is 38 and the 16th term is 73.

31. Find a pair of the y axis which is equidistant from the points A(6, 5) and B(-4, 3)

OR

31. If the points A(6, 1), B(8, 2), C(9, 4) and D(P, 3) are the vertices of a parallelogram, taken in order, find the value of P.

32. The distribution below shows the number of wickets taken by bowlers in one day cricket matches. Find the mean number of wickets by choosing a suitable method.

Number of Wickets	20 – 60	60 – 100	100 – 150	150 – 250	250 – 350	350 – 450
Number of Bowler	7	5	16	12	2	3

33. A box contains 3 blue, 2 white and 4 red marbles. If a marble is drawn at random from the box, what is the probability that it will be (i) White ? (ii) Blue ? (iii) red ?

34. A cubical block of side 7 cm is surmounted by a hemisphere. What is the greatest diameter the hemisphere can have? Find the surface area of the solid.

Section-D

- **Answer the questions as requested. [35 to 39] [4 marks each]** **[20]**

35. Write and prove the converse of the pythagoras theorem.

OR

35. Write and prove the the thales theorem.

36. The median of the following data is 525. Find the values of x and y, if the total frequency is 100.

Class interval	0 – 100	100 – 200	200 – 300	300 – 400	400 – 500	500 – 600	600 – 700	700 – 800	800 – 900	900 – 1000
Frequency	2	5	x	12	17	20	Y	9	7	4

37. Draw a triangle PQR with side QR = 7 cm, Q = 60°, P = 90°. Then construct a triangle whose sides are $\frac{3}{4}$ of corresponding side of the triangle △PQR give the justification of the construction also.

OR

37. Draw a circle of radius 5 cm. From a point 8 cm away from its centre construct the pair of tangents to the circle and measure their length give also the justification of the construction.

38. 100 surname were randomly picked up from a local telephone directory and the frequency distribution of the number of the letters in the English alphabets in the surname was obtained as below determine the median number of letter in the surname

Length	1-4	4-7	7-10	10-13	13-16	16-19
Number of leaves	6	30	40	16	4	4

39. Rachel, an engineering student, was asked to make a model shaped like a cylinder with two cones attached at its two ends using a thin aluminium sheet. The diameter of themodel is 3 cm and its length is 12 cm. If each cone has a height of 2 cm, find the volumeof air contained in the model that Rachel of air contained in the model that Rachel made. (Assume the outer and inner dimensions of the model to be nearly the same)

OR

39. A container shaped like a right circular cylinder having diameter 12 cm and height 15 cm is full of ice cream. The ice cream is to be filled into cones of height 12 cm and diameter 6 cm, having a hemispherical shape on the top. Find the number of such cones which can be filled with ice cream.

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STD: 10TH **BASIC MATHS**

PAPER – 3 **Marks: 80**

Section – A

- **Answer the following questions as instructed. (Question no. 1 to 16)[1 Mark Each]** **[16]**

➢ **Whether the following statements are True or False.**

1. For any two positive integers a and b, HCF (a, b) x LCM (a, b) = a x b.

2. The zeroes of a linear polynomial ax + b is $\frac{b}{a}$.

3. If sin θ = cos 45° then $\theta = 45°$.

4. tan θ = $\frac{\cos\theta}{\sin\theta}$

➢ **Answer each of the following statements correctly by selecting the options.**

5.The decimal representation of $\frac{31417}{6250}$ has _____ digits after the Ten's place.

(A) 3 (B) 4 (C)5 (D)6

6.The sum of the inverse of the zeroes of P(x) =$2x^2$ + x -1 is _____.

(A) 1 (B)-1 (C) 5 (D) 6

7. For a pair of linear equations $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ is _____.

(A) Infinitely many solutions (B) Exactly one solution.

(C) No solution (D) Not even on

8. From a point Q, the length of the tangent to a circle is 24 cm and the distance of Q from the centre is 25 cm. The radius of the circle is

(A) 7 cm (B) 12 cm (C)15cm (D) 24.5 cm

9. For an APs has a common difference is -2 then $a_{20} - a_{15}$ = _____.

(A) 10 (B) -10 (C) -15 (D) 15

10. If the origin point is one end point (3, -2) of the diameter of a circle having a centre, then the coordinate of the other end point of the diameter is _____.

(A) (-3, 0) (B) (0, 2) (C) (0, -2) (D) (-3, 2)

➢ **Fill in the blanks as the statements become true.**

11. The median can be found by drawing _____ for a given version of distribution.

12. Probability of a card is drawn randomly from 52 cards and the cards not King or Queen to be _____.

13. The probability that the same number is obtained by bouncing three dice together is _____.

14. The graph of polynomial P(x) = $4x^2$ - 9 intersects the x-axis at _____ different points.

➢ **Answer the following questions in one word / sentence / statistics.**

15. If the sides of a triangle are 5 cm, 4 cm and 3 cm, then the radius of its inner circle is _____.

16. If the area and circumference of the circle are numerically equal, find the radius of the circle.

Section-B

- **Calculate and answer the questions given below. [17 to 26] [2 marks each]** **[20]**

17. Find the zeroes of $3x^2$ - x - 4 quadratic polynomial and verify the relationship between the zeroes and the coefficients.

OR

17. Find the quadratic polynomial with the given numbers 4 and 1 as the sum and product of its zeroes respectively.

18. divide $3x^3+x^2+2x+5$ by $1+2x+x^2$

19. In the following APs, find the missing terms in the boxes. {5,___,___, 9.5}

20. Evaluate : $\frac{\cos 45°}{\sec 30°+\text{cosec } 30°}$

OR

20. If tan 2A = cot(A - 18°) where 2A is an acute angle, find the value of A

21. Find the coordinates of a point A, where AB is the diameter of a circle whose centre is (2, -3) and B(1, 4).

22. The angle of elevation of the top of a tower from a point on the ground. Which is 30 m away from the foot of the tower is 30°, Find the height of the tower.

23. If a chord AB of a centre circle O is 4 cm in length with radius 4 cm. Find ∠AOB.

OR

23. Prove that the tangents drawn at the ends of a circle are parallel.

24. How many silver coins, 1.75 cm in diameter and of thickness 2 nm, must be melted to form a cuboid of diamensions 5.5 cm x 10 cm x 3.5 cm?

OR

24. A 20 m deep well in diameter 7 m is dug and the earth from digging is evenly spread out to form a platform 22 m by 14 m. Find the height of the platform.

25. The following distribution gives the state wise teacher student ratio in higher secondary schools of India. Find the mode of this date.

No. of student per teacher	15 – 20	20 – 25	25 – 30	30 – 35	35 – 40	40 – 45	45 – 50	50 – 55
No. of states / UT	3	8	9	10	3	0	0	2

26. A die is thrown twice. What is the probability that (1) 5 will not come up either time? (ii) 5 will come up atleast once?

Section-C

- **Answer the questions out of the following questions as required. [27 to 34] [3 marks each]** **[24]**

27. For which value of a and b does the following pair of linear equations have an infinite number of solutions?
(a - b)x + (a + b)y = 3a + b - 2 and 2x + 3y = 7

OR

27. For which values of P does the pair of equations given below has unique solution?
4x +Py+ 8 = 0 and 2x + 2y + 2 = 0

28. Find the roots of quadratic equation $ax^2 + bx + c = 0$ ($a \neq 0$).

OR

28. Find two numbers whose sum is 27 and whose product is 182.

29. Given, d = 5, $S_9 = 75$ then. Find a and a_9.

30. How many terms of the AP 9,17,25,….must be taken to give a sum of 636?

31. Find the coordinates of the points which divide the line segment joining A(-2, 2) and B(2, 8) into four equal parts.

OR

31. Find the area of the quadrilateral whose vertices taken in order, are (-4, -2), (-3, -5), (3, -2) and (2, 3).

32. The following table gives the literacy rate (in percentage) of 35 cities. Find the mean literacy rate.

Literacy rate (lin %)	45 – 55	55 – 65	65 – 75	75 – 85	85 – 95
Number of cities	3	10	11	8	3

33.

Obtained Marks	20	25	28	29	33	38	42	43
No. of Students	6	20	24	28	15	4	2	1

(a) Find out the probability of students getting more than 40 marks.

(b) Find out the probability of students getting less than 30 marks.

34.A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box,find the probability that is bears :

(i) a two digit number

(ii) a perfect square number

(ili) a number divisible by 5

Section-D

- **Answer the questions as requested. [35 to 39] [4 marks each]** **[20]**

35 Prove that, in a triangle, if square of one side is equal to the sum of the squares of the other two sides, then the angle opposite the first side is a right angle.

OR

35. The ratio of the areas of two similar triangles is equal to the square of the ratio of their corresponding sides.

36. Find the mean of following below table information using step deviation method.

Class	0 – 6	6 – 10	10 – 14	14 – 20	20 – 28	28 – 38	38 – 40
Frequency	11	10	7	4	4	3	1

37. Construct a triangle to a given triangle ABC with its sides equal to $\frac{1}{3}$ of the corresponding sides of the triangle ABC, give also the justification of the construction.

OR

37. Draw a line segment PQ of length 6.5 cm and divide it in the ratio 5: 8. Measure the two parts.

38. If the median of the distribution gives below is 28.5. Find the value of x and y.

Class interval	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Frequency	5	x	20	15	y	5	60

39.2 cubes each of volume 64 cm^3 are joined end to end. Find the surface area of the resultant cuboid.

OR

39. Rasheed go a playing top (lattu) ashis birthday present, which surprisingly had no colour on it. He wanted to colour it with his crayons. The top is shapped like a cone surmounted by a hemisphere. The entire top is 5 cm in height and the diameter of the top is 3.5 cm. Find the area he has to colour. ($\pi = \frac{22}{7}$)

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STD: 10TH **BASIC MATHS**

PAPER – 4 **Marks: 80**

Section – A

- **Answer the following questions as instructed. (Question no. 1 to 16)[1 Mark Each]** **[16]**

➢ **Whether the following statements are true or false.**

1. π is a rational number.

2. 5 is a zeroes of the polynomial $P(x)=x^2- 8x + 15$

3. $\frac{tan43°}{tan47°} = 1$

4. $\sin 0° < \sin 45° < \sin 60°$

➢ **Answer each of the following statements correctly by selecting the options.**

5.The smallest number that can be divisible by any numbers from 1 to 10 is

(A) 2520 (B) 5040 (C) 1680 (D)840

6.The exponent of the polynomial $(x + 1)(x^2 - x - x^3 - 1)$ is_____.

(A) 1 (B) 2 (C) 3 (D)4

7. If (4, a) is the solution of the equation 2x + 3y = 23, then a = _____.

(A) 3 (B) 4 (C) 5 (D) 6

8. If the tangents drawn from the point P to the circle with centre O from an angle of 80 between PA and PB, then ∠POA is _____.

(A) 80° (B) 70° (C) 60° (D) 50°

9. From the final position of the APs -11, -8, -5,.....,49 the 4^{th} position becomes

(A) 37 (B) 40 (C) 43 (D) 58

10. If A(1, x), B(5, 2), C(5, 6) and D(1, 6) are the vertices of the square ABCD then x = _____.

(A) 2 (B)-2 (C) -3 (D) 3

➢ **Fill in the blanks as the statements become true.**

11. If M = 15 and $\overline{X}$ = 10 for a given frequency distribution then Z = _____.

12. The probability of a complementary event to the sunrising in the east is _____.

13. If the polynomial $P(x) = mx^2 - 5x + 3$ product of the zeroes is $\frac{3}{2}$, then m = _____.

14. If a, b, c are in APs, then b is called _____ of a and c.

➢ **Answer the following questions in one word / sentence / statistics.**

15. What is the special case of intersection in which two end points converse in its corresponding chord.

16. If two equal solid hemisphere are connected with radius r of their same base, then what is the total surface are of this compound?

Section-B

- **Calculate and answer the questions given below. [17 to 26] [2 marks each]** **[20]**

17. Divide $x^3 - 3x^2 + 5x - 3$ by $x^2 - 2$

OR

17. Dividing the polynomial P(x) by $x^2 + 3x + 5$ gives the divisor polynomial and remainder polynomial $2x^2 + x + 1$ and x - 3, then find P(x).

18. Find the zeroes of t^2-15 quadratic polynomial and verify the relationship between the zeroes and the coefficients.

19. Find the number of terms in each of the APs: 18,15.5,13,.....-47

20. If A, B and C are interior angles of a triangle ABC, then show that $\tan\left(\frac{A+B}{2}\right) = \cot\frac{C}{2}$.

OR

20. Prove that, $\sec A (1 - \sin A)(\sec A + \tan A) = 1$

21. In each of the (7, -2), (5, 1), (3, K). Find the value of K for which the points are collinear.

22. From the top of a 7 m high building the angle of elevation of the top of a cable tower is 60° and the angle of depression of its foot is 45°. Determine the height of the tower.

23. The cross shaped bucket of cone is 15 cm high and has radii of 2 cm and 10 cm on both it ends. So find its diagonal height.

OR

23. If the length of a chord of a circle with a radius of 5 cm is 8 cm. Find its distance from the centre

24. The base radius of the cone shaped tent for 6 artist is 4.2 m. The perimetre of the tent is 5 metre. So how many cubic meters of air comes to each artist?

25. A student noted the number of cars passing through a spot on a road for 100 periods each of 3 minutes and summarised it in the table given below. Find the mode of the data.

Number of cars	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80
Frequency	7	14	13	12	20	11	15	8

26. One card is drawn from a well shuttled deck of 52 cards. Calculate the probability that the card will (i) be an ace (ii) not be an ace.

Section-C

- **Answer the questions out of the following questions as required. [27 to 34] [3 marks each]** **[24]**

27. For which value of K will the following pair of linear equations has infinite number of solution?

3x- (K + 1)y = 20 and (K + 2)x - 10y = 40

OR

27. Solve the following pair of equations by reducing them to a pair of linear equations.

$\frac{5}{x-1} + \frac{1}{y-2} = 2$ and $\frac{6}{x-1} - \frac{3}{y-2} = 1$

28. Find the nature of the roots of the quadratic equation $3x^2 - 4\sqrt{3}\,x + 4 = 0$. If the real roots exist, find them.

OR

28. Find the value of k of quadratic equation kx(x - 2) + 6 = 0, So that they have two equal roots.

29. Given, $a_3 = 15$, $s_{10} = 125$ then. Find d and a_{10}.

30. Find the sums: 34 + 32 + 30 +.....+ 10

31. Find the area of the quadrilateral whose vertices A(1, 0), B(7, 0), C(6, 3) and D(2, 3).

OR

31. If A and B are (-2, -2) and (2, -4) respectively. Find the coordinates of P such that AP= $\frac{3}{7}$ ABand P lies on the segment AB.

32. Find the mean of below given information.

Class	0 – 2	2 – 4	4 – 6	6 – 8	8 – 10	10 – 12	12 – 14
Frequency	1	2	1	5	6	2	3

33. One card is drawn from a well shuffled deck of 52 cards. Find the probability of getting **(i)** a black face card **(ii)** the jack of black **(iii)** a red king.

34. A game of chance consists of spinning an arrow which comes to rest pointing at one of the numbers 1,2,3,4,5,6,7,8 and these are equally likely outcome what is the probability that it will point at (i)6?(ii)an even number (iii)a number grater than 5

Section-D

- **Answer the questions as requested. [35 to 39] [4 marks each]** **[20]**

35. Prove that, In a right triangle, the square of the hypotenuse is equal to the sum of the squares of the other two sides.

OR

35. Write and prove the converse of the pythagoras theorem.

36. The length of 40 leaves of a plant are measured correct to the nearest millimetre and the data obtained is represented in the following table. Find the median length of the leaves.

Length (in mm)	**Number of Leaves**
118 – 126	3
127 – 135	5
136 – 144	9
145 – 153	12
154 – 160	5
163 – 171	4
172 – 180	2

37. Draw a pair of tangents to circle of radius 4 cm which are inclined to each other at an angle at 60°.

OR

37. Draw a triangle ABC with side BC = 6 cm, AB = 5 cm and ∠ABC = 60°. Then construct a triangle whose Sides are ¾ corresponding sides of the triangle ABC. Give the justification of the constrction also.

38. Find the mean of below given information.

Class	5 – 15	15 – 25	25 – 35	35 – 45	45 – 55	55 – 65
Frequency	6	11	21	23	14	5

39. In a semicircular archshaped tunnel a person standing 150 cm high at a distance of 36 cm from one end stands in such a way that his head touches the arch, find the width of the arch.

OR

39. A drinking glass in the shape of a frustum of a cone of height 14 cm. The diameters of its two circular ends are 4 cm and 2 cm. Find the capacity of the glass.

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D. M. BHATT ENGLISH MEDIUM

STD: 10TH **BASIC MATHS**

PAPER – 5 **Marks: 80**

Section – A

- **Answer the following questions as instructed. (Question no. 1 to 16)[1 Mark Each]** **[16]**

➢ **Whether the following statements are True or False.**

1. LCM of the smallest prime number and the smallest divisible numbers is 4.

2. A polynomial at degree n has at most n + 1 zeroes.

3. As the value of θ increases as such the value of sin θ increases. (Where $0° \leq \theta, \theta \leq 90°$)

4. sin (A + B) = sinA + sin B. (Where $0° \leq A, B \leq 90°$)

➢ **Answer each of the following statements correctly by selecting the options.**

5. If x, y, z are prime integers so their LCM is _____.

(A) 1 (B) xy (C) yz (D) xyz

6. The graph of p(x) = $x^2 + 4x + 3$ is _____.

(A) line (B) Ray

(C) Parabolic open upwards (D) Parabolic open to bottom

7. If $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$ have _____ Relation, then infinite solution is found. (Where $a_i^2 + b_i^2 \neq 0$, i = 1,2 and a_i, b_i, c_i are real numbers)

(A) $\frac{a_1}{a_2} \neq \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$ (B) $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$ (C) $\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$ (D) $\frac{a_1}{a_2} \neq \frac{b_1}{b_2} = \frac{c_1}{c_2}$

8. If the angle between the two radii of a circle is 130°, What is the angle between the tangents drawn to the point where the endpoints of these radii touch the circle ?

(A) 90° (B) 50° (C) 70° (D) 40°

9. The n^{th} term of the AP is _____.

(A) a + d (B) a + (n – 1) d (C) a + (n + 1) d (D) a + n – d

10. The distance of a point of a point p(x, y) from the origin is _____.

(A) $\sqrt{x^2 + y^2}$ (B) $\sqrt{x + y}$ (C) $|x + y|$ (D) $\sqrt{x^2 - y^2}$

➢ **Fill in the blanks as the statements become true.**

11. A die is thrown once, the probability of getting a numbers 7 is _____.

12. The probability of a leap years being 53 Mondays = _____.

13. The first term of AP is a and common different is d then the $(n - 2)^{th}$ term is _____.

➢ **Answer the following questions in one word / sentence / statistics.**

14. If the tangent of a circle drawn from one point is 24 cm and the distance from the centre of the circle is 25 cm. Find the radius of the circle.

15. If the radius of circle is increased by 10 %, what is the percentage increase in its area ?

16. Find the maximum area of the inner triangle in a semicircle 20 cm in diameter.

Section – B

- **Calculate and answer the questions given below. [17 to 26] [2 marks each]** **[20]**

17. Find the zeroes of $2x^2 + 7x + 5$ quadratic polynomial and verify the relationship between the zeroes and the coefficients.

18. If the zeroes of cubic polynomial p(x) $x^3 - 3x^2 - 6x + 8$ is 4 then. Find other zeroes of p(x).

OR

18. Divide the polynomial $\rho(x) = 2x^3 + 9x^2 + 13x + 6$ by the polynomial $s(x) = 2x^2 + 5x + 3$ and find the quotient and remainder.

19. What are the three digit natural numbers divisible by 7 ?

20. Find : $2\cot^2 45° + \cot^2 60° - \sin^2 30°$

OR

20. If P, Q, R are interior angles of a triangle then show that $\tan\left(\frac{P+R}{2}\right) = \cot\frac{Q}{2}$.

21. Find the coordinates of the point dividing the line segment PQ from P in the ratio 3 : 1 connecting the points P(2, 3) and Q(6, 7).

22. An observer 1.5 m tall is 28.5 m away from a chimney. The angle of elevation of the top of the chimney from her eyes is 45°. What is the height of the chimney ?

23. Two concentric circles are od radii 21 cm and 29 cm. Find the chord of the larger circle which touches the smaller circle.

24. If the radius and height of a cylinder and a cone are equal, how many times the volume of a cylinder is equal to the volume of a cone ?

OR

24. Find the maximum volume of a cone carved out of a r radius hemisphere.

25. If the prevalent cues for a classified information are L = 200, f_1 = 27, f_0 = 18, $f_2 = 20$ and h = 100. Find the mode of that information.

26. A game of chance consist of spinning an arrow which comes to rest pointing at one of the number 1,2,3,4,5,6,7 and these are equally likely outcome what is the probability that it will point at (i) 8? (ii) an odd number ?

Section-C

- **Answer the questions out of the following questions as required. [27 to 34] [3 marks each]** **[24]**

27. Solve 2x + 3y = 11 and x – 2y = -12 by the substitution method. Find the value of K for which y = kx + 3

OR

27. Find out whether the following pair of linear equations are consistent or inconsistent.

(i) 3x + 2y = 5 and 2x – 3y = 7

(ii) 2x – 3y = 8 and 4x – 6y = -9 **(iii)** 9x + 10y = 42 and 9x – 10y = 12

28. Find the root of equation $x + \frac{1}{x} = 3$, $x \neq 0$

OR

28. Two water taps together can fill a tank in $9\frac{3}{8}$ hours. The tap of larger diameter takes 10 hours less than the smaller one to fill the tank reparately. Find the time in which each tap can separately fill the tank.

29. (-5) + (-8) + (-11) + …. + (-230) = (?)

30. Check whether 301 is a term of the list of numbers 5, 11, 17, 23,…...

31. If (1, 2), (4, y), (x, 6) and (3, 5) are the vertices of a parallelogram taken in order, find x and y.

OR

31. Find the coordinate of the point P if the distance of the point P on the x-axis from A(11, 12) is 13 units.

32. The following table shows the ages of the patients admitted in hospital during a year : find mode

Age (in years)	5 – 15	15 – 25	25 – 35	35 – 45	45 – 55	55 – 65
Number of patients	6	11	21	23	14	5

33. A box contains 90 discs which are numbered from 1 to 90. If one discs is drawn at random from the box, find the probability that is bears :

(i) a two digit number

(ii) a perfect square number

(iii) a number divisible by 5

34. A box contains 3 blue, 2 white and 4 red marbles. If a marble is drawn at random from the box what is the probability that it will be **(i)** blue ? **(ii)** not red ?

Section-D

- **Answer the questions as requested. [35 to 39] [4 marks each]** **[20]**

35. Write and prove the basic proportionality theorem.

OR

35. Write and prove Pythagoras theorem.

36. The median of the following data is 525. Find the value of x and y, If the total frequency is 100.

Class interval	Frequency
0 – 100	2
100 – 200	5
200 – 300	X
300 – 400	12
400 – 500	17
500 – 600	20
600 -700	Y
700 – 800	9
800 – 900	7
900 – 1000	4

37. Draw a circle of radius 3 cm. Take two points P and Q on one of its extended diameter each at a distance of 7 cm from its centre. Draw tangents to the circle from these two points P and Q.

OR

37. Draw a triangle PQR with side QR = 7cm, ∠Q = 60°, ∠P = 90°. Then construct a triangle. Whose sides are $\frac{3}{4}$ times the corresponding sides of ΔPQR.

38. The following distribution shows the daily pocket allowance of children of a locality. The mean pocket allowance is Rs. 18. Find the missing frequency *f*.

Daily pocket allowance (in Rs.)	11-13	13-15	15-17	17-19	19-21	21-23	23-25
Number if children	7	6	9	13	f	5	4

39. Rachel, an engineering student, was asked to make a model shaped like a cylinder with two cones attached at its two ends by using a thin aluminum sheet. The diameter of the model is 3 cm and its length is 12 cm. If each cone has a height of 2 cm. Find the volume of air contained in the model that Rachel made. (Assume the outer and inner dimensions of the model to be nearly the same)

OR

39. A hemispherical tank full of water is emptied by a pipe at the rate of $3\frac{4}{7}$ liters per second. How much time will it take to empty half the tank, if it is 3 m in diameter ? (Take $\pi = \frac{22}{7}$)

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D. M. BHATT ENGLISH MEDIUM

STD: 10TH STANDARD MATHS

PAPER – 1 Marks: 80

Section-A

- **Answer the following questions as instruction [Question no. 1 to 16] [1 Marks Each]** **[16]**
- **State whether the following statements are true or false.**

1. The graphs of equation 4x - 2y + 12=0 and 2x - y = -6 are parallel lines.

2. If a line touches a circle then the line is perpendicular to the radius passing through the tangent.

3. If s_n= 2n² + 3n then d = 4

4. If $\frac{a_1}{a2}=\frac{b_1}{b_2}\neq\frac{c_1}{c_2}$ then the pair of linear equations has no solution.

- **Choose the right option, so that the statement becomes true.**

5. For same $\theta(0<\theta<90)$ which one of the following is true.

(A) $\frac{1}{sec\theta}>1$ (B) $\frac{1}{sec\theta}=1$ (C) $sec\theta$ (D) $\frac{1}{cos\theta}<1$

6. If Leap year is not considered, what is the probability of two friends having different birthdays?

(A) $\frac{364}{365}$ (B) $\frac{364}{366}$ (C) $\frac{1}{366}$ (D) $\frac{1}{365}$

7. if x² - 6x = 1 then $x-\frac{1}{x}=$

(A) (-6) (B) (-5) (C) 5 (D) 6

8. Which one of the following holds true for the points A(1, 2), B(2, 3), C(3, 4)?

(A) AB+ BC = AC (B) C in midpoint of AB (C) AC+BC=AB (D) A, B, C are non collinear

- **Answer the following questions in one word / sentence / statistics.**

9. From a deck of well shuffled 52 cards, one card is chosen at random. What is the probability that the chosen card is a red face card.

10. If the radius of a circle is 7 and the length of its minor arc is 10, then what is the length of corresponding major arc.

11. Who has a minimum positive Integer that can be divisible by the integers 1 to 10 ?

12. For a multimodal data, if mean and median are 28.2 and 30.5, then find mode.

13. The zeroes of p(x)= 2x²+5x+k are reciprocals, then K= _____.

14. $\frac{sec^4\theta}{sec^2\theta}-\frac{tan^4\theta}{tan^2\theta}=$ _____.

15. The formula to find solution of quadratic equation ax² + bx+ c = 0 by completing the square is _____.

16. The distance of O from A(x, y), OA= _____.

Section-B

- **Calculate and answer the questions given below. [17 to 26] [2 marks each]** **[20]**

17. Prove that $3\sqrt{2}$ is irrational.

18. Without doing the actual long division, state whether $\frac{13}{3125}$ has terminating decimal or non-terminating repeating decimal expansion.

19. Find the product and sum of zeroes of p(x) = 3x² +7x + 4 without actually finding zeroes.

20. 15 students of standard 10 had appeared for mathematics olympiad exam. The total number of girls was 5 less than the boys who appeared for the exam. Find number of boys and girls.

OR

20. Solve by Elimination method 9x - 4y =14, 7x - 3y =11.

21. If tan (A + B)= $\sqrt{3}$ and tan(A - B) = $\frac{1}{\sqrt{3}}$, $(0<A+B\leq 90°)$ then find the value of A and B.

OR

21. Prove that $(cosec\,\theta - cot\,\theta)^2=\frac{1-cos\theta}{1+cos\theta}$

22. Evaluate : $\frac{tan^2 60°+4\,sin^2\,45°+3\,sec^2\,30°+5\,cos^2 90°}{cosec\,30°+sec\,60°-cot^2\,30°}$

23. ABCD is a quadrilateral such that ∠D= 90. A circle with centre O, radius r, Is Inscribed in a Quadrilateral which touches AB, BC, CD, DA at P, Q, R and S respectively. If BC= 40, CD= 30, PB= 25 then find radius of the circle.

24. The Dally profits of 100 shops have been tabulated below. Find Mode.

Daily profit(in Rs.)	0 - 100	100 – 200	200 – 300	300 – 400	400 – 500	500 – 600
No. of Shops	12	18	27	20	17	6

25. A guy wire attached to a vertical pole of height 18 m is 24 m long and has a stake attached to the other end. How far from the base of the pole should the stake be driven so that the wire will be taut ?

26. Find the nature of roots of equation $2x^2 - 3x + 5 = 0$. If roots are real then find them.

OR

26. Find the solution of quadratic equation $3x^2+2ax - a^2 = 0$.

Section-C

- **Answer the questions out of the following questions as required. [27 to 34] [3 marks each]** **[24]**

27. A tradev buys $2x^2 - x + 2$ T.V. sets for Rs. $8x^4+7x - 6$. Find the cost of each T.V. set.

28. Two water taps together can fill a tank in $9\frac{3}{8}$ hours. The tap of larger diameter takes 10 hours less than the smaller one to fill the tank reparately. Find the time in which each tap can separately fill the tank.

29. 200 logs are stacked in the following manner: 20 logs in the bottom row, 19 in the next row, 18 in the row next to it and so on. In how many rows are the 200 logs placed and how many logs are there in the top row?

OR

29. If the 3rd and the 9th terms of an AP are 4 and -8 respectively, which term of this AP is zero ?

30. find the area of a quadrilateral whose vertices, taken in order are (-4, -2), (-3, -5), (3, -2) and (2, 3).

31. During the medical check-up of 35 students of a class, their weights were recorded as follow : find median

Weight in Kg	Less than 38	Less than 40	Less than 42	Less than 44	Less than 46	Less than 48	Less than 50	Less than 52
No. of students	0	3	5	9	14	28	32	35

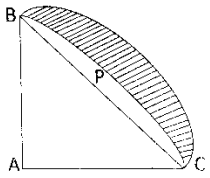
OR

31. The table below gives the percentage distribution of female teachers in the primary schools of rural areas of various states and union territories (U.T.) of India. Find the mean percentage female teachers.

Percentage of female teachers	15-25	25-35	35-45	45-55	55-65	65-75	75-85
Number of states / U.T.	6	11	7	4	4	2	1

32. A tangent PQ at a point P of a circle of radius 5 cm meets a line through the centre O at a point Q so that OQ = 12 cm. Find length PQ.

33. in the given figure, ABC is a quadrant of a circle of radius 14 cm and a semicircular arc is draw with BC as diameter. Find the area of the shaded region.



34. 2 cubes each of volume 64 cm^3 are joined end to end. Find the surface area of the resultant cuboid.

OR

34. A 20 m deep well with diameter 7 m is dug and the earth from digging is evenly spread out to form a platform 22m by 14m. Find the height of the platform.

Section-D

- **Answer the questions as requested. [35 to 39] [4 marks each]** **[20]**

35. Draw a triangle ABC with side BC = 7 cm, ∠B = 45°, ∠A= 105°. Then construct a triangle whose sides are $\frac{4}{3}$ times the corresponding sides of ABC.

OR

35. Draw a circle of radius 6 cm. From a point 10 cm away from its centre, constract the pair of tangents to the circle and measure their length.

36. Solve 2x + 3y = 11 and x – 2y = -12 by the substitution method. Find the value of K for which y = kx + 3

37. The angles of depression of the top and the bottom of an 8 m tall building from the top of a multi-storaged building 30° and 45° respectively. Find the height of the multi-storaged building and the distance between two buildings.

38. Water in the canal, 6 m wide and 1.5 m deep, is flowing with a speed of 10 km/h. How much area will it irrigate in 30 minutes, if 8 cm of standing water is needed?

39. Write and prove the converse of the Pythagoras theorem.

OR

39. Write and prove the Thales theorem.

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D. M. BHATT ENGLISH MEDIUM

STD: 10TH **STANDARD MATHS**

PAPER – 2 **Marks: 80**

Section – A

- **Answer the following questions as instruction [Question no. 1 to 16] [1 mark each]** **[16]**

State whether the following statements are true or false.

1. The sum of two digits and the number obtained by swapping digits is always divisible by 11.

2. If the redius of a line P centered circle is perpendicular A to PA, then the line is tangent to the circle.

3. For some information Z = 20 and $\bar{x}$ = 20 then M = 20.

4. If 13x + 19y = 90 and 19x + 13y = 70 then x + y = 5.

- **Choose the right option, so that the statement becomes true.**

5. The solution of the pair of linear equation 3x + 2y = 6 and x – y = 7 is _____.

(A) (4,3) (B) (3,-2) (C) (4,-3) (D) (-3,2)

6. If the starting point is one extreme (3,-2) of the diameter of a circle having a center then the coordinates of the other and of the diameter is _____.

(A) (-3,0) (B) (0,2) (C) (0,-2) (D) (-3,2)

7. If s_1 = 2 + 4 + _____ +2n and s_2 = 1 + 3 + _____+ (2n – 1) then $s_1 : s_2$ = _____.

(A) (n – 1) : n (B) (n + 1) : n (C)) n : (n + 1) (D)) n : (n – 1)

8. If the two zeroes of $4x^2$ – x(α + 1) – 1 = 0 are opposite numbers then α = _____.

(A) 0 (B) 1 (C) -1 (D) 2

- **Answer the following questions in one word/ sentence / statistics.**

9. If ΔABC contains ∠ABC = 90°, ∠ACB = 45° and AC= 6 then find the area of ΔABC.

10. If 65 people are black, 25 people are brown and 10 people are blue eyed. The probability of that a person will choose randomly and have blue or black eyes?

11. How many large cubes can be curved out of the same piece of wood with 42 cm side?

12. What is the sum of the deviations taken from the mean of each of its observations for any Information?

13. If the product of zeroes of p(x) = mx^2 – 5x + 3 is $\frac{3}{2}$, then m = _____.

14. The probability of any event being or less and non negative.

15. The decimal representation of $\frac{14587}{1250}$ _____ will be terminating decimal expansion.

16. If A(1,2) and B(3,-2) are given points, then the midpoint if AB is _____.

Section – B

- **Calculate and answer the questions given below. [17 to 26] [2 marks each]** **[20]**

17. Find LCM (105, 91) using LCM (a, b) x HCF (a, b) = ab.

18. The two buses start from the same place and go on the same circular route, a luxury bus, which returns to its original place in 35 minutes. The other ST is the bus which takes 42 minutes to return, so how long will it take for the buses to return to their destination?

19. Check: $\frac{7}{5}$ is zeroes of linear polynomial p(x) = 5x + 7.

20. The present age ratio of Tina and her daughter Dhara is 8: 3. After five years, their age ratio will be 9:4. Find the present age of both.

OR

20. Find the solution of pair of linear equation 2x + y = 5 and 4x + 2y = 10 by using cross multiplication method.

21. Prove that cos 38° · cos 52° - sin 38 · sin 52° = 0

22. Prove that: $\frac{\cos A}{1+\sin A} + \frac{1+\sin A}{\cos A}$ = 2 sec A

OR

22. Prove that: tan 1 · tan 2 ·..... · tan 88 · tan 89 = 1

23. In △ABC; AD is altitude and ∠A is right angle. If AB = $\sqrt{20}$ and BD = 4 then. Find CD.

24. If $\bar{x}$= 21.44 and Z= 19.13, then find M.

25. If a chord of O(0, 5) touches O(0, 3). Find the length of the chord.

26. Find the discriminant of the equation x^2 + 2x + 4 = 0 and hence find the nature of its roots.

OR

26. If 4 is a zeroes of equation $x^2 + ax - 8 = 0$ then find a.

Section – C

- **Answer the questions as required. [27 to 34] [3 marks each]** **[24]**

27. If the zeroes of cubic polynomial p(x) $x^3 - 3x^2 - 6x + 8$ is 4 then. Find other zeroes of p(x).

28. find the roots of quadratic equation $2x^2 - 2\sqrt{2}\,x + 1$ using the quadratic formula.

29. How many three digit numbers are divisible by 7 ?

OR

29. Given, d = 5, $S_9 = 75$ then. Find a and a_9.

30. Show that the points (1,7), (4,2), (-1,-1) and (-4,4) are the vertices of a square.

31. The following table gives the distribution of the life time of 400 neon lamps :

Life time (in hours)	1500-2000	2000-2500	2500-3000	3000-3500	3500-4000	4000-4500	4500-5000
Number of lamps	14	56	60	86	74	62	48

Find the median life time of a lamps.

OR

31. The following distribution shows the daily pocket allowance of children of a locality. The mean pocket allowance is Rs. 18. Find the missing frequency f.

Daily pocket allowance (in Rs.)	11-13	13-15	15-17	17-19	19-21	21-23	23-25
Number if children	7	6	9	13	f	5	4

32. Prove that, the lengths of tangents drawn from an external points to a circle are equal.

33. From a solid cylinder whose height is 2.4 cm and diameter 1.4 cm, a conical cavity of the same height and same diameter is hollowed out. Find the total surface area of the remaining solid to the nearest cm^2.

OR

33. How many silver coins, 1.75 cm in a diameter and of thickness 2 mm, must be melted to form a cuboid of dimensions 5.5 cm × 10 cm × 3.5 cm.

34. A car has two wipers which do not overlap, each wiper has a blade of length 25 cm sweeping through an angle of 115°, Find the total area cleaned at each sweep of the blade.

Section – D

- **Answer the questions as requested. [35 to 39] [4 marks each]** **[20]**

35. Draw a triangle ABC with side BC = 6 cm, BC = 5cm and ∠ABC = 60°. Then construct a triangle whose sides are $\frac{3}{4}$ of the corresponding sides of the triangle ABC.

OR

35 Draw a line segment of length 7.6 cm and divide it in the ratio 5 : 8 Measure the two parts also.

36. Solve the following pair of equations by reducing them to a pair of linear equations.

$\frac{5}{x-1} + \frac{1}{y-2} = 2$ and $\frac{6}{x-1} - \frac{3}{y-2} = 1$

37. A 1.2 m tall girl spot a ballon moving with the wind in a horizontal line at a height of 88.2 m from the ground. The angle of elevation of the ballon from the eyes of the girl at any instant is 60°. After some time, the angle of elevation reduces to 30°. Find the distance travelled by the ballon during the interval.

38. A gulabjamun, contains sugar syrup up to about 30% of its volume. Find approximately how much syrup would be found in 45 gulab jamuns, each shaped like a cylinder with two hemispherical ends with length 5 cm and diameter 2.8 cm.

39. prove that, in a triangle, if square of one side is equal to the sum of the squares of the other two sides, then the angle opposite the first side is a right angle.

OR

39. If one angle of a triangle is equal to one angle of the other triangle and the sides including these angles are proportional then the two triangles are similar .prove that.

D. M. BHATT ENGLISH MEDIUM

STD: 10TH STANDARD MATHS

PAPER – 3 Marks: 80

Section – A

- **Answer the following questions as instruction Question no. 1 to 16] [1 Marks Each]** **[16]**
- **State whether the following statements are true or false.**

1. The graph of 2x = 3 is perpendicular to the X-axis.

2. Tangents drawn at the end points of the diameter of the circle Intersect each other.

3. The mean of 8 observations is x. If an observation y is omitted, then the new mean is $\frac{8x-y}{7}$.

4. If the graph of ax – by = m passes through the point of origin, then m = 0.

- **Choose the right option, so that the statement becomes true.**

5. $\frac{3\tan 30}{1-tan^2 30}$ = _____.

(A) 0 (B) 1 (C) $\frac{2}{3\sqrt{3}}$ (D) $\frac{3\sqrt{3}}{2}$

6. The probability of 5th Friday in August of any year is _____.

(A) $\frac{1}{7}$ (B) $\frac{2}{7}$ (C) $\frac{3}{7}$ (D) 0

7. A(1,2), B(2,3), C(3,4) are the given points. Which of the following is true ?

(A) AB + BC = AC (B) B is a midpoint of AC

(C) AC + BC = AB (D) A, B, C are non-linear.

8. If point P(2,1) is a point on the line segment connecting points A(4, 2) and B(8, 4), then _____.

(A) AP = $\frac{1}{3}$AB (B) AP = PB (C) PB = $\frac{1}{3}$AB (D) AP = $\frac{1}{2}$AB

- **Answer the following questions in one word/ sentence / statistics.**

9. If the ratio of the number of female teachers and male teachers in a school is x and the ratio of the number of male teachers and female teachers is y, what x + y ?

10. If $x(cos^2 45° - cos^2 30°) = \cos 45 \cdot \sin 45, then\ find\ x.$

11. Find the probability that an equal number is obtained by throwing three equilibrium dice together.

12. If the radius of a circle is reduce by 10%, how much is its area reduced?

- **Fill in the blanks as the statement become true.**

13. If the two zeroes of the quadratic polynomial p(x) = $ax^2 + bx + c$ are a and b, then $\frac{1}{\alpha} + \frac{1}{\beta}$ = _____

14. The probability of any event being _____ or higher.

15. If HCF (35, 28) = m and HCF (12, 39) = n then HCF (m, n) = _____.

16. If $\frac{AM}{AB} = \frac{1}{3}$, A – M – B then point M divides AB from A in a ratio of _____.

Section – B

- **Calculate and answer the questions given below. [17 to 26] [2 marks each]** **[20]**

17. Find HCF and LCM : 112, 128, 144.

18. $0.\overline{142857}$ real number decide whether they are rational or not. If they are rational then write down the form $\frac{p}{q}$.

19. Divide the polynomial $\rho(x) = 2x^3 + 9x^2 + 13x + 6$ by the polynomial $s(x) = 2x^2 + 5x + 3$ and find the quotient and remainder.

20. Solve the pair of equation $d + t = 7$ and $2d - 3t = 11$ by substitution method.

OR

20. Solve the pair of linear equation $0.2x + 0.3y = 1.3$ and $0.4x + 0.5y = 2.3$ by the cross -multiplication method.

21. If tan 2A = cot (A – 18°), where 2A is an acute angle, find the value of A.

OR

21. Prove : $\sqrt{sec^2\theta + cosec^2\theta} = \tan\theta + \cot\theta$

22. Evaluate : $\frac{\sin 18}{\cos 72} + \sqrt{3}$ (tan 10 · tan 30 · tan 40 · tan 50 · tan 80)

23. If a chord AB of a centre circle O is 4 cm in length with radius 4 cm. Find ∠AOB.

24. Find the median of below information.

The value of variable	12	13	14	15	16	17	18	19	20
Frequency	7	10	15	18	20	10	9	8	3

25. A ladder is placed against a well such that its foot is at a distance of 2.5 m from the wall and its top reaches a window 6 m above the ground. Find the length of the ladder.

26. Find the roots of the equation $x^2 - 8x + 15 = 0$ by the method of completing the square.

OR

26. Find the roots of the equation $4x^2 + 4\sqrt{3}x + 5 = 0$.

Section – C

- **Answer the questions as required. [27 to 34] [3 marks each]** **[24]**

27. If the multiplication of two polynomials is $6x^3 + 29x^2 + 44x + 21$ and one of the polynomials is $3x + 7$ find the other polynomials.

28. In an AP; given a = 2, d = 8, Sn= 90. Find n and a_n.

OR

28. Find the sum of the APS : $\frac{1}{15}, \frac{1}{12}, \frac{1}{10}$, ….. to 11 terms.

29. The area of rectangular plot is 528 m². The length of the plot (in meters) is one more than twice its breadth. Find the length and breadth of the plot in the form of quadratic equations.

30. A medicine capsule is in the shape of a cylinder with two hemispheres stuck to each of its ends. The length of the entire capsule is 14 mm and the diameter of the capsule is 5 mm. Find its surface area.

OR

30. A hemispherical tank full of water is emptied by a pipe at the rate of $3\frac{4}{7}$ liters per second. How much time will it take to empty half the tank, if it is 3 m in diameter ? (Take $\pi = \frac{22}{7}$)

31. In what ratio does the point (-1, 6) divide the line segment joining the points (-3, 10) and (6, -8) ?

32. . If the length of a chord of a circle with a radius of 5 cm is 8 cm. Find its distance from the centre

33. The wheels, of a car are of diameter 80 cm each, How many complete revolutions does each wheel make In 10 minutes when the car is travelling at a speed of 66 km per hour ?

34. The median of 230 observations is 46. Whose frequency distribution is as follows. Find a and b.

Class	10 - 20	20 - 30	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80
Frequency	12	30	A	65	b	25	18

Section – D

- **Answer the questions as requested. [35 to 39] [4 marks each]** **[20]**

35. Construct a triangles with sides 5 cm, 6 cm and 7 cm and then another triangle whose sides are $\frac{7}{5}$ the corresponding sides of the first triangle.

OR

35. Draw a pair of tangents to a circle of radius 5 cm which are inclined to each other at an angle of 60.

36. Solve the following equations by reducing them to a linear equations.

$\frac{1}{3x+y} + \frac{1}{3x-y} = \frac{3}{4}, \frac{1}{2(3x+y)} - \frac{1}{2(3x-y)} = -\frac{1}{8}$

37. A straight highway leads to the foot of a tower. A man standing at the top of the tower observer a car at an angle of depression of 30°. Which is approaching the foot of the tower with a uniform speed. Six second later, the angle of depression of the car is found to be 60°. Find the time taken by the car to reach the feet of the tower from this point.

38. A solid consisting of a right circular cone of height 120 cm and radius 60 cm standing on a hemisphere of radius 60 cm is placed up right in a right circular cylinder full of water such that it touches the bottom. Find the volume of water left in the cylinder, if the radius of the cylinder is 60 cm and its height is 180 cm.

39. Write and prove the converse of the pythagoras theorem. **OR 39.** Write and prove the the thales theorem.

D. M. BHATT ENGLISH MEDIUM

STD: 10TH STANDARD MATHS

PAPER – 4 Marks: 80

Section – A

- **Answer the following questions as instruction [Question no. 1 to 16] [1 mark each]** **[16]**
- **State whether the following statements are true or false.**

1. The probability of any event E is $0 \leq P(E) \leq 1$.
2. The mean of 15 numbers is 10. If 3 is added to each of the first 10 number the new mean become 13.
3. If the area ratio of two circles is 1 : 4, then the ratio of its circumference is 2 : 1.
4. A pair of linear equations which has no solution, is called an inconsistent pair of linear equations.

- **Choose the right option, so that the statement becomes true.**

5. If $\cot A = \frac{5}{12}$, then $(\sin A + \cos A) \cdot \operatorname{cosec} A =$ _____.
(A) $\frac{12}{5}$ (B) $\frac{12}{17}$ (C) $\frac{17}{12}$ (D) $\frac{17}{5}$
6. If $P(\bar{A}) = 2 : 3$ then $P(\bar{A}) =$ _____.
(A) $\frac{1}{4}$ (B) $\frac{5}{2}$ (C) $\frac{2}{5}$ (D) $\frac{3}{5}$
7. If AP is 12, *x*, *y*, -2 then $x + y =$ _____.
(A) 10 (B) 8 (C) 6 (D) 4
8. Which of the following is not a quadratic equation ?
(A) $2(x-1)^2 = 4x^2 - 2x + 1$ (B) $2x - x^2 = x^2 + 5$
(C) $(\sqrt{2}x + \sqrt{3})^2 + x^2 = 3x^2 - 5x$ (D) $(x^2 + 2x)^2 = x^4 + 3 + 4x^3$

- **Fill in the blanks as the statement become true.**

9. The circle has a maximum _____ parallel tangent.
10. If A(-5, 2), B(3,2), C(1, 4) is the vertex of ΔABC and AD is the median, then the coordinates of D is _____.
11. HCF of two prime numbers are always _____ happens.
12. The perpendicular distance from the X-axis of point of point P(2, 3) is _____.

- **Answer the following questions in one word/ sentence / statistics.**

13. What is the sum of the inverse of the zeroes of $P(x) = 2x^2 + x - 1$?
14. What is the total number of results in the twice dice experiment ?
15. Which Greek mathematician developed the geometric method of finding length ?
16. What does 'a' mean in the mean formula $\bar{X} = a + \frac{\sum fiui}{\sum fi} \times h$?

Section – B

- **Calculate and answer the questions given below. [17 to 26] [2 marks each]** **[20]**

17. Find the HCF and LCM of 6, 72 and 120, using the prime factorisation method.
18. Use Euclid's division algorithm to find the HCF of 867 and 255.
19. Find a quadratic polynomial in which the sum of zeroes is 0 and product of zeroes is $\sqrt{5}$.
20. Find the solution of the pair of linear equations: The coach of a cricket team buys 7 bats and 6 balls for Rs. 3800. Later she buys 3 bats and 5 balls for Rs. 1750. Find the cost of each bat and each ball.

OR

20. The ratio of income of two persons is 9:7 and the ratio of their expenditures is 4: 3. If each of them manages to save Rs. 2000 per month, find their monthly Incomes by elimination method.
21. Find the roots of the quadratic equations $2x^2 + x - 6 = 0$ by factorisation.

OR

21. Find the roots of $4x^2 + 3x + 5 = 0$ by the method of completing the square.
22. E and F are points on the sides PQ and PR respectively of a ΔPQR, If PQ = 1.28 cm, PR = 2.56 cm, PE= 0.18 cm and PF = 0.36 cm then state whether EF || QR.
23. In ΔOPQ, right angled at P. OP = 7 cm and OQ - PQ = 1 cm. Determine the value of sin Q and cos Q.

24. Prove that, $\frac{1+\sec A}{\sec A} = \frac{sin^2 A}{1-\cos A}$.

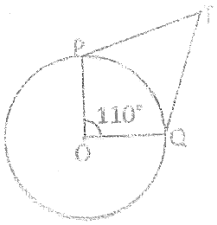
OR

24. If sin 3A = cos(A - 10°) then find the value of A(3A < 90°).

25. The given distribution shows the number of runs scored by some top betsmen of the worls in one-day international cricket matches, Find the mode of the data.

Runs scored	Number of batsmen
3000 – 4000	4
4000 – 5000	18
5000 – 6000	9
6000 – 7000	7
7000 – 8000	6
8000 – 9000	3
9000 – 10000	1
10000 – 11000	1

26. In fig. if TP and TQ are the two tangents to a circle with center O so that ∠POQ = 110° then find ∠PTQ.



Section – C

- **Answer the questions as required. [27 to 34] [3 marks each]** **[24]**

27. Find all the zeroes of $2x^4-3x^3 - 3x^2 + 6x - 2$ if you know that two of the zeroes are $\sqrt{2}$ and $-\sqrt{2}$.

28. Check whether 301 is a term of the list of numbers 5, 11, 17, 23,…...

OR

28. Given, d = 5, S_9 = 75 then. Find a and a_9.

29. A rectangular park is tobe designed whose breadth is 3 m less than its length. Its area to be 4 square meters more than the area of a park that her already been made in the shape of an isosceles triangle with its base as the breadth of the rectangular park and of altitude 12 m. Find the length and breadth.

30. Rasheed go a playing top (lattu) ashis birthday present, which surprisingly had no colour on it. He wanted to colour it with his crayons. The top is shapped like a cone surmounted by a hemisphere. The entire top is 5 cm in height and the diameter of the top is 3.5 cm. Find the area he has to colour. ($\pi = \frac{22}{7}$)

OR

30. A solid is in the shape of a cone standing on a hemisphere with both their radii being equal to 1 cm and the height of the cone is equal to its radius. Find the volume of the solid in terms of π.

31. Find the ratio in which the Y-axis divides the line segment joining the points (5, -6) and (-1, -4). Also find the point of intersection.

32. If the length of a chord of a circle with a radius of 5 cm is 8 cm. Find its distance from the centre

33. A chord of a circle of radius 10 cm subtends a right angle at the centre. Find the area of the corresponding (1) minor segment (2) major sector. (use π = 3.14)

34. Find the mean percentage of female teachers by below given distribution.

Percentage of female teachers	15-25	25-35	35-45	45-55	55-65	65-75	75-85
Number of state / U.T.	6	11	7	4	4	2	1

OR

34. find the mean of below given information

Class	5-15	15-25	25-35	35-45	45-55	55-65
F	6	11	21	23	14	5

Section – D

- **Answer the questions as requested. [35 to 39] [4 marks each]** **[20]**

35. Draw a circle with the help of a bangle. Take a point outside the circle construct the pair of tangents from this point to the circle give also the justification of the construction.

OR

35. Construct a triangle to a given triangle ABC with its sides equal to $\frac{3}{4}$ of the corresponding sides of the triangle ABC, give also the justification of the construction.

36. The students of a class are made to stand in rows. If 3 students are extra in a row, there would be 1 row less. If 3 students are less in a row there would be 2 rows more, find the number of students in the class.

37. The shadow of a tower standing on a level ground is found to be 40 m longer when the sun's altitude is 30° then when it is 60°. Find the height of the tower.

38. A metallic right circular cone 20 cm high and whose vertical angle is 60° is cut into two parts at the middle of its height by a plane parallel to its base. If the frustum so obtained by drawn into a wire of diameter $\frac{1}{16}$ cm, find the length of the wire.

39. Prove: If a line is drawn parallel to one side of a triangle to intersect the other two sides in distinct points, the other two sides are divided in the same ratio.

OR

39. Prove that, in a triangle, if square of one side is equal to the sum of the squares of the other two sides, then the angle opposite the first side is a right angle.

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D. M. BHATT ENGLISH MEDIUM

STD: 10TH **STANDARD MATHS**

PAPER – 5 **Marks: 80**

Section – A

- **Answer the following questions as instruction [Question no. 1 to 16] [1 mark each]** **[16]**
  - **State whether the following statements are true or false.**

1. A quadratic polynomial has at least two zeroes.
2. The sum of the probabilities of all the primary events of the experiment is always 1.
3. The radius of a circle is 14. If the sector of 60° in front of the centre of the circle with an area of 616.
4. The graph of the equation $3x + 2y - 1 = 1$ is the line passing through the point of origin.

- **Answer the following questions in one word/ sentence / statistics.**

5. The number selected from the number from 1 to 15 is likely to be prime _____.
(A) $\frac{5}{2}$ (B) $\frac{2}{5}$ (C) $\frac{5}{3}$ (D) $\frac{3}{5}$
6. If _____ the two roots of quadratic equation are different and real.
(A) $b^2 - 4ac < 0$ (B) $b^2 - 4ac = 0$ (C) $b^2 - 4ac > 0$ (D) $b^2 - 4ac \neq 0$
7. Quadratic equation $2x^2 - \sqrt{5}x + 1 = 0$ to _____.
(A) There are two different real roots. (B) There are two identical real roots.
(C) No real roots. (D) There are more than two real roots.
8. If the vertex is the point (3, 4) of a circle having a center, then the radius of that circle is _____.
(A) 2 (B) 3 (C) 4 (D) 5

- **Answer the following questions in one word/ sentence / statistics.**

9. How many times did statistician kari person toss a coin ?
10. 'Adding two to one gives three' is this event a random event or not? Why ?
11. How many tablets of radius 0.1 cm can be made by melting a sphere of radius 1 cm.
12. What is the product of every three consecutive positive integers divisible by ?

- **Fill in the blanks as the statement become true.**

13. If sin θ = cos 30°, then θ =____.
14. The circle touches all the sides of the quadrilateral ABCD. If AB = 7, BC = 3, CD = 4 then AD = _____.
15. If HCF (10, 15) = 2x + 1, then x = __
16. The coordinates of the center of a triangle with vertices A(3, 4), B(4, 5) and C(12, 3) is _____.

Section – B

- **Calculate and answer the questions given below. [17 to 26] [2 marks each]** **[20]**

17. Use Euclid's algorithm to find the HCF of 4052 and 12576.
18. Show that $5 - \sqrt{3}$ is irrational.
19. Divide $3x^2 + x^2 + 2x + 5$ by $1 + 2x + x^2$.
20. Solve the pair of linear equations $S - t = 3$, $\frac{s}{3} + \frac{t}{2} = 6$ by the substitution method.

OR

20. The difference between two numbers is 26 and one number is three times the other. Find them.
21. If $\tan\theta = \frac{4}{3}$ then calculate sin θ and cos θ.
22. Evaluate : $\frac{\cos 45°}{sec30° + cosec30°}$

OR

22. If A, B and C are interior angles of a triangle ABC, then show that $\sin(\frac{B+C}{2}) = \cos\frac{A}{2}$.
23. Prove that the tangents drawn at the ends of a circle are parallel.

24. Find the mode of following information.

Class	10-25	25-40	40-55	55-70	70-85	85-100
Frequency	2	3	7	6	6	6

25. Let ΔABC ~ ΔDEF and their areas be, respectively, 64 cm^2 and 121 cm^2. If EF = 15.4 cm, find BC.

26. Check whether the following are quadratic equation : $x^3 - 4x^2 - x + 1 = (x - 2)^3$.

OR

26. Find the roots of the quadratic equation $3x^2 - 2\sqrt{6} + 2 = 0$.

Section – C

- **Answer the questions as required. [27 to 34] [3 marks each]** **[24]**

27. Obtain all other zeroes of $3x^4 + 6x^3 - 2x^2 - 10x - 5$, if two of its zeroes are $\sqrt{\frac{5}{3}}$ and - $\sqrt{\frac{5}{3}}$.

28. Find the sum of first 51 terms of an AP whose second and third terms are 14 and 18 respectively.

OR

28. Check whether 301 is a term of the list of numbers 5, 11, 17, 23, ...

29. The sum of the reciprocals of Rehman ages 3 years ago and 5 years from now is $\frac{1}{3}$. Find his present age.

30. A vessel is in the form of hollow hemisphere mounted by a hollow cylinder. The diameter of the hemisphere is 14 cm and the total height of the vessel is 13 cm. Find the inner surface area of the vessel.

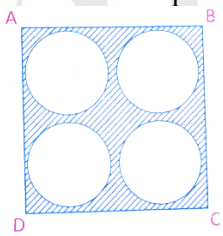
OR

30. A vessel is in the form of an inverted cone. Its height is 8 cm and the radius of its top, which is open, is 5 cm. It is filled with water up to the brim. When lead shots each of which is a sphere of radius 0.5 cm are dropped into the vessel, $\frac{1}{4}$ of the water flows out. Find the number of lead shots dropped in the vessel.

31. Find a relation between x and y such that the point (*x, y*) is equidistant from the point (3, 6) and (-3, 4).

32. If a chord AB of a centre circle O is 4 cm in length with radius 4 cm. Find ∠AOB.

33. Find the area of the shaded region in Fig. Where ABCD is square of side 14 cm.



34. The following distribution shows the daily pocket allowance of children of a locality. The mean pocket allowance is Rs. 18. Find the missing frequency *f*.

Daily pocket allowance (in Rs.)	11-13	13-15	15-17	17-19	19-21	21-23	23-25
Number if children	7	6	9	13	f	5	4

OR

34. find the mean of below given information

Class	5-15	15-25	25-35	35-45	45-55	55-65
F	6	11	21	23	14	5

Section – D

- **Answer the questions as requested. [35 to 39] [4 marks each]** **[20]**

35. Solve the following equations by reducing them to a pair of linear equations :

$\frac{2}{\sqrt{x}} + \frac{3}{\sqrt{x}} = 2, \frac{4}{\sqrt{x}} - \frac{9}{\sqrt{y}} = -1$

36. Prove that, if in two triangles, corresponding angles are equal, then their corresponding sides are in the same ratio and hence the two triangles are similar.

OR

36. Write and prove the converse of the pythagoras theorem.

37. A tree breaks due to storm and the broken part bends so that the top of the tree touches the ground making an angle 30° with it. The distance between the foot of the tree to the point where the top touches the ground is 8 m. Find the height of the tree.

38. Rachel, an engineering student, was asked to make a model shaped like a cylinder with two cones attached at its two ends by using a thin aluminum sheet. The diameter of the model is 3 cm and its length is 12 cm. If each cone has a height of 2 cm. Find the volume of air contained in the model that Rachel made. (Assume the outer and inner dimensions of the model to be nearly the same)

39. Construct a tangent to a circle of radius 4 cm from a point on the concentric circle of radius 6 cm and measure its length. Also verify the measurement by actual calculation give also the justification of the construction.

OR

39. Draw a line segment of length 7.6 cm and divide it in the ratio 5 : 8. Measure the two parts give the justification of the construction also.

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D. M. BHATT ENGLISH MEDIUM

STD: 10TH SCIENCE

PAPER – 1 Marks: 80

SECTION-A

- **Answer the following Q.no. 1to16 as directed: [1 mark each]** **(16)**
- **Choose the correct option from the given below multiple-choice questions (MCQ).**

1. Which functional group is present in alcohol?
(A)-X (B) –COOH (C) –CHO (D) -OH
2. An element X forms an oxide X_2O_3.What is valency of X?
(A) 1 (B) 2 (C) 3 (D)4
3. Which is the function of gene?
(A) To form the structure of DNA (B) To from the structure of chromosome
(C) To bring about the synthesize of protein (D) To synthesize DNA
4. Which is the fundamental reaction in nuclear weapon for destructive purposes?
(A) Fusion chain (B) Fission chain (C) Radiation chain (D) Thermal chain
5. Which trophic level has highest energy in an ecosystem?
(A) Producers (B) Herbivores (C) Primary carnivores (D) Higher carnivores
6. Which of the following activity is not helpful for the protection of environment?
(A) Social forestry (B) Rotation of crops (C) Recycling of used water (D) Deforestation

- **Answer the following questions.**

7.Give the structural formula of 2 - Chloropropane.
8.Write the valency of an element having atomic number 13.
9.Name the asexual method of reproduction in (a) Hydra and (b) Plasmodium.
10.What can you say about the resistance of a Conductor ?

- **Fill in the blanks with a correct word to make the following statements 'True'.**

11.The tendrils of pea plants are the example of .....
12. ..... is called the science of heredity and variations.
13.Danger signals are red in color because red light is ……

- **State whether the following statements are true or false.**

14.Fe acts as an oxidizing agent in the following reaction : $Fe + CuSO_4 \rightarrow FeSO_4 + Cu$
15.The near point of every person is 25 cm.
16.Many involuntary actions are controlled by the mid-brain and hind-brain.

SECTION - B

- **Answer the following Q. No. 17 to 26. (Within the limit of 40 to 50 words)** **(20)**

17. Write difference between ionic compounds & covalent-compound.
18. Write properties of Baking Soda.
19. Write limitations of Mendeleev Periodic table.

OR

19. Mention the number of Valence electrons in (a) halogens (b) alkali metals (c) noble gases
20.Discuss the signification of hemoglobin in respiration.

OR

20.Draw diagram of Nephron with naming.
21.Draw a labelled diagram of the longitudinal section of flower.
22.Draw ray diagram showing the image formation by a convex lens when object is between
(i) F & 2 F (ii) between optical center & F

23.What are the factors on which resistance of conductor depends?

OR

23. Why does the cord of electric heater not glow while the heating element does?

24.What is the function of earth wire? Why it is necessary to earth metallic appliances?

25.Write a note on canal system.

26.How has the traditional use of wind and water energy been modified according to our convenience?

OR

26.Why are we looking at alternate sources of energy?

SECTION - C

- **Answer the following Q. No. 27 to 34 in short. (Within the limit of 60 to 80 words) (3 marks each) (24)**

27. State the type of chemical reaction with chemical equation that take place in the following. (1) Magnesium wire is burnt in air. (2) Electric current is passed through water. (3) Ammonia and hydrogen chloride gases are mixed.

28. Describe the electrolytic refining method for purification of metals.

OR

28. Why is sodium kept immersed in kerosene oil?

29.Hormones are needed by our body in an appropriate quantity, slightly more or less secretion causes disorder in our body. Illustrate this by giving three examples.

30.Explain: Menstruation in woman with diagram.

OR

30.What are the changes seen in girls at the time of puberty?

31.In what way "homologous organ" provide evidence for evolution.

32.Draw a ray diagram showing the position, nature and size of the image of an object placed between optical center and infinity of concave lens.

33.Explain and Derive formula of equivalent resistance of connection of resistors in series.OR 33. What are the advantage of connecting electrical devices in parallel ?

34. List in major hazard and limitation of Nuclear Power generation.

SECTION - D

- **Answer the following Q. No. 35 to 39 in detail. (Within the limit of 90 to 120 words) (4 marks each) (20)**

35. Explain Chemical properties of acid with equation.

OR

35.Explain the preparation of washing soda and its four uses.

36. Write the structural formula of ethanol. Write its four physical properties and four uses.

37.Explain human excretory system with diagram.

38.What is far sightedness defect? How can this defect be corrected? Give two points of difference between Near-sightedness and Far sightedness.

39. Write a short note on Electric generator

OR

39. Explain: Short circuit and overloading.

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STD: 10TH **SCIENCE**

PAPER – 2 **Marks: 80**

SECTION-A

- **Answer the following Q. No. 1 to 16. (Within the limit of 10 to 20 words) (1 mark each) (16)**
- **Fill in the blanks with a correct word to make the following statements 'True'.**

1. The valency of noble gas is ……..
2. The dinosaurs belong to…… class.
3. ……. Is used in black and white photography.
4. The accumulation of pesticides at successive trophic levels is called ……

- **State whether the following statements are true or false.**

5. Nuclear fusion releases more energy than Thermal power plant.
6. Water harvesting is new concept in India.
7. The SI unit of refractive index is diopter.

- **Choose the correct option from the given below multiple-choice questions (MCQ).**

8. Who discovered modern periodic table.
(A) Dobereiner (B) Mendeleev (C) Henry Mosley (D) Newland
9. Which colour deviates maximum in dispersion of light by the prism?
(A) violet (B) Blue (C)Green (D) Red
10. for how many days does the menstruation period last in woman?
(A) 2 to 8 days (B) 10 to 12 days (C) 12 to 15 days (D) 28 to 32 days
11. What is the unit of Power of lens?
(A) meter (B) dioptre (C) m/s (D)none of the above

- **Answer the following questions.**

12. How would you name $CH3\ CH_2\ CH_2\ CH_2\ CH_2CH{=}CH_2$?
13. Show circuit symbol of variable resistance.
14. What is the main disadvantages of nuclear power generator?
15. To which phenomenon "Reduce" is related?
16. Write full form of CFC.

SECTION - B

- **Answer the following Q. No. 17 to 26. (Within the limit of 40 to 50 words) (2 marks each) (20)**

17. Why does distilled water not conduct electricity whereas rain water does?

OR

17. What is baking soda chemically called? Give reaction involved in its preparation. Write one of its uses.
18. Write the difference between roasting and calcination. Explain this two with suitable chemical equation.
19. What is meant by periodicity of properties of elements? Why are the properties of elements placed in the same group of the periodic table similar?
20. Draw Nephron with proper naming.
21. What changes are observed in uterus if fertilization does not occur?
22. Write laws of reflection with diagram.
23. Calculate the no. of electrons constituting one coulomb of change.

OR

23. State the advantages of an electromagnet.
24. Why should we conserve forests and wildlife?
25. What are the problems caused by the non-biodegradable waste that we generate?

OR

25. Distinguish between Biodegradable and Non-Biodegradable waste.

26.Write difference between series and parallel connection of resistance.

SECTION -C

- **Answer the following Q. No. 27 to 34 in short. (Within the limit of 60 to 80 words) (3 marks each) (24)**

27. Write an experiment on "Electrolysis of water".
28.Write six general physical properties of metals.

OR

28. Explain the formation of magnesium chloride ($MgCl_2$) by electron exchange method.
29. Explain human brain with its different parts.(with Diagram)
30.Describe the methods to control human population.
31.What is sex-determination? State the various methods of sex determination in animals.

OR

31.Explain evolution by stages through the example of eye.
32.Write note on power of lens

OR

32.Properties of image formation by Plane mirror with diagram.
33.Explain and derive formula for combination of resistors in parallel connection.
34.State the advantages and limitations in harnessing wind energy.

SECTION-D

- **Answer the following Q. No. 35 to 39 in detail. (Within the limit of 90 to 120 words) (4 marks each) (20)**

35.Explain: The heart is our pump.
36.Explain the importance of pH in existence of living beings and digestive system.

OR

36. Write a short note on plaster of paris .
37.State causes of myopia. How is this defect corrected? Draw suitable diagram to show it.
38.Explain the effect of soap in cleansing action.
39.What precaution should be taken to avoid the overloading of domestic electric circuits?

OR

39.What is an electro magnet? State the principle on which it works.

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PAPER – 3 **Marks: 80**

SECTION-A

- **Answer the following Q. No. 1 to 16. (Within the limit of 10 to 20 words) (1 mark each) (16)**
- **Fill in the blanks with a correct word to make the following statements 'True'.**

1. The surface of ..... metal acquires a green coating when it is exposed due to air, but on heating the metal, it acquires black coating.
2. Butanone is a compound having four carbon atoms. There is ..... functional group in it.
3. The existing mankind, present on the earth has originally descended from ….....
4…….. hormone prepares our body for action in emergency situation.

- **State whether the following statements are true or false.**

5. The structural formula of ethanal is CH_3CH_2OH.
6. Lens of power +2.0D is a convex lens.
7. The cerebellum helps in maintaining posture & balance of the body.

- **Choose the correct option from the given below multiple-choice questions (MCQ).**

8. Which scientist gave the law of octaves for the classification of elements?
(A) Dobereiner (B) Newlands (C) Mendeleev (D) Henry
9. Which colour of white color deviates maximum in the dispersion of light by the prism?
(A) Violet (B) Blue (C) Green (D) Red
10. For how many days does the menstruation period last in woman?
(A) 2 to 8 days (B) 10 to 12 days (C) 12 to 15 days (D) 28 to 32 days

- **11 Match the following.**

Column A (Evidences of evolution)	**Column B** (Example)
1. Homologous Organs	a. wing of bird & wing of butterfly
2. Analogous organs	b. Dinosaur skull.
3. Fossils	c. Fore limb of lizard & hand of human.

- **Answer the following questions.**

12. Define isotopes.
13. By which instrument can the electric potential difference be measure?
14. Name any two greenhouse gases.
15. State the abiotic components of ecosystem.
16. Which tree leaves are used in manufacture of bidis?

SECTION - B

- **Answer the following Q. No. 17 to 26. (Within the limit of 40 to 50 words) (2 marks each) (20)**

17. What is Lymph? How it is formed and transport? State the functions of it.

OR

17. Write about blood vessels.
18. What is the role of decomposers in the ecosystem?
19. Give an example of a metal which ... (i) is a liquid at room temperature.
(ii) can be easily cut with a knife. (iii)is the best conductor of heat. (iv)is a poor conductor of heat.
20. A convex mirror used for rear view on an automobile has a radius of curvature of 3.00 m If a bus is located at 5.00 m from this mirror, find the position, nature and size of the image.

21.Calculate the number of electrons constituting one coulomb of charge.

OR

21.When a 12V battery is connected across an unknown resistor, there is a current of 2.5 mA in the circuit. Find the value of the resistance of the resistor.

22.List the properties of magnetic field lines.

23.What changes would you suggest in your home in order to be environment-friendly?

OR

23.Suggest some approaches towards conservation of forests.

24.Give two important uses of washing soda and baking soda.

25.What were the criteria used by Mendeleev in creating his periodic table?

OR

25.Difference between Mendeleev's periodic table and the modern periodic table.

26.How is sexual reproduction different from asexual reproduction?

SECTION-C

- **Answer the following Q. No. 27 to 34 in short. (Within the limit of 60 to 80 words) (3 marks each) (24)**

27. Balance the following equation.

(a)HNO_3 +$Ca(OH)_2$ →$Ca(NO_3)_2$ + H_2O

(b)NaOH + H_2SO4 → Na_2SO_4 + H_2O

(c)$BaCl_2$ + H_2SO4 → $BaSO_4$ + HCl

28. (A) What is activity series of metal? Arrange the metal Zn, Al, mg, Fe and Cu in decreasing order.

(B) What would you observe when you put

(i) Some zinc pieces into blue copper sulphate solution?

(ii) Some copper pieces into green ferrous sulphate solution?

OR

28.A metal "A" has two electrons in the valance shell and non metal "B" has T valance electrons. Show bonding between "A" & "B" giving reason for the same. Predict solubility of compound formed by A & B in water.

29.What happen to the synapse between two neutrons? Answer in detail.

30.Write a note on reproduction part of plant with diagram.

31. Write Mendel's experiments on trait.

OR

31.Explain sex determination in human.

32.Explain sign convention for spherical mirror. OR 32. Define following (i) Centre of curvature. (ii)focus.(iii)focal length.

33.State Ohm's law. Draw a schematic diagram of the circuit for studying Ohm's law.

34.Write a note on solar cooker.

SECTION - D

- **Answer the following Q. No. 35 to 39 in detail. (Within the limit of 90 to 120 words) (4 marks each) (20)**

35. Write Importance of pH in everyday Life.

OR

35. Give in example of each of the following.

(i)A carbon compound containing two double bonds.

(ii)A molecule in which central atom is linked to three other atoms.

(iii)A compound containing both ionic and covalent bonds.

(iv)An organic compound which is soluble in water.

(v)A carbon compound which burns with a sooty flame.

36.Explain cleansing action of soap.

37.Explain the process of digestion of food in mouth, stomach and small intestine in human body and draw a neat labelled diagram.

OR

37. Draw a neat labelled diagram of human heart and describe the flow of blood through the human heart.

38. Explain three common defects of vision. Draw the diagram and suggest the way of correcting there defects.

39. Draw a labelled circuit diagram of a simple electric motor and explain its construction and working.

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STD: 10TH **SCIENCE**

PAPER – 4 **Marks: 80**

SECTION-A

- **Answer the following Q. No. 1 to 16. (Within the limit of 10 to 20 word)(1 mark each)** **(16)**
- **Fill in the blanks with a correct word to make the following statements 'True'.**

1.$Fe_{(s)}+Cuso_{4(aq)} \rightarrow FeSo_{4\ (aq)} + Cu_{(s)}$ is a ……..reaction.
2.The molecular formula of Butane is.....
3.....is called the science of heredity and variations.
4.Plant hormone which inhibits growth is.....

- **State whether the following statements are true or false.**

5.Ethanoic acid is a colourless liquid.
6.Water is optically denser than crown glass.
7.Thyroxin hormone regulates metabolism for body growth.

- **Choose the correct option from the given below multiple choice questions (MCQ).**

8.The element which has maximum number of electrons in last orbit?
(A)$_{13}$ Al (B)$_{12}$Mg (C)$_{17}$Cl (D)$_{15}$P
9. Which lens is used to correct presbyopia?
(A) plane (B)convex (C)concave (D)bi-focal
10.Which part of the flower at maturity modified into fruit?
(A)Ovary (B) Ovule (C) Carpel (D)Female gamete
11. .....is the origin of Homo sapiens.
(A) India (B) Africa (C) Eurasi (D)China

- **Answer the following questions**

12.Which element has a total of three shells,with six electrons in its yetence shelt ?
13.How is a voltmeter connected in the circult?
14.Which energy source is not derived hrom the sun's energy?
15.Which type of cancer can be caused by U.V,radiation?
16.Which leaves are used in Bidi industry?

SECTION-B

- **Answer the following Q. No, 17 to 26,(Within the limit of 40 to 50 words)(2 marks each)** **(20)**

17.Write the balanced chemical equation for the following
(i)Magnesium(s)+Hydrochloric acid(ag)
(ii)Sodium carbonates(s) +Hyrochlonic acid(aq)→
18. Why is sodium kept immersed in Kerosene oil ?
19. An element X has following electronic configuration, (a) To which group of periodic table does element X belong?
(b) What is the molecular formula of its chloride?

OR

19.Name two elements you would expect to show chemical reactions similar to sodium.Why?
20.Write two points of differences between Blood and Lymph.

OR

20,How are fats digested in our bodies ? Where does this process take place?
21.Write the functions of testis by drawing male reproductive system.
22.Give scientific reason, in a torch a concave mirror is used.
23. On which factors does the resistance of a conductor depend?

OR

23.Give scientific reason, in the bulb tungsten metal is in coiled shape not in the straight parallel wire form,

24.What is meant by the term 'frequency of an alternating current' what is its value in our country?
25.Write any two ways in which non-biodegradable substances affect the environment.
26. Why should we conserve our forest? Write any two causes for deforestation.

OR

26.Which one is better ?(1)to collect rain water in ponds or (II) to recharge ground water by water harvesting,

SECTION-C

- **Answer the following Q. No. 27 to 34 in short. (Within the limit of 60 to 80words) (3 marks each) (24)**

27, What is observed when a solution of potassium iodide is added to a solution of leadnitrate? What type of reaction is this? Write a balanced equation.
28. Element X is in third period in modern periodic table, it is stored under kerosene, oxide of element X and balanced chemical equation when its oxide combines with water.

OR

28.Give reason: Why copper is used to make hot water tanks, name other two metals which can be used for same.
29.Draw the structure of a neuron. What is the need for a system of control and co-ordination in an organism?
30.Distinguish between Male reproductive system and Female reproductive system, (Three Points)
31.Describe the sex determination in human beings.

OR

31.State the meaning of inherited traits and acquired traits which one is not passed on to the next generation. Explain with an example.
32.With neat and labelled ray diagram, describe the position, nature and size of the image formed when an object is kept at 2F (Centre of curvature) in front of convex lens.

OR

32.An object 4 cm in size is placed at 25 cm in front of a concave mirror of focal length 15 cm at what distance from the mirror should the screen be placed in order to obtain a sharp image ? Find the nature and size of the image.
33.State three points of difference between series combination of resistors and parallel combination of resistors.
34.Mention why is it not possible to make use of solar cells to meet all our energy needs? State three reasons to support your answer. Mention three uses of solar cells.

SECTION-D

- **Answer the following Q. No. 35 to 39 in detail. (Within the limit of 90 to 120 words) (4 marks each) (20)**

35. State reason for the following statements.
(a)Why does an aqueous solution of an acid or a base conduct electricity?
(b)Dry hydrogen chloride gas does not turn blue litmus red.
(c)For dilution of acid, acid is added into water not water into acid.
(d)Which has higher pH value, a concentrated or dilute solution of acid?
36. Write chemical equation when (a) Sodium metal is added to ethanoic acid.
(b)When ethanoic acid is heated with ethanol in presence of concentrated H_2SO4.
(c)Ethanol is heated at 443 K with excess concentrated sulphuric acid.
(d)Ethanoic acid reacts with sodium carbonate.

OR

36. Write four acids, which are available in nature with their natural source. Write making and two uses of bleaching powder and washing soda each.
37.(a) Draw a sectional view of human heart and label on it why is double circulation of blood is necessary in human heart?
38.Write the difference between myopia and hypermetropia. (Four points)
39.Draw a labelled diagram of an electric motor. Explain its principle and working. **OR**
39. Explain the main features of a domestic wiring with diagram. chemical equation for this reaction

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STD: 10TH **SCIENCE**

PAPER – 5 **Marks: 80**

Section - A

- **Answer the following Q. No. 1 to 16. (Within the limit of 10 to 20 words)(1 mark each) (16)**
- **Fill in the blanks with a correct word to make the following statements 'True'.**

1…….. is used in black and white photography.
2.Reaction of ethanoic acid with ethanol in presence of acid catalyst forms …….. .
3.The reduction of weight in the beetle due to starvation is ..... trait.
4……..... is growth inhibitor hormone of plants.

- **State whether the following statements are true or false.**

5.Dehydration of ethanol gives propene.
6.Laws of reflection are not applicable to rough and irregular surface.
7.The phloem tissue transport carbohydrate, amino acids and plant hormones.

- **Choose the correct option from the given below multiple choice questions (MCQ).**

8. Which of the following element will gain an electron easily.
(A) Na (B) F (C) Mg (D) AI
9. Which with region are the genetical foot print of human beings related?
(A) Asia (B) Australia (C) Africa (D) America
10. Where does the fertilization of sperm and ovum occur in human?
(A) in uterus (B) in cervix (C) in vagina (D) in oviduct

- **11. Match the following.**

(A) 1(a), 2(b), 3(c), 4(d) (B) 1(c), 2(d), 4(a), 4(b) (C) 1(b), 2(d), 3(a) , 4(c) (D) 1(d), 2(a), 3(b) , 4(c)

Column A	Column B
1.Variation	a. change in variety by selective hybridisation
2.Natural selection	b. change in the form or function of organism
3.Artificial selection	c. Rations of isotopes
4.Dating fossils	d. evolution of species

- **Answer the following questions.**

12.Name the functional group present in butanone and butanal respectively.
13.Write Joule's Law of Heating.
14.Name two oxides that causes acid rain.
15.Which mirror would be the best for solar cooker?
16.What are the five R'S used to save environment?

SECTION - B

- **Answer the following Q. No. 17 to 26.(Within the limit of 40 to 50 words) (2 marks each) (20)**

17.How can the black coating of copper oxide be removed chemically? Explain with the help of chemical reaction.
18.Sonu detected the pH of four unknown solution A, B, C and D as follows 11, 5, 7 and 2 Predict the nature of the solutions.
19.An element 'X' has atomic number 13:
(A) Write its electronic configuration. (B) State the group to which 'X' belongs.
(C) Is 'X' a metal or a non- metal?

OR

19.Choose from the following: $_{6}C$, $_{8}0$, $_{10}Ne$, $_{11}$ Na, $_{14}Si$ (a) Elements that should be in the same period.
(b)Elements that should be in the same group. State reason for your selection in each case.

20How are the alveoli designed to maximise the exchange of gases?

OR

20.State two difference between arteries and veins.

21."DNA copies generated during reproduction will be similar but may not be identical to the original." Justify this statement.

22."The magnification produced by a spherical mirror is -3." List four information you obtain from this statement about the mirror/ image.

23.(a) What do the following circuit symbols represent? (b) The potential difference between the terminals of an electric heater is 60 V when it draw a current of 4A from the source. Find the resistance of heater when in use.

OR

23.State difference between the wire used in the element of an electric heater and in a fuse wire.

24. A coil of insulated wire is connected to a galvanometer. What would be seen if a bar magnet with its north pole towards one face of the coil is (i)moved quickly towards it, (ii)moved quickly away from the coil and (iii)placed near its one face ? Name the phenomenon involved.

25."Burning of fossil fuels results in global warming." Give reasons to justify this statement.

26."Reuse is better than recycling of material." Give reason to justify this statement.

OR

26. What is biodiversity? List two advantages of conserving forests and wildlife.

SECTION – C

- **Answer the following Q. No. 27 to 34 in short.(Within the limit of 60 to 80 words) (3marks each) (24)**

27.2g of ferrous sulphate crystals are heated in a dry boiling tube. (a)List any two observations (b)Name the type of chemical reaction taking place. (c)Write the chemical equation for the reaction.

28.A gas 'X' reacts with lime water and forms a compound 'Y' which is used as a bleaching agent in chemical industry. Identify 'X' and 'Y'. Give the chemical equation of the reaction involved.

OR

28.Describe the electrolytic refining of copper

29.Sonu's father has been advised by a doctor to reduce his sugar intake. (i)Name the disease he is suffering from and (ii)name the hormone whose deficiency is ? (iii)Identify the gland that secretes it and mention the function of this hormone. (iv)Explain how the time and amount of secretion of this hormone is regulated in human system

30.Describe in brief the role of testis, seminal vesicle ,vas deferens ,ureter ,prostate gland in human male reproductive system by drawing diagram

31.List two differences in tabular from dominant trait and recessive traits. What percentage/proportion of the plants in the F_2 generation/ progeny were round, in Mendel's cross between round and wrinkled pea plants?

OR

31.What is speciation? Explain in brief the role of natural selection and genetic drift in this process.

32.If the image formed by mirror for all positions of the object placed in front of it is always virtual and diminished, state the type of the mirror. Draw a ray diagram in support of your answer. Where are such mirrors commonly used and why?

OR

32.State the laws of refraction of light. If the speed of light in vacuum is 3×10^8m/s, find the absolute refractive index of a medium in which light travels with a speed of 1.4×10^8 m/s.

33.(a) Define the term 'coulomb'. (b) An electric iron of resistqance 20Ω takes a current of 5A, calculate the heat developed in 5 s.

34.State in brief two ways in which non- biodegradable substances would affect the environment. List two methods of safe disposal of the non- biodegradable waste.

SECTION - D

- **Answer the following Q. No. 35 to 39 in detail. (Within the limit of 90 to 120 words) (4 marks each) (20)**

35. How do metal carbonates and metal hydrogen carbonates react with acid? Explain with experiment.

OR

35.A student dropped few pieces of marble in dilute hydrochloric acid, contained in a test - tube. The evolved gas was then passed through lime water. What changes would be observed in lime water?

What will happen if excess of gas is passed through lime water? With the help of balanced chemical equations for all the changes explain the observations.

36.What are hydrocarbons ? Write the name and general formula of (1) saturated hydrocarbons, (2) unsaturated hydrocarbons, draw the structure of one hydrocarbon of each type. How can an unsaturated hydrocarbon be made saturated?

37. (a) Draw a diagram of human respiratory system and label the following:

(i) part where air is filtered by fine hair and mucus
(ii) part which terminates in balloon - like structures
(iii) balloon-like structures where exchange of gases takes place.
(iv) part which separates chest cavity from abdominal cavity.

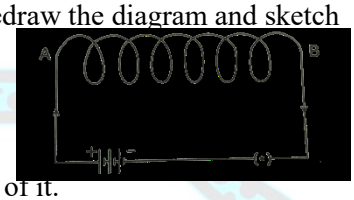
(b) Why is the rate of breathing in aquatic organisms much faster than in terrestrial organisms?

38.Sonu is unable to see clearly the words written on the blackboard placed at a distance of approximately 4 m from him. Name the defect of vision the boy is suffering from. Explain the method of correcting this defect. Draw ray diagram for the : (i) Defect of vision and also (ii) For its correction

39.Observe the figure given below and answer the following question :

(a)Write the special name given to the coil AB which has many circular turns of insulated copper wire.

(b)State the nature of magnetic field inside AB when a current is passed through it. Redraw the diagram and sketch the pattern of magnetic field lines through and around AB.



(c)List two factors on which the strength of the magnetic field produced by AB.

(d)What is the effect of placing an iron core in the coil AB ?

OR

39. (a) Draw an appropriate diagram of common domestic circuit and write properties of it.

(b) There was a fire due to overloading in circuit in Ramanbhai's house. What precautions had he taken to prevent this hazard?

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STD: 10TH **ENGLISH**

PAPER – 1 **Marks: 80**

SECTION-A

Read the following passage and select the correct answer from the options given below it. **[04]**

The ceremonies took place in the lovely sandstone amphitheatre formed by the Union Buildings in Pretoria. For decades this had been the seat of white supremacy, and now it was the site of a rainbow gathering of different colours and nations for the installation of South Africa's first democratic, non-racial government. On that lovely autumn day I was accompanied by my daughter Zenani. On the podium, Mr de Klerk was fast sworn in as second deputy president. Then Thabo Mbeki was sworn in as first deputy president. When it was my turn, I pledged to obey and uphold the Constitution and to devote myself to the wellbeing of the Republic and its people.

1. Which of the following is true?

[A] The world was unaware of the ceremony.
[B] Only people of south Africa witnessed the event.
[C] Mr. De Klerk first sworn in as first deputy president.
[D] It was going to be South Africa's first democratic, nonracial government.

2. Choose a word from the passage that means 'support',

[A] supremacy [B] outlaws [C] sworn [D] up hold

It is from these comrades in the struggle that I learned the meaning of courage. Time and again, I have seen men and women risk and give their lives for an idea. I have seen men stand up to attacks and torture without breaking, showing a strength and resilience that defies the imagination. I learned that courage was not the absence of fear, but the triumph over it. The brave man is not he who does not feel afraid, but he who conquers that fear.

3. According to Nelson Mandela, what is the meaning of courage?

[A] to take risks. [B] to give one's life. [C] to feel afraid. [D] to conquer fear.

4. Find out the synonym of the word 'defy'.

[A] torture [B] disobey [C] accept [D] break

Fill in the blanks choosing the correct words given in the bracket. Write only the answers. (05-08) **[04]**

(confer, liberty, disaster, humanity)

Today, all of us do, by our presence here..... glory and hope to newborn ..... Out of the experience of an extraordinary human ..... that lasted too long, must be born a society of which all .....will be proud.

Answer the following questions in five to six sentences each. **[08]**

9. Describe the narrator's experience as he flew the aeroplane into the storm.
10. Why does Maddie stand by and not do anything? How is she different from Peggy?
11. Anne feels that teachers are the most unpredictable. Is Mr Keesing unpredictable? How?
12. Why does the postmaster send money to Lencho and sign the letter 'God'?

OR

12. What does Kisa Gotami understand the second time that she failed to understand the first time?

SECTION-B

Read the following Stanza and answer the questions given below it. **[02]**

Don't bite your nails, Amanda!
Don't hunch your shoulders, Amanda!
Stop that slouching and sit up straight,
Amanda!
(There is a languid, emerald sea, where the sole inhabitant is me
— a mermaid, drifting blissfully.)

13. How many voices are there in the lines?
14. Who do you think are the speakers?

Select the correct figures of speech from the given options. **[02]**

15. He hears the last voice at night, the patrolling cars.
[A] Personification [B] Alliteration [C] Onomatopoeia [D] Euphemism

16. Some say the world will end in fire Some say in ice.
[A] Alliteration and Transferred Epithet [B] Euphemism and Climax
[C] Anticlimax and Simile [D] Alliteration and Antithesis

Answer the following questions in five to six sentences each. **[06]**

17. Comment on the theme of 'The Ball Poem'.
18. What is 'dust of snow'? How has it changed the poet's mood?
19. Is Amanda an orphan? What could Amanda do if she were a mermaid ?

OR

19. Why did Custard cry for a nice safe cage? Why is the dragon called "cowardly dragon"?

Answer the following questions in five or six sentences each. **[06]**

20. Why does Mrs Pumphrey think the dog's recovery is "A Triumph of Surgery"?
21. What does the thief say about the different reactions of people when they are robbed?
22. What are the qualities that go into the making of a scientist?

OR

22. What lesson does Elbert learn when he does not win anything at a science fair?

SECTION – C

Errors: (23-28) **[03]**

He wrote 'To God' in the envelope	.....	.....
put a letter inside	.....	.....
and, still trouble,	.....	.....
went on town	.....	.....
To the post office	.....	.....
Dropped it in the mailbox	.....	.....

Fill in the blanks with proper articles, conjunctions and prepositions. (29-34) **[03]**
[a, the, from, who, even though, in]

But in ……. hearts of all …….. lived in that solitary house …….. the middle of the valley, there was …….. single hope: help …… God. "Don't be so upset, …….. this seems like a total loss."

Punctuate the following paragraph appropriately. (35-38) **[02]**

perhaps said the air hostess with the most charming smile it would be better if you resumed your seat and I will find the animal and bring it to you

Convert the following into indirect form of narration. **[03]**

39. Look, Peg," whispered Maddie.

"There's that blue one she told us about. Isn't it beautiful?"

"Yes," said Peggy, "And here's that green one. Boy, and I thought I could draw."

Do as Directed. **[05]**

40. The sight of the food maddened him. [exclamatory sentence]
41. The policy of apartheid created a deep and lasting wound in my country and my people. [passive voice]
42. I hope it passes quickly. [question tag]
43. Wasn't there anything she could do? [assertive sentence]
44. There was not a sign of life about the house. [interrogative sentence]

SECTION - D

Read the following passage and answer the questions. **[04]**

Health is important for development of the country. World Health Organization (WHO) defines health as " a state of physical, mental; social and spiritual well-being and not merely the absence of disease or infirmity". WHO-defines mental health as mental well- being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community. In this positive sense, mental health is the foundation for individual well- being and the effective functioning community. More than 450 million people suffer from mental disorders. According to WHO, by the year 2020, depression will constitute the second largest disease burden worldwide (Murray & Lopez, 1996). Global burden of mental health will be well beyond the treatment capacities of developed and developing countries. The social and economic costs associated with growing burden of mental ill health focused the possibilities for promoting mental; health as well as preventing and treating mental illness, thus. Mental Health is linked to behavior and seen as fundamental to physical health and quality of life.

Questions:

45. What contributes to the development of the country?
46. Write WHO's definition of health.
47. In what positive sense can mental health be taken?
48. Which disease can occur due to mental disorders?

Read the following poem and answer the questions. **[04]**

WEAVERS, weaving at break of day,
Why do you weave a garment so gay?
Blue as the wing of a halcyon wild,
We weave the robes of a new-born child.
Weavers, weaving at fall of night,
Why do you weave a garment so bright?
Like the plumes of a peacock, purple and green,
We weave the marriage-veils of a queen.

49. What is the mood of the weavers in the morning?
50. To what is the new born child's robe compared ?
51. How is the garment in the night?
52. List the colours mentioned in the poem.

53. You are Avani/Avi Mehta. Make a diary entry of your two day visit to your friend's village. [04]

OR

53. A famous cricketer visited your school. You are the sports secretary of your school. Write at least four dialogues which you used to interview him/her.

54. You arc the secretary of the recreation club of your school. The annual day celebration of the school is to be held next month. Write a notice for the school display board in this reference. [04]

OR

54. Your school is organizing a health awareness camp on the precautions to be taken against Covid-l9. Prepare an attractive poster for the same.

SECTION-E

55. You watched a rescue operation during the floods in a river in the monsoon season. Write a report based on your observation. [04]

56. Write an email to the editor of 'The Times of India' on the need of a city library with interment facilities at nominal rates for students. [06]

OR

56. You visited your friend's painting exhibition last week. Write a letter to your uncle describing your experiences ofthe same.

57. Write an essay in about 200 words. [Anyone] **[08]**

A. Importance of Sports in Education [various subjects-sports-benefits-fitness and health]

B. Power of Press and Media [powerful medium of communication-uses-misuses-your opinion]

OR

58. Write a story in about 200 words based on the inputs given below.

An illiterate boy-caught for pick pocketing-sent to juvenile prison-forced to do lessons-becomes sullen rebellious-watches French comic film on T.V. during recreation hour-requested for coaching classes-a French tourist guide today.

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D. M. BHATT ENGLISH MEDIUM

STD: 10TH **ENGLISH**

PAPER – 2 **Marks: 80**

SECTION-A

Read the following passage and select the appropriate answer from the options given below: **[04]**

The young seagull was alone on his ledge. His two brothers and his sister had already flown away the day before. He had been afraid to fly with them. Somehow when he had taken a little run forward to the brink of the ledge and attempted to flap his wings he became afraid. The great expanse of sea stretched down beneath, and it was such a long way down-miles sown.

1. Who has penned the story?

(a) Frederick Forsyth (b) EL Bsor Ester

(c) Liam O'Flaherty (d) Lucio Rodrigres

2. Why did the young seagull run away?

(a) Because his wings supported him to fly.

(b) Because he was too tired.

(c) Because his wings did not support him to fly.

(d)Because he was ill.

Coorg, or Kodagu, the smallest district of Karnataka, is home to evergreen rain forests, spices and coffee plantations. Evergreen rainforests cover thirty per cent of this district. During the monsoons, it pours enough to keep many visitors away. The season of joy commences from September and continues till March. The weather is perfect, with some showers thrown in for good measure. The air breathes of invigorating coffee. Coffee estates and colonial bungalows stand tucked under tree canopies in prime corners.

3. Which of the following statements is true?

(A) Coorg has only thirty per cent of coffee plantations

(B) During the monsoons, it pours enough to attract the visitors

(C) Kodagu is covered by thirty per cent of rainforests

(D) The season from March to September is a season of joy

4. ……. means 'to fill with energy'.

(A) Canopies' (B) 'Commence' (C) 'Tnvigorate' (D) Pours'

Fill in the blanks choosing the correct words given in the bracket. : (05-08) **[04]**

(offering, touched, praising, floating)

His feet sank into the green sea, and then his belly …… it and it and he sank no farther. He was ……..on it, and around him his family was screaming, …… him and their beaks were …… him scraps of dog-fish.

Answer the following questions in five or six sentences each. **[08]**

9. Lencho had immense faith in god comment. (ch:1)

10. What made the women in the control center look strangely at the narrator? (ch-3)

11. How did Buddha convey to Kisa the truth of life and death ?(ch:10)

12. What do military generals do ?How has their attitude changed why ? (ch 2)

OR

12. Why does the conductor refer to Valli as madam ? (ch 9)

SECTION - B

Read the following verse and answer the questions given below: **[02]**

He should be snarling around houses
At the jungle's edge,
Baring his white fangs his claws,
Terrorising the village!

13. What is the tiger supposed to do?

14. Where is the village located?

Select the correct figures of speech from the given option. **[02]**

15. And the little yellow was sharp as mustard

a) Simile b) Metaphor c) Personification d) Antithesis

16. The dust of snow

a) Oxymoron b) Alliteration c) Metaphor d) Onomatopoeia

Answer the following questions in five or six sentences each. **[06]**

17. Why does Walt Whitman want to live with animals?(poem 7)

18. How were Belinda's pet other than custard face the pirate? (poem 10)

19. Why did the poet not offer the boy money to buy another ball? (poem 5)

OR

19. Explain the message of the poem ' Dust of Snow (poem 1)

Answer the following questions in five or six sentences each. **[06]**

20. How is Ausable different from other secret agents?

21. How does Ausable manage to make Max believe that there is a balcony attached to his room? Look back at his detailed s description of it. What makes it a convincing story?

22. Horace Danby was a meticulous planner but still he faltered. Where did he go wrong and why?

OR

22. How did the invisible man first become visible?

SECTION – C

Rectify the error. (23-28) **[03]**

	Error	Correction
Everyone is born hating	……	……
The other person because	……	……
for the colour	……	……
on his skin, or his background	……	……
his background, and his religion	……	……
People must taught to love.	……	……

Fill in the blanks using article(s), conjunction(s), and preposition(s), at the correct places: (29-34) **[03]**

[where, a, what, for, of, the]

At first, as …….. student, I wanted freedom only……. myself, …….. transitory freedoms …… being able to stay out at night, read …….. I pleased and go ……. I chose.

Punctuate the following paragraph appropriately. (35-38) **[02]**

Its really getting bad now exclaimed the man. I hope it passes quickly.

39. Convert the following into indirect form of narration. **[03]**

" You look a bit of a wrestler yourself ", young boy said, "So do you", Anil replied, the young boy said modestly, "I do wrestle a bit". Anil asked him "What's your name?". "Hari Singh", the young boy lied.

Do as Directed. **[05]**

40. I was accompanied by my daughter Zenani. [active voice]
41. He knows that I am lost. [interrogative sentence]
42. How selfish am I in my grief ! [assertive sentence]
43. Valli would be too jealous to listen to their talks. [without 'too'.]
44. It was not for the love of the loaf. [interrogative sentence]

SECTION – D

Read the following passage and select the appropriate answer from the options given below. **[04]**

The twentieth century was often called the Era of the Book. In those days, there were books about everything, from anteaters to Zulus. Books taught people how to, and when to and where to, and they illustrated, educated, punctuated, and even decorated.

Questions :

45. Who has penned the story?
46. Which of the following was not done by books?
47. Give adjective form of books'.
48. Who is speaking the above lines?

Read the following poem and answer the questions. **[04]**

In days gone. by I used to be A potter who would feel
His fingers mould the yielding
clay To patterns on his wheel;
But now, through wisdom lately won, That pride has gone away,
I have ceased to be the potter And have learned to be the clay.

Questions :

49. What was the poet in the past?
50. Why did the poet decide to be the clay?
51. Write two pairs of rhyming words from the above stanza.
52. What has the poet learnt to be?

53. You recently witnessed a three day trekking program at Mount Abu. Write a diary of entry of your visit and sightseeing. [04]

Or

53. A famous Environmentalist visited your school last week. Write at least four dialogue You used to interview him or her.

54. You are Shreerang shah of std 12th (sci). You have unfortunately lost your journal during school assembly. Write a notice to be put up for your school notice board. [04]

Or

54. Design a poster to increase awareness among the youth about blindness and the importance of donating eyes.

SECTION – E

55. Write a report in about 150 words on your visit to a school for the deaf and dumb. **[04]**

56. Write an email to your cousin giving him some tips telling him / her that not everything on the internet is fun or appropriate. **[05]**

Or

56. Write a letter to your friend informing him / her about the revised traffic rules in Gujarat. **[08]**

57. Write an essay of about 200 words on any one of the following :-
(1) Social networking site :- use and abuse (advantages and disadvantages – uses – bullying – applications)
(2) Save water , water will save you . (importance of water – life without it – conclusion)

OR

Complete the story and give it a suitable title :-

7 year old sunil – alone at home – rich locality – three man – suspicious looking – boy afraid – rang up 100 – 15 minutes later – police came – arrested robbers – sunil was rewarded – famous at school .

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STD: 10TH **ENGLISH**

PAPER – 3 **Marks: 80**

SECTION-A

Read the following passage and select the appropriate answer from the options given below: **[04]**

My father, the most adorable father I have ever seen, didn't marry my mother until he was thirty six and she was twenty-five. My sister, Margot was born in Frankfurt in Germany in 1926. I was born on June 1929. I live in Frankfurt until I was four. My father emigrated to Holland in 1933. My mother, Edith Hollander Frank, went with him to Holland in September, while Margot and I were sent to Aachen to stay with our grandmother. Margot went to Holland in December, and I followed in February, When

1. Where was Anne Frank born?

(A) Holland (B) Stuttgart (C) Frankfurt (D) Berlin

2. When was Anne Frank born?

(A) 12 June 1929 (B) 12 June 1926 (C) 12 July 1926 (D) 12 July 1929

The young seagull was alone on his ledge. His two brothers and his sister had already flown away the day before. He had been afraid to fly with them. Somehow when he had taken a little run forward to the brink of the ledge and attempted to flap his wings he became afraid. The great expanse of sea stretched down beneath, and it was such a long way down- miles down. He felt certain that his wings would never support him; so he bent his head and ran away back to the little hole under the ledge where he slept at night.

3. Which of the following is closer in meaning to the term, "On the brink of"?

(A) at the end of (B) on the verge of (C) in front of (D) over the edge of

4. Which statement shows the seagull's lack of confidence in flying?

(A) The seagull was alone on the ledge. (B) The seagull's attempt to flap his wings.

(C) The seagull ran forward to the brink of the ledge.

(D) The seagull ran away back to the little hole under the ledge.

Fill in the blanks choosing the correct words given in the bracket. : (05-08) **[04]**

(buried, ardent, pulled, detective)

The train …….. out of the station. Pranjol …….. his nose in his detective book again. Rajvir too was an …… fan of ……. Stories.

Answer the following questions in five or six sentences each. **[08]**

9. How did Mandela's understanding of freedom change with age and experience? (ch :2)
10. How does Wanda feel about the dresses game? Why does she say that she has a hundred dresses?(ch :5)
11. What is the story about Kodavu people`s descent ? (ch 7)
12. Do you think Mr Kessing was a strict teacher ?(ch :4)

OR

12. How was Mij transported to England ?(ch 8)

SECTION:B

Answer the following questions in five or six sentences each. **[02]**

He is learning, well behind his desperate eyes,
The epistemology of loss, how to stand up
Knowing what every man must one day know
And most know many days, how to stand up.

13. Why are the boy's eyes desperate?

14. What does the boy have to learn?

Select the correct figures of speech from the given option. **[02]**

15. His strength behind bars

a) Metonymy b) Synecdoche c) Litotes d) None

16. Just notice if he eats you

a) Tautology b) Irony c) Litotes d) Metaphor

Answer the following questions in five or six sentences each. **[06]**

17. Describe the Tiger's movements in his natural habitat (poem-3)
18. What is the central theme of the poem The Trees ? (poem 8)
19. Describe the Tiger's moment in the cage ?(poem-3)

OR

19. What does 'In the world of possession mean?(poem 5)

Answer the following questions in five or six sentences each. **[06]**

20. Griffin was rather a lawless person," comment
21. What other extraordinary things happen at the inn?
22. Why does Mrs Hall find the scientist eccentric?

OR

22. How do they replace the necklace?

SECTION - C

Rectify the error: (23-28) **[03]**

	Errors	**Correction**
he was beside the sea now	……	……
to fly straight over it	……	……
facing straight out on the ocean.	……	……
He saw a vast green sea under him,	……	……
in little ridges moving over it	……	……
he turns his beak sideways.	……	……

Fill in the blanks using article(s), conjunction(s), and preposition(s), at the correct place: (29-34) **[03]**

[the, to, about, when, and, behind]

Paris was …….. 150 kilometers …….. me …….. I saw the clouds. Storm clouds. They were huge. They looked like black mountains standing in front of me across ……. sky. I knew I could not fly up and over them, …… I did not have enough fuel ……. fly around them.

Punctuate the paragraph. (35-38) **[02]**

Paris control Paris control can you hear me I had no radio no compass and I could not see where I was.

39. Convert the following into indirect form of narration. **[03]**

"yes,. I'm travelling along," she answered curtly. "And I've got a ticket too."
"yes, she's on her way to town." "said the conductor." "with a thirty – paise ticket." "oh, why don't you mind your own business, " said valli

Do as Directed. **[05]**

40. Is the oppressor not robbed of his humanity?[Assertive sentence]
41. As soon as the class assembled, Miss Mason announced the name of the winner. [use No Sooner ... than]
42. Their shapes are very beautiful and graceful. (Exclamatory)
43. Otters are as common as mosquitoes in the Tigris Marshes. (Change the degree)
44. I hope it passes quickly (Negative)

SECTION – D

Read the following passage and answer the following question. **[04]**

Familiar to most people for its medicinal properties, the Neem is recognised by few despite its distinctive, curved leaves and an annual profusion of star-shaped sweet-scented flowers. It is a medium-sized or large tree with a straight trunk and evergreen, a native of India, Burma and Sri Lanka. This is really an amazing tree. People are most likely to draw off these trees because of their ignorance towards nature. If people really come to know even only a few of the benefits of this amazing tree or they feel how its presence could benefit people it is never likely to be chopped off. Young leaves are pale, tender green tinged with rust. These are eaten on New Year days to ward off sickness during the coming year. Some people to whom the tree is sacred, also festoon fresh leaves across their houses when there is an epidemic of chickenpox or to keep evil spirits away when there is a birth or death. Dried leaves put in drawers or cupboards keep out moths and cockroaches. Another use for these 'magic' leaves is in poultice form for healing wounds. This way the benefits of this tree keep benefitting the people.

From the yellow fruit is obtained the famous Margosa oil, so effective in the treatment of leprosy and skin diseases. External application of oil from the seed is believed to cure rheumatism. The bark and gum yield valuable medicines. In fact, every part of this tree is of some value. Neem timber is beautifully mottled, hard and heavy and is used for shipbuilding, carts and furniture. Wood from old trees is so bitter that no insects will attack it.

45. For what is the Neem tree well known?
46. How can the leaves of the Neem tree be recognized?
47. What is the belief of some people about the leaves of the Neem?
48. Why are young leaves of Neem are eaten on the New Year's Eve?

Read the stanza and answer the following question. **[04]**

Song VII
My song has put off her adornments.
She has no pride of dress and decoration.
Ornaments would mar our union;
they would come between thee and me;
their jingling would drown thy whispers.
My poet's vanity dies in shame before thy sight.
O master poet, I have sat down at the feet.
Only let me make my life simple and straight,

like a flute of reed for thee to fill with music.
- Rabindranath Tagore

(49) What is the theme of the poem?
(50) What is the meaning of "put off" in line 1?
(51) Who or what does the word "She" refer to?
(52) What "dies in shame" before the sight of the addressee?

53. Your board exam begins in a week's time. Share your feelings with your diary. Make at least two diary entries. **[04]**

OR

53. Write a dialogue between you and your friend about how to learn English and how to improve English.

54. You are the captain of the school football team. Write a notice to be displayed on the sports. Notice board calling all the football players to discuss about a certain match with the other school. **[04]**

OR

54. As a president of welfare association of Radhekishan villa design a poster promoting cleanliness in the complex.

OR

54. Principal of Bright high school Anand requires a receptionist draft a suitable advertisement giving all the necessary detail.

SECTION – E

55. Write a report on "Selfie Mania among the youngsters". **[04]**
56. Write an E-Mail to your friend informing him/her about the newly fitted water percolation system in your society and how it saves water. **[05]**

OR

56. Write a letter to your friend making an appeal to avoid Chinese fire crackers and have a safe Diwali, free of sound and air pollution.

57. Write a essay in about 200 words on any one of the following: **[07]**

(A) Chandrayaan- 2- A mission that made India proud.
(Introduction- Dream mission- Contribution- How it was different from other mission?- Uniqueness- Appreciation inspite of negligible failure – conclusion)

(B) Online Shopping v/s offline shopping.
(Introduction- Availability- Variety- Price check- Return/Refund policies- Quality- pocket friendliness- Time factor- Conclusion)

Or

57. Complete the story and give it a suitable title:
(An Engineer- Interview in a Multi National Company- goes to cobbler- shoe polishing- tips for interview and salary- interview goes well- gets job- comes to know the real boss- awestruck)

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STD: 10TH **ENGLISH**

PAPER – 4 **Marks: 80**

SECTION-A

Read the following passage and select the appropriate answer from the options given below: [04]

These sights so moved him that he at once went out into the world to seek enlightenment concerning the sorrows he had witnessed. He wandered for seven years and finally sat under a peepal tree, where he vowed to stay until enlightenment came.

Question:

1. Which sight moved him?

(A) An aged man (B) A sick man (C) A funeral Procession (D) A monk begging for alms

A. I, ii, iii B. i, ii, iii, iv C. I, iv D. I, ii, iv

2. What is enlightenment?

(A) A state of high spiritual knowledge (B) A state of meeting God

(C) Able to see with eyes closed (D) Able to foretell future

Let me put it more clearly, since no one will believe that a thirteen-year-old girl is completely alone in the world. And I'm not. I have loving parents and a sixteen-year-old sister, and there are about thirty people I can call friends. I have a family, loving aunts and a good home. No, on the surface I seem to have everything, except my one true friend. All I think about when I'm with friends is having a good time. I can't bring myself to talk about anything but ordinary everyday things. We don't seem to be able to get any closer, and that's the problem. Maybe it's my fault that we don't confide in each other. In any case, that's just how things are, and unfortunately, they're not liable to change. This is why I've started the diary.

3. Which of the following is closer in meaning to the term 'not liable to change'?

(a) radiant (b) dynamic (c) stagnant (d) lively

4. Which of the following statement is not true?

(i) Anne is completely alone in the world. (ii) Anne has one true friend.

(iii) Anne knows her faults. (iv) Anne has started writing a diary.

Fill in the blanks choosing the correct words given in the bracket. : [04]

(stopped, ready, dumb, takes)

Struck ……. with wonder, Valli gaped at everything. Then the bus …… and everyone go off, except Valli. "Hey, lady," said the conductor, "aren't you …….. to get off? This is as far as you thirty paise …… you."

Answer the following questions in five or six sentences each [08]

9. What did the girls write to Wanda?(Ch 6)
10. Why was Mr Keesing annoyed with Anne? What did he ask her to do? (Ch 4)
11. "I will take the risk" What is the risk? Why does the Narrator take it? (Ch 3)
12. Lencho was creast fallen when the rain turned into hail storm – comment (Ch 1)

OR

12. What are the high energy adventures that are available in Coorg? (Ch 7)

SECTION - B

Answer the following questions in five or six sentences each. **[02]**

The way a crow Shook down on me
The dust of snow

13. Name the bird. What has it done?
14. Where was the poet when the incident happened?

Select the correct figures of speech from the given option. **[02]**

15. Be sure it is a bear
a) Synecdoche b) Metonymy c) Alliteration d) Litotes

16. Chimney for a nose
a) Simile b) Irony c) Metaphor d) Personification

Answer the following questions in five or six sentences each. **[06]**

17.'Belinda ticked him , she ticked him unmerciful Why?(poem 10)
18. How will the world perish twice? (poem-2)
19. Why does Amanda seem moody most of the time?(poem-6)

OR

19. How are animals superior to human beings?(poem-7)

Answer the following questions in five or six sentences each. **[06]**

20. The course of the Loisels' life changed due to the necklace. Comment.
21. What was the cause of Matilda's ruin? How could she have avoided it?
22. What more does Bill say about Lutkins and his family?

OR

22. Who was Oliver Lutkins? What did he do to fool the young lawyer?

SECTION – C

Rectify the error: (23-28) **[03]**

	Errors	**Correction**
Wanda does not sit here	…….	……
because she was ruff and noisy.	…….	……..
Contradictory, she was very quite	…….	…….
or rarely said	…….	…….
something at al	…….	…….
And nobody had ever heard her laugh	…….	…….

Fill in the blanks using article(s), conjunction(s), and preposition(s), at the correct places:(29-34) **[03]**

[the, after, in, on, and, when]

During our childhood …… Goa, ……. baker used to be our friend, companion and guide. He used to come at least twice a day. Once, …… he set out in the morning …… his selling round, …….. then again, when he returned …….. emptying his huge basket.

Punctuation (35-38) **[02]**

Okay okay but you must get on the bus said the conductor and he stretched out his hand to help her.

39. Convert the following into indirect form of narration. **[03]**

Natalya : I've noticed that those hunters argue most who know least.
Lomov : Madam, please be silent. My heart is going to pieces (shouts) shut up!

Do as Directed: **[05]**

40. Let me put it more clearly (Voice)
41. What can you write about that ?(Assertive)
42. Nobody noticed her absence again. (Turn into Affirm)
43. I was happy to be alone high up the country side (Exclamatory)
44. She worked her arithmetic problems absent mindedly. (Change into interrogative)

SECTION – D

Read the following passage and answer the following question. **[04]**

Mt. Everest has continued to attract ever since June 8, 1924, when two members of a British expeditions George Mallory and Andrew Irvine, had first attempted to climb the summit. The two men were last spotted "going strong" for the top, until the clouds perpetually swirling around Everest, engulfed them. They then vanished. Mallory's body was not found for another 75 years, in May 1999. Ten more expeditions were to follow before the historic climb of Everest for the first time, by Edmund Hillary, a New Zealand beekeeper, and Tenzing Norgay, an acclaimed Sherpa climber. The news of the climb reached England at the time of the coronation of Queen Elizabeth U and Hilary became famous overnight, in all of the British Empire. Tenzing, on the other hand, became a symbol of national pride across both Nepal and India. Today, Mt Everest is drawing attention for all the negative reasons. The entire route that the climbers follow to reach the top is littered with rubbish and in sore need of cleaning up. The rubbish strewn all over the mountain includes oxygen cylinders, human waste, and even climbers' bodies which do not decompose in the extreme cold. Under the new regulations passed by the Nepalese government, climbers scaling Everest will have to bring back eight kilograms of garbage. This amounts exclusive of the climbers own garbage weight. This measure is taken to restore the pristine nature of the peak.The rule will be applicable to those climbers of Mt Everest who will ascend beyond Everest's base camp, from April onwards. Climbers who fall to comply with this new rule are likely to be charged and legal action would be taken against them. The action would involve the paying of a fine, or another penalty. Expeditions returning back to the base will have to submit their trash at an office to be set up in the precincts of the Everest Base Camp.

45. Why is Everest drawing attention today?
46. What is the nature of the waste littering the mountainside?
47. What is the nature of the new regulation?
48. How were the first climbers of Everest rewarded?

Read the stanza and answer the following question. **[04]**

Fireflies in the Garden
Here come real stars to fill the upper skies,
And here on earth come emulating flies,
That though they never equal stars in size,
(And they were never really stars at heart)
Achieve at times a very star - like start.
Only, of course, they can't sustain the part.
— Robert Lee Forst

49. Which insect does the poem describe?
50. What does the poet compare and contrast fireflies with in this poem?

51. What can you conclude from these lines?

52. Why might the poet have included the phrase "of course" in the last line?

53. You paid a visit an old home with other N.S.S volunteers. Make a diary entry of what you saw and experienced there. **[04]**

OR

53. Write a dialogue between a teacher and the mother of a student who is not doing very well in school.

54. A quiz competition is to be held in your school. Prepare a Notice inviting students to participate in it. **[04]**

OR

54. Your school is going to organize a Diwali mela design a poster to inform the student about the various activities connected with it. Even ask them to participate.

OR

54. You are Keyur from 12 sevanagar Ahmedabad You want to sell your flat as your shifting to another city. Draft a suitable advisement to be published in the Ahmedabad Times.

SECTION – E

55. Recently your school organized, "Used Toy Collection Drive" for the less privileged children, write a Report on it. **[04]**

56. Write an email to your cousin giving him some tips telling him/her that not everything on the internet is fun or appropriate. **[05]**

OR

56. Write a letter to your friend informing him/her about the revised traffic rules in Gujarat.

57. Write a essay in about 200 words on any one of the following: **[07]**

(A) Handsome is as Handsome Does.

(All cannot have good looks- Judge a person by good behavior- not by looks- illustrations- how a simple-ordinary person's behavior and earning)

Yoga the best Exercise

(Our ancient heritage- light exercise- type of yogasanas- make body flexible- regularise breathing- help to improve memory- reduce fats- mental peace- keep us active and cheerful for the whole day- morning the best time)

Or

57. Story Writing :

Summer vacations- School trip to kerala- teaches directed the class- Children excited- key to Treasure hidden- Team & finally found it- through map- they find lovely story books- donate to the class library.

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D. M. BHATT ENGLISH MEDIUM

STD: 10TH **ENGLISH**

PAPER – 5 **Marks: 80**

D. M. BHATT
English Medium Group Tuition

PHANTOM papers

SECTION-A

Read the following passage and select the appropriate answer from the options given below: **[04]**

Let me put it more clearly, since no one will believe that a thirteen-year-old girl is completely alone in the world. And I'm not. I have loving parents and a sixteen-year-old sister, and there are about thirty people I can call friends. I have a family, loving aunts and a good home. No, on the surface I seem to have everything, except my one true friend. All I think about when I'm with friends is having a good time. I can't bring myself to talk about anything but ordinary everyday things. We don't seem to be able to any closer, and that's the problem. Maybe it's my fault that we don't confide in each other. In any case, that's just how things are, and unfortunately that's not liable to change. This is why I've started the diary.

Questions:

1. The writer does not feel lonely in the company of …

(A) her parents (B) her elder sister

(C) some thirty friends (D) All of these three

2) 'I seem to have everything, except my one true friend'. Who is this true friend of the writer?

(A) The one who is no more (B) Her elder sister

(C) Her diary (D) Her loving aunt

Wanda Petronski. Most of the children in Room Thirteen didn't have names like that. They had names easy to say, like Thomas, Smith or Allen. There was one boy named Bounce, Willie Bounce, and people thought that was funny, but not funny in the same way that Petronski was.

Wanda didn't have any friends. She came to school alone and went home alone. She always wore a faded blue dress that didn't hang right. It was clean, but it looked as thought had never been ironed properly. She didn't have any friends, but a lot of girls talked to her. Sometimes, they surrounded her in the schoolyard as she stood watching the little girls play hopscotch on the worn hard ground.

3. Wanda used to put on dress of….

(A) Black colour (B) Blue colour (C) White colour (D) Pink colour

4. Wanda came to school with…..

(A) No one. (B) Her friend. (C)Her father. (D) Her neighboring girl.

Fill in the blanks choosing the correct words given in the bracket.: (05-08) **[04]**

(flickered, darkness, weary, watching)

Kisa Gotami became …….. and hopeless, and sat down at the wayside ……. The lights of the city, as they …….. up and were extinguished again. At last, the ……. Of the night reigned everywhere.

Answer the following questions in five or six sentences each. **[08]**

9. How did Mandela's 'hunger for freedom' change his life?(Ch 2)
10. What did Valli see on her way that made her laugh?(Ch 9)
11. According to Kisa Gotami what is the greatest grief of life?(Ch 10)
12. How did Natalya react when she comes to know that Lomov had come to propose?(Ch 11)
13. How was Mij to be transported to England ?

SECTION – B

Answer the following questions in five or six sentences each. **[02]**

I think I could turn and live animals, they are So placid and self-contain'd,
I stand and look at them long and long.
They do not sweat and whine about their condition, They do not lie awake in the dark and weep for their sins,
They do not make me sick discussing their duty to God,
Not one is dissatisfied, not one is demented with the mania of owning things,

14. With who, can the poet live happily?
15. Which of the things do animals not do?

Select the correct figures of speech from the given option. **[02]**

15. In a world of possessions
a) Similie b) Synecdoche c) Metonymy d) None
16. I am a Rapunzel , I have no care
a) Litotes b) Metonymy c) Metaphor d) Similie

Answer the following questions in five or six sentences each. **[06]**

17. Mention three things that humans do and animals don't?(poem-7)
18.'Money is external' what does the poet mean by this expression?(poem-5)
19. Why does the tiger express his rage quietly?(poem-3)

OR

19. How does the poet describe Fog as if it were a living being ? (poem 9)

Answer the following questions in five or six sentences each. **[06]**

20. Why do you think Lutkin's neighbours were anxious to meet the lawyer?
21. Why do Bholi's parents accept Bishamber's marriage proposal?
22. How did Bholi's teacher play an important role in changing the course of her life?

OR

22. What guesses are made by Think-Tank about the books found on Earth?

SECTION – C

Rectify the errors. (23-28)	**Errors**	**Correction**	**[03]**
Not from weeping mor from	……	……	
weeping nor from grief	……	……	
grief will someone obtain peace of mind	……	……	
on the constant, his pain	……	……	
His pain will be the greatest and his body will suffer	……	……	
He will be made himself sick and pale.	……	……	

Fill in the blanks using article(s), conjunction(s), and preposition(s), at the correct places: (28-34) **[03]**

[a, on, the, into, to, and]

Day after day she watched ……. bus, ……. gradually ……. tiny wish crept ……. her head and grew there; she wanted ……... ride …… that bus, even if just once.

Punctuation: (35-38) **[02]**

I slowed down to a walk and counted the notes 600 rupees in fifties I could live like an oil rich Arab for a week or Two

39. Convert the following into indirect form of narration. **[03]**

Lomov : I'll prove to you that they're mine!
Chubukov : you won't prove it.
Lomov : I shall

Do as Directed: **[05]**

40. We will go hungry this year. (Negative)
41. How selfish am l in my grief 1 (Turn into assertive)
42. Coorgi homes have a tradition of hospitality (Voice)
43. I prefer to step aside (Question tag)
44. Give us two cups (start with two cups)

SECTION – D

Read the following passage and answer the question. **[04]**

A spoiled child is an enraged child. Children become enraged when their deepest emotional needs get neglected. Most parent advocates argue that firm limit-setting - and even punishment - is the antidote to spoiling. This is untrue, and only ignores the depth of the problem. The real antidote to spoiling is that parents find ways to meet their children's needs. Children who get their deepest needs met never become enraged - and would never put up with being spoiled. Such children have nothing to be enraged about. And yet, most parents lack the capacity to meet their children's deepest needs. And figuring out how to gain this capacity is simply too hard for most parents. Gaining this capacity requires that parents enter realms within themselves that are terribly painful: the realms of their own unresolved childhood needs which lie dormant and split-off in their own unconsciousness. Thus, the sooner the parents control their child's rage the quicker they can return to their state of blissful denial of just how disturbed they themselves are beneath the surface. Healthier parents try to appease their children's rage through whatever compensatory means they have at their disposal - primarily through spoiling. Less healthy parents simply try to kill their child's rage - by burying it. If it were easier for parents to have accessed their own ancient, unresolved anger they would have worked on it. They would have gone within and reflected on their own painful truth, blamed and even confronted the people who were responsible for it, grieved, and ultimately healed through integration. But when this does not happen it passes to their children and the wounds never heal. Today we find many children get angry for small things. The parents look confused and have do not how to address this. Over a period of time, it gets out of control.

45. When do children get enraged?
46. What do parents fail to understand?
47. How do parents control their children's rage?
48. What happens when parents do whatever their children ask?

Read the stanza and answer the following question. **[04]**

All human things are subject to decay
And, when Fate summons, monarchs must obey.
This Flecknoe found, who, like Augustus, young
Was called to empire and had governed long.
In prose and verse was owned without dispute,
This aged prince, now flourishing in peace.

49. What happens to all the human beings?
50. What have monarchs to do when fate summons?
51. Who governed long?
52. What was happening to the aged prince?

53. While going from school you saw an six years old child begging near the traffic signal. You are moved by the scene. Write a diary about your feeling. **[04]**

OR

53. A young animal lover visited a school recently, you interviewed him write atleast four dialogue based on it.

54. You are a sport teacher of your school write a notice about 'Selection of the hockey players' for a hockey tournament. **[04]**

OR

54. Design a poster to crate awareness among the people of city on the importance of traffic rules.

OR

54. You are a Ravi shah a leading lawyer of Ahmedabad. You want to buy a house on city light road draft and adviresement for the classified colums of a local newspaper.

SECTION – E

55. Write a report on Bus-truck Accident . **[04]**

56. Write an E-mail to your friend asking her to join you on a trekking camp at Manali in summer vacation. **[05]**

Or

56. Write a letter to the Municipal Commissioner informing him about the problems of pollution in your city and requesting him to take necessary actions.

57. Essay **[07]**

(A) If mothers go on strike. (k chaos- can't manage things- realization of the importance-)
(B) Tuition in Education- Necessity or Nuisance.
(What is tuition- How it happened to creep into education?- Advantages- Disadvantages - help or harm education- conclusion)

OR

57. Story writing: Twin sisters- seeta and Geeta- assigned task- Christmas tree- labour of love- Ramesh planned to destroy the tree- sow a gift for him- heart melted- ashamed- apologized- became friends.

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D. M. BHATT ENGLISH MEDIUM

STD: 10TH **Social Science**

PAPER – 1 **Marks: 80**

SECTION-A

Match the following Question: (Each of 1 mark) **(Marks - 3)**

Connect the following pairs.

1.	Negrito	a) People from Southeast Asia who came to India
2.	Austroloid	b) Inheritors of Stone Age culture
3.	Dravid	c) People from Central Asia who came to India
		d) The oldest inhabited people of India

State whether the following statements are True or False. **(Marks - 3)**

4. There are 5 main ragas of music.

5. Atharva Veda is called 'Gangotri of music'.

6. Amir Khushro considered India a 'paradise on earth'

Answer the following questions in one word/sentence. **(Marks - 3)**

7. Images of which animals are shown on our national emblem?

8. What Is the process followed in spinning?

9. What is a stupa?

Fill in the blanks. **(Marks - 3)**

10. Caste is the most ancient inhabitants of India.
(Negrito, Austroloid, Dravid)

11. The city of Bikaner in Rajasthan is known ..... for its jewelery.
(Jari work, Inlay work, Akik work)

12. The whole world celebrates 21st June as .....
(Yoga day, Elelerly day, children day)

Choose the correct option with from those, given bellow each question. **(Marks - 4)**

13. Which veda is associated with music?
A. Atharvaveda B. Yajurveda C. Samveda D. Rigveda

14. Which composition of Chand Bardai is regarded as the first work in Hindi?
A. Chandrayan B. Kaviraj Marg C. Vikramankdev Chant D. Prithviraj Raso

15. Which sculpture has international significance from the point of view of art?
A. Ram - the Archer B. Bodhigaya C. Nataraja D. Buddha

16. Which of the following is not a step-well?
A. Vijaya B. Tada C. Bhadra D. Manda

SECTION – B

Answer the following questions (Each of 2 Marks) **(Marks - 20)**

17. Which animals are shown on our national currency?

OR

17. Give details of the Aryan and Dravidian culture.

18. Why is dramatic art of ancient India considered as image of social life?

19. Evaluate the art of Indian music.

20. Give information about Dholaveera.

OR

20. Explain art of architecture of Hampi.
21. Give main characteristic/pecularities of Mahabalipuram.
22. Write your views regarding cleanliness and preservation of tourists (picnic) spots. (March '18).
23. Explain following statements / reasons: It is our moral duty to protect wild life. Explain.
24. Write about the distribution of irrigation.
25. Write about the classification of minerals.

OR

26. How many ship building centres are there in India? Which are they?

SECTION – C

Answer the following questions (Each of 3 Marks) **(Marks - 24)**

27. Write a note on the Sun temple of Modhera.

OR

27. Give introduction about vedic literature of India.
28. Describe the process of soil formation and state on which basis these are classified.
29. Discuss the features of Market system.
30. Mention the objectives of the World Trade Organization (WTO).
31. Give information about ISI, ECO, FPO and AGMARK.

32. Who can file a complaint ? Describe the information included in complaint.
33. What is 'Abhyam Yojna'? Explain.
34. What is meant by women empowerment ? Why is women empowerment needed in India ?

SECTION – D

Answer the following questions (Each of 4 Marks) **(Marks - 24)**

35. Write about the contribution of the ancient India in metallurgy.

OR

35. Write short note on Vastu Shastra.
36.write a note on 'Global market and Indian agriculture'.

OR

36. Describe the 'wheat crop of India'.
37. Write a short note on poverty measurement.

OR

37. Write a note on Children Rights.
38. Explain – Present situation of Poverty in India.
39. Display the following details in the right place with proper symbols on the map of India.
1) Perrier national park
2) One state producing juwar.
3) One state producing Silk clothes.
4) Black Soil

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PAPER – 2 **Marks: 80**

SECTION-A

Match the following (Each of 1 mark) **(Marks - 3)**

Question: Connect the following pairs.

1.	Somdev	a) Gitagovind
2.	Kalhan	b) Kathasarit Sagar
3.	Jaydev	c) Kavirajmarg
		d) Rajatarangini

State whether the following statements are True or False. **(Marks - 3)**

4. Among the temples of Khajuraho, the temple of sixty-four yoginis is the main one

5. Natural resources are unlimited.

6. National Parks are a safer area than sanctuaries.

Answer the following questions in one word/sentence. **(Marks - 3)**

7. What information is given in the Yajurveda.

8. Which philosophical principles have been explained in Shrimad Bhagwad Gita?

9. What is meant by science and technology?

Fill in the blanks **(Marks - 3)**

10 ……..is the oldest book of Indian literature.
(Rigveda, Samveda, Yajurveda)

11… ……..is called the father of mathematics.
(Nagarjuna, Chanakya, Aryabhatta)

12 ……...was the first architect of the gods.
(Vishvakarma, Varahmihir, Brihaspati)

Choose the correct option with from those, given bellow each question. **(Marks - 4)**

13. Soil is formed of the matter available due to the of base rocks.
A. Vertical and headwards B. Sequence and non-sequence
C. Migration and Stagnancy D. Erosion and weathering

14. Which wildlife Is extinct from Gujarat?
A.Leopard B. Tiger C. Bear D. Ghudkhar

15. After arranging the following multi-purpose projects from North to South, which option seems to be correct?
A. Bhakra-Nangal, Chambal Valley, Narmada Valley, Nagarjun Sagar
B. Nagarjun Sagar, Narmada Valley, Chambal Valley, Bhakra-Nangal
B. Bhakra-Nangal, Nagarjun Sagar, Narmada Valley, Chambal Valley
C. Chambal Valley, Bhakra-Nangal, Narmada Valley, Nagarjun Sagar

16. Which place does India hold in the export of jute in the world?
A.None B. Third C. First D. Second

SECTION – B

Answer the following questions (Each of 2 Marks) **(Marks - 20)**

17. Write a short note on Negritoit (Habsi).

OR

17. Explain the difference between natural heritage of India and cultural heritage of India.

18. Write a short note on 'Bhavai'.

19. Explain the statement/saying 'Padi patole bhat, fate pan fite nahi.

20. Explain :Lothal was an important port (dockyard) of Gujarat.

21. Write a brief note on the Kailash Temple at Ellora.

22. Make a list of the places (Monuments) of Cultural heritage of Gujarat.

OR

23. Describe the advantages of tourism industry.
24. Give introduction to difference among sanctuaries, national parks and bio reserve zones.
25. 'Modern age is known as mineral age'. Why?

OR

25. State the uses of ground water.
26. Why there is an increase in the usage of non-conventional energy today?
27. State the steps which should be taken to eradicate communalism.

SECTION – C

Answer the following questions (Each of 3 Marks) **(Marks - 18)**

28. Explain town planning of ancient India.

OR

28. Discuss Ramayana and Mahabharata as great epics.
29. State the remedies to prevent soil erosion.
30. Which are the factors of productions ? Name them.
31. Mention the benefits and limitations of Privatization.
32. Describe the reasons of consumer exploitation.
33. Clarify the role of consumer societies in providing consumer protection.
34. Describe the various schemes of the government of Gujarat for providing equality to women.
35. State the social effects of terrorism.

SECTION – D

Answer the following questions (Each of 4 Marks) **(Marks - 18)**

35. Explain - Types of Unemployment.

OR

35. Write a short Note: Green revolution.
36. Explain - Right to Information.
37. Explain technical reform in Agriculture sector.
38. Discuss ancient India's progress In Medical Science and Surgery.
39. Display the following details in the right place with proper symbols on the map of India.
1) One state producing Cotton Clothes
2) Kaziranga National park
3) Red soil
4) Woolen cloths Industries.

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PAPER – 3 **Marks: 80**

SECTION-A

Match the following (Each of 1 mark) **(Marks - 3)**

Question: Connect the following pairs.

1.	Sun Temple of Konark	a) Madhya Pradesh
2.	Temple of Virupaksha - Pattadakal	b) Tamil Nadu
3.	Brihadeshwar Temple	c) Karnataka
		d) Odisha

State whether the following statements are True or False. **(Marks - 3)**

4. Water requirement is high for paddy and maize(cron) crops.

5. Bengaluru is called the capital of electronics industry.

6. The main cause of unemployment is poverty.

Answer the following questions in one word/sentence. **(Marks - 3)**

7. In which three parts did Varahmihir divide astrology?

8. Where are the Elephanta caves situated?

9. What is meant by soil erosion?

Fill in the blanks. **(Marks - 3)**

10. Red soil is also called..... land.
(regular, Padkhau, Scarlet)

11. Forests, sunlight, animals, birds, etc. are called..... resources.
(Renewable, Non-Renewable, Re-Renewable)

12. Migratory birds come to spend the winter in the.....Sarovar wetland area of Gujarat.
(Nal, Keloadev, Kankaria)

Choose the correct option with from those, given bellow each question. **(Marks - 4)**

13. Which state in India has the lowest proportion of the poor?
A. Gujarat B. Goa C. Bihar D. Uttar Pradesh

14. Which periodical is published for consumer education and awareness?
B. Consumer Act B. Consumer Education C. Consumer Awareness Forum D. Insight

15. Which year was celebrated In India as Women's Empowerment Year?
A. 1999 B. 1985 C. 2002 D. 1975

16. Find out the correct pair?
C. Sidi Salyad Grill - Bhavnagar B. Northern glance festival — Modhera
C. Polo Festival – Vadnagar D. Shardapeeth – Somnath

SECTION – B

Answer the following questions (Each of 2 Marks) **(Marks - 10)**

17. Write a short note on Mongoloid tribes.

18. Evaluate the 'art of painting' of ancient India.

OR

18. Write a short note : Akik work

19. Explain terminology : Culture

20. Write a short note on the Cathedrals (Churches) of Goa.

OR

20. Write a note on Champaner.

21. Describe the importance of conservation and preservation of our heritage.

22. What is meant by bio-reserve zone ?

23. What is meant by multipurpose ? Which are main multipurpose projects of India ?

24. Write a note on Bio-gas.

25. Jute textile industry is concentrated in West Bengal. Explain the statement.
26. Write a note on electronic industry.

SECTION – C

Answer the following questions (Each of 3 Marks) **(Marks - 18)**

27. Explain the meaning of Mohan-Jo-Daro and write about its roadways.

OR

27. Give information about Nalanda Vidhyapeeth.
28. State the remedies to prevent soil erosion.
29. Differentiate between : Economic and Non-economic activities.
30. Explain the strategy of Sustainable Development.
31. Explain following statements / reasons : Price rise with stability is beneficial for economy.
32. Describe the challenges of Human Development.
33. Write a short note on health.
34."Black money is one of the reason for price rise". Explain.

SECTION – D

Answer the following questions (Each of 4 Marks) **(Marks - 18)**

35. Describe the contribution of agriculture in the economy of India.

OR

35. Write a short note on World Labour Market.
36. Explain - Institutional reform of Agriculture.(pending)
37. Explain - Right to education.(pending)
38.'Paddy' the most Important crop of India. - Explain.
39. Display the following details in the right place with proper symbols on the map of India.
1) Sundarvan Bio Reserve Zone
2) Coconut Producing state
3) Rail route between Dehli to mumbai
4) Mountain Soil

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PAPER – 4 **Marks: 80**

SECTION-A

Match the following (Each of 1 mark) **(Marks - 5)**

Question: Connect the following pairs.

1.	Tiger Project	a) Total 9 species
2.	Elephant project	b) Total 12 species
3.	Valture project	c) A total of 44 fields
		d) Launched in 2000
		e) A total of 26 fields

State whether the following statements are True or False. **(Marks - 5)**

4.Students' education is favorably affected in a terror-hit region.

5.India is the largest democracy in the world.

6. Varahmihir was a great astronomer and mathematician.

Answer the following questions in one word/sentence. **(Marks - 4)**

7. Name the institutions working on agricultural research at national level.

8. Which canal was constructed in 1882?

9. Mention the raw material for manufacturing cement.

Fill in the blanks. **(Marks - 5)**

10. Water is a .....wealth.
(International, state, National)

11. About.....% of water in India is useful for irrigation.
(84%, 38%, 42%)

12. Bengluru is called.....of India.
(Inley valled, Silicon valley, Gulf Valley)

Choose the correct option with from those, given bellow each question. **(Marks - 5)**

13. On which day 'World Yoga Day' is celebrated?
A. 5th September B. 21st April C. 1st May D. 21st June

14. In which language were stone inscriptions engraved?
B. Odiya B. Urdu C. Brahmi D. Hind

15. Which is the literary composition of Maharshi Panini?
C. Chandrayan B. Vikramankdev Chait C. Prithviraj Raso D. Ashtadhyayi

16. Who propounded Brahma Siddhanta' that stated the laws of gravitation?
D. Patanjali B. Grutsamad C. Vatsyayan D. Brahmagupta

SECTION – B

Answer the following questions (Each of 2 Marks) **(Marks - 10)**

17. Explain our constitutional duties for preservation and conservation of Heritage.

OR

17. Give importance of rivers in natural heritage of India.

18. Explain clay work of ancient Indian heritage.

19. Why pillar at Sarnath is considered as one of the best specimen of sculpture in the world?

20. Write about Khajuraho Temples.

21. Write about Bruhadeshwar temple.

OR

21. What did Swami Vivekananda say about religion in the 'World Religious Conference'?

22. Where we would find Tigers in Gujarat?

23. Give information about rain water harvesting.
24. Mention the utility of Copper.
25. Explain following terminologies : Scheduled Castes.
26. Discuss about Caves of Gujarat.

SECTION – C

Answer the following questions (Each of 3 Marks) **(Marks – 18)**

27. Describe Medieval literature.

OR

27. What are the factor of production ? Mention briefly.

28. Any five features of Developing Economy.
29. Explain the benefits of Globalization.
30.Analyze main two measures for controlling price rise.
31. What is meant by Human Development ? Give objective of Human Development.
32. Describe architectural style of Taj Mahal.
33. Write a note on Red Fort of Delhi.
34. Describe the important things for the planning and conservation of resources.

SECTION – D

Answer the following questions (Each of 4 Marks) **(Marks – 18)**

35. Explain – Right to Food.

OR

35. What provisions have been made for the disable?
36. Explain – Reasons of Poverty.
37. Write a short note on: Types of Farming
38. Write short note: Astronomy and Astrology in the Ancient India.
39. Display the following details in the right place with proper symbols on the map of India.
1) Dachigam National park
2) One state producing Jute
3) One state – Iron Industry
4) One state having desert soil.

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STD: 10TH **Social Science**

PAPER – 5 **Marks: 80**

SECTION-A

Match the following (Each of 1 mark) **(Marks – 5)**

Question: Connect the following pairs.

1.	Bhakhra-Nangal	a) Krishna
2.	Hirakud	b) Godavari
3.	Nagarjuna Sagar	c) Narmada
		d) Mahanadi
		e) Sutluj

State whether the following statements are True or False. **(Marks – 3)**

4. Mrinalini Sarabhai is considered to be a well known dancer of Bharatnatyam.

5. There are two types of Manipuri dance, laughter and Tandava.

6. Narasimha Mehta and Sant Namdev have written devotional songs in Gujarati language.

Answer the following questions in one word/sentence. **(Marks – 3)**

7. What is seasonal unemployment?

8. Which two statues are preserved in a museum at Chennai?

9. Name the pioneers of Vastu Shastra

Fill in the blanks. **(Marks – 3)**

10. Poverty is a..... concept.
(Quantitative, qualitative, Cumilative)

11. The expectation of how many years a child can live at the time of birth is known as…....
(Average life, life expectancy, child expectancy)

12. Under Article 17 of the Constitution..... has been abolished.
(touchability, untouchability, communalism)

Choose the correct option with from those, given bellow each question. **(Marks – 5)**

13. The resource available at one or two places in the world ……
A. Solitary resource B. Rare resource C. Common available resource D. Universal resource

14. Which of the following pulses is a rabi(winter) crop?
A.Math B. Mung C. Gram D. Udad

15. Which is the main source of surface water?
A.Rivers B. Lakes C. Ponds D. Rainfall

16. Which state in India has the highest proportion of the poor?
A.Bihar B. Chhattisgarh C. Odisha D. Uttar Pradesh

SECTION – B

Answer the following questions (Each of 2 Marks) **(Marks - 10)**

17. Describe tribal dances of Gujarat.

OR

17. Give information about Garba and Garbi of Gujarat.

18. Review the architecture of Gujarat.

19. Write about the art of pillar inscriptions.

OR

19. Write a brief note on Elephanta caves.

20. Give information about “Kathakali" dance.
21. Which functions are formed by 'Departments of Indian Archaeological Survey'?
22. Give reasons for destruction of wild life.
23. Agriculture in South India is done through ponds. Why?

OR

23. Write a note on solar energy.
24. Describe the classification of industries.
25. Terrorism - A global problem.
26. Write about Garba and Garbi.

SECTION – C

Answer the following questions (Each of 3 Marks) **(Marks - 18)**

27. Write about the art of architecture at Hampi.

OR

27. Write a brief note on the Elephanta caves.
28. Write notes about the wildlife on verge of extinction.
29. Why is the water crisis created In India?
30. Explain any four schemes / programmes undertaken by the government to reduce the unemployment.
31. Which are the vaccines administered on the children under the Universal (Child) Immunization Programme in India?
32. Suggest the ways and means to establish gender equality.
33. Human development is an important component of the strategy of development.
34. Distinguish between: Terrorism and Rebellion

SECTION – D

Answer the following questions (Each of 4 Marks) **(Marks - 18)**

36. Reasons and effects of unemployment.

OR

35. Steps taken by government to control corruption?
36. Explain reasons for (causes of) price rise?
37. Write about the development in in chemistry achieved by ancient India.
38. Describe the provisions regarding the consumer courts.

OR

38. Rights of Consumer.
39. Display the following details in the right place with proper symbols on the map of India.
1)Forest Soil
2)One state produ cing tea
3)One state - chemical fertilizer industry
4)Gir national park

PPR – 1 ANSWERS
SECTION-A

(1) D
(2) A
(3) B
(4) True
(5) False
(6) True
(7) Elephant, Horse, Bullock
(8) The art of making long threads using small pieces of cotton from cotton balls and joining them together.
(9) An oval shaped construction under which the remains of lord Buddha's body were kept in the box.
(10) Negrito
(11) Inlay doy
(12) World yoga day
(13) Samveda
(14) Prithviraj Raso
(15) Natraja
(16) Manda

PPR – 2 ANSWERS
SECTION-A

(1) B
(2) D
(3) A
(4) True
(5) False
(6) True
(7) The hymns recited at time of yagyas, the religious practices and rituals.
(8) Achieving "Molsha" or salvation through "Gyana" "Icarma" and "bhalcti"
(9) Science means systematic knowledge. and Technology means the practical utility of systematic knowledge.
(10) Rigveda
(11) Arya Bhatta
(12) Vishvakarma
(13) C
(14) A
(15) A
(16) D

PPR – 3 ANSWER
SECTION-A

(1) D
(2) C
(3) B
(4) True
(5) True
(6) False
(7) Tantra, Hora, Samhita
(8) Arabian sea, 12 km away from Mumbai
(9) The transportation of land particles from one place to another with the help of moving air and water
(10)Padkhau
(11) Renewable
(12) Nal

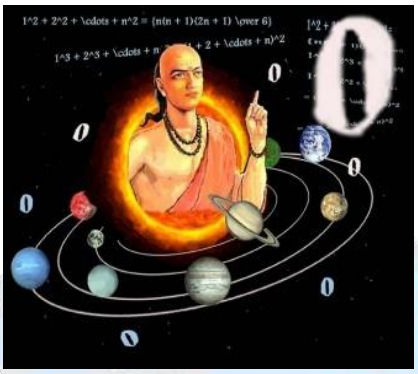
(13) Goa
(14) Insight
(15) 2002
(16) B (Northem dance festival)

PPR – 4 ANSWER
SECTION-A

(1) C
(2) E
(3) A
(4) True
(5) True
(6) True
(7) ICAR
(8) Eastern Yamuna canal
(9) Lime stone, gypsum, bauxite, clay
(10) National
(11) 84%
(12) Silicon valley
(13) 21st June
(14) Brahmi
(15) Ashta dhyayi
(16) Brahmagupta

PPR – 5 ANSWER
SECTION- A

(1) E
(2) D
(3) A
(4) True
(5) True
(6) False
(7) Due to lack of irrigation facilities, irregularity in rainfall and lack of alternative employment farmers have to remain unemployed for 3to5 months in india. This is called seasonal unemployment.
(8) Natraja and Ram the archer
(9) Brahma, Narad, Brahspati, Bhrugu, Vishvakarma
(10) Qualitative
(11) Life expectancy
(12) Untouchability
(13) Solitary
(14) Gram
(15) Rivers
(16) Chhattisgarh



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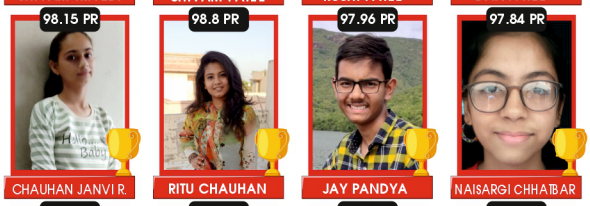

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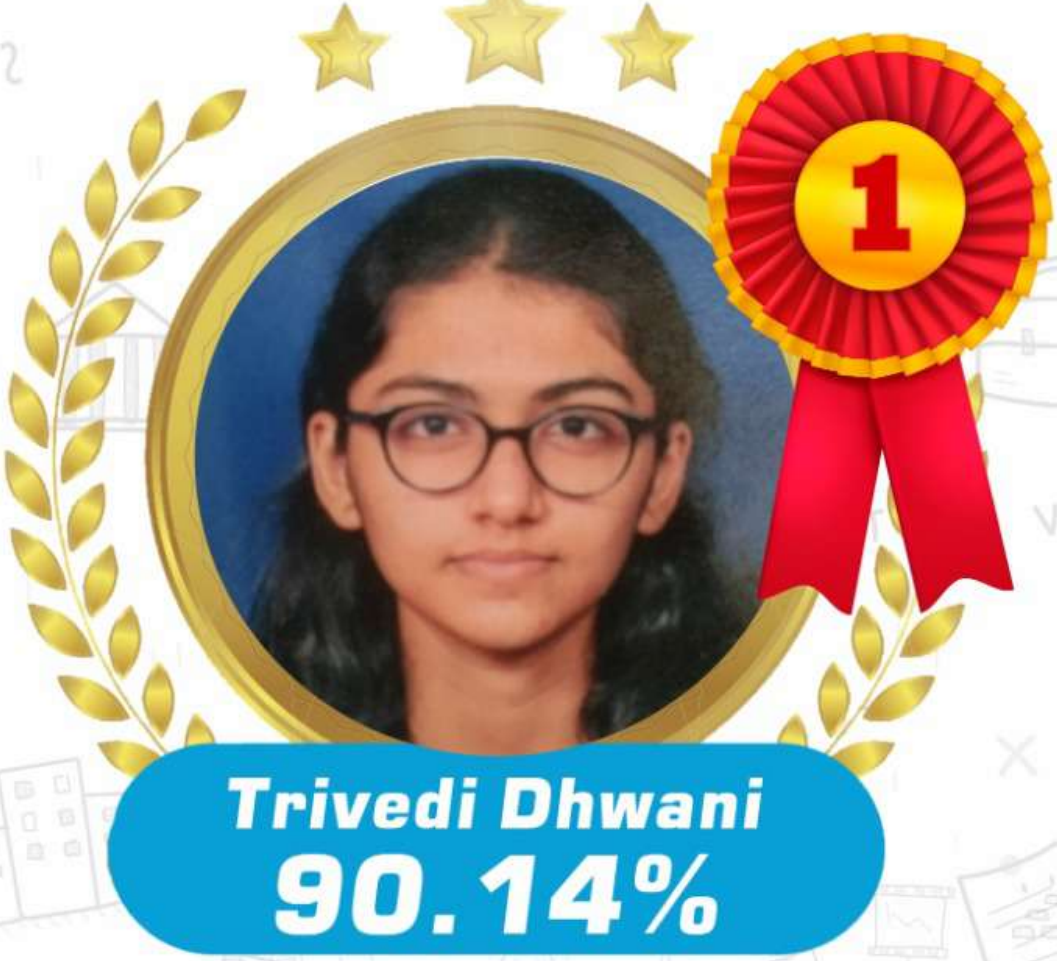

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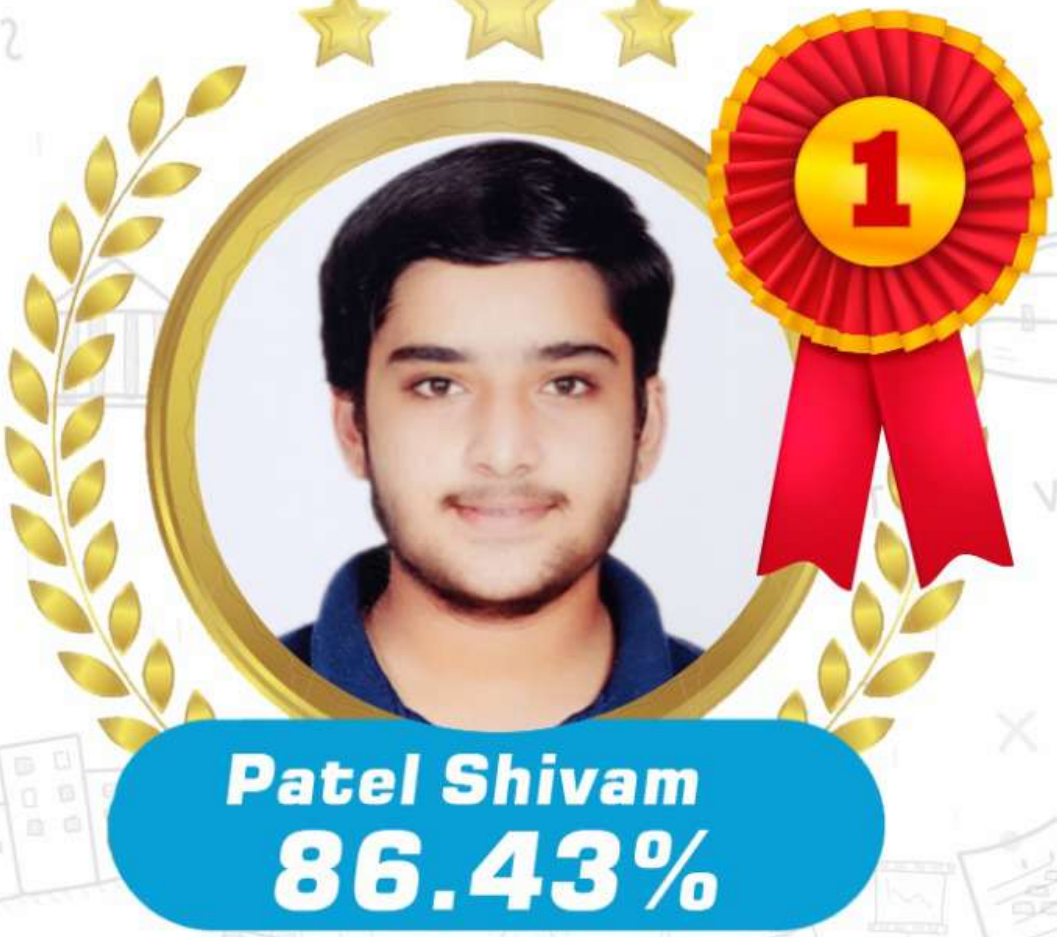

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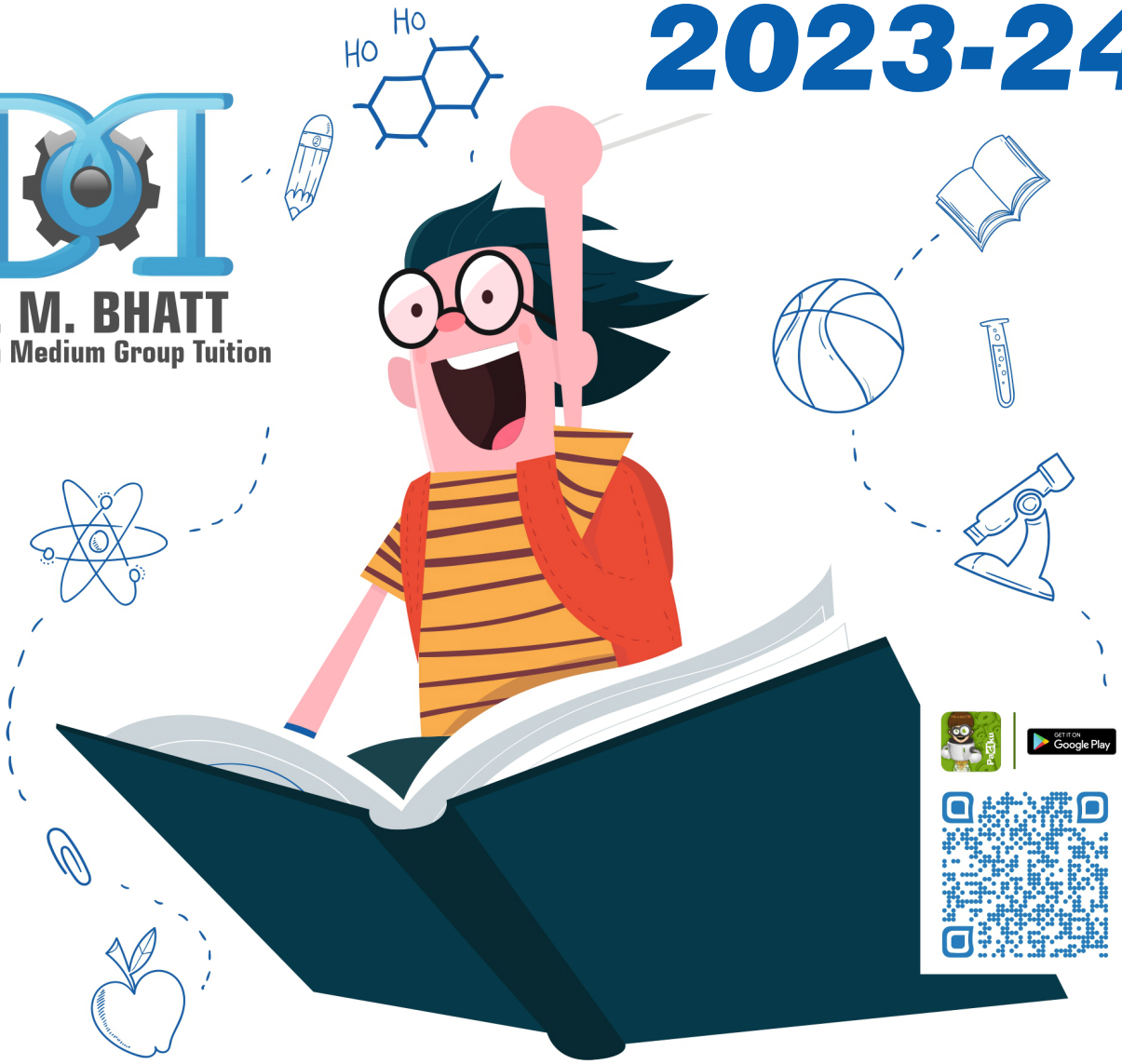

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