9ᵗʰ General Math Guess Paper 2025

These guess papers are prepared according to the new paper pattern 2025 issued by the board and based on SLOs.

Your exam paper will be divided as follows:

- **25% Conceptual**
- **75% Knowledge-Based**
- **25% Analytical + Application-Based**

Most Important Short Questions

(Question No 2) (Chapters 1, 2, 4 and 5)

1. Express $\frac{4}{5} \div \frac{3}{4}$ in its simplest form

2. Find the ratio of Rs 160 per meter to Rs 150 per meter

3. Calculate Ushar at a rate of 10% on an amount of Rs 1,00,000

4. Selling price of 12 articles is equal to the cost price of 15 articles. Find the profit percentage

5. Find marked price when SP = Rs 2400, Discount = 4%

6. Express 2.64 as a percentage

7. Express $\frac{2}{3} \div \frac{1}{6}$ in its simplest form

8. Find the ratio between 36 rupees per dozen to 6 rupees each

9. Calculate Ushr on wheat crop amounting Rs. 3,50,000, produced by artificial resources

10. Find the CP, when SP = Rs. 851 and Loss = 8%

11. Find the SP, when MP = Rs. 2760 and Discount = 5%

12. Express the given Decimal as Percentage: 1.72

If 82% of the houses have a Television, what percentage do not have?

Simplify the Ratio 8:2 in the Simplest Form.

Find the Ratio of 6 Rupees each to 72 Rupees per dozen.

Calculate the amount of Zakat on an amount of Rs 5,00,000.

Find the Selling Price when MP = Rs. 2760, Discount = 5%.

The Selling Price of 12 Articles is equal to the Cost Price of 15 Articles, find Profit Percentage.

Find the Ratio of First Quantity to the Second in its Lowest Form: Rs.150 to Rs.275.

A Table costs a Carpenter Rs. 720 to make. He sells it for Rs. 920. What is the percentage of the profit?

Calculate Zakat on gold amounting to Rs. 11,10,000.

Najeeb left a wealth amounting to Rs. 4,00,000. He left behind a widow, while they did not have any child. Find the share of Najeeb's Widow.

Find the Sale Price when CP Rs. 950, Profit = 10%.

Find the Selling Price when MP = Rs. 728, Discount = 6%.

Express 0.22 as a percentage.

Express percentage as decimal, give your answer correct to 3 decimal places: 48 2352\frac{3}{5}%.

Define antecedent and consequent.

Calculate Zakat on silver amounting to Rs 3,00,000.
Najeeb left a wealth amounting to Rs 4,00,000. He left behind a widow, while they did not have any child. Find the share of Najeeb's widow.
Find CP, when SP = Rs 100 and Profit = 33%.
Find marked price when SP = Rs 858 and Discount = 12%.
The selling price of 12 articles is equal to the cost price of 15 articles. Find profit percentage.
If a : b = 2 : 3, find the ratio of 6a : 2b.
Find the value of x in the proportion 20 : 50 :: 8 : x.
Calculate Zakat on gold amounting to Rs 11,10,00,000.
Calculate Ushr on a rice crop produced by natural resources amounting to Rs 6,00,000.
If a television is purchased for Rs 6590 and sold for Rs 6850, find the profit percentage.
Find SP, when CP = Rs 1540, Loss = 5%.
Express fraction 4176\frac{41}{76}7641 as a percentage. Give answer correct to one decimal place.
Calculate Zakat on gold amounting to Rs 11,10,000.
Calculate Ushr on a rice crop amounting to Rs 490,000 produced by artificial resources.

If a deceased left a property of worth Rs 15,00,000, work out the property, if he left behind a widow.

Find SP, when CP = Rs 1540 and Loss = 5%.

Find the marked price, when SP = Rs. 858, Discount = 12%.

Find X in the proportion x : 3 :: 60 : 15.

Express 92% percentage as decimal, giving answer correct to 3 places of decimal.

Calculate Ushr on a wheat crop amounting to Rs. 3,50,000 produced by artificial resources.

Find the SP, when CP = Rs. 12,600, loss = 5%.

Find the MP, when SP = Rs. 858, discount = 12%.

Express 75% as fractions in their simplest form.

If 82% of the houses have a television, what percentage of the houses do not have television?

Find the ratio of Rs. 160 per meter to Rs. 150 per meter.

Calculate Zakat on gold amounting to Rs. 11,10,000.

Find the SP, when CP = Rs. 950, Profit = 10%.

Find the marked price, when SP = Rs. 515.20, Discount = 8%.

Find the value of x in the proportion x : 3 :: 60 : 15.

If a : b = 2 : 3, then find the ratio of 6a : 5b.

Calculate Ushr on wheat crop amounting to Rs. 350,000 produced by artificial resources.

Najeeb left a wealth amounting to Rs. 400,000. He left behind a widow.

A trader earns a profit of 20% by selling a chair for Rs. 2700. Find the cost price of the chair.

Find the selling price, when MP = Rs. 395.75, Discount = 8%.

Express 2.25 as a percentage.

If of the students in a school have been away for a 5-day holiday, then how many in every hundred have been on holiday?

Calculate Zakat on gold amounting to Rs. 11,10,000.

Calculate Ushr on a rice crop produced by natural resources amounting to Rs. 6,00,000.

Find the SP, when CP = Rs. 1540, Loss = 5%.

Find the marked price when SP = Rs. 515.20, Discount = 8%.

Define business partnership.

Express the following decimal as a percentage: 0.845.

If 84% of a book consists of 420 pages, find the total number of pages in the book.

If a : b = 2 : 3, then find the ratio of 6a : 5b.

Calculate Zakat on silver amounting to Rs. 3,00,000.

Find the selling price, when M.P. = Rs. 395.75, Discount = 8%.

Find the marked price when SP = Rs. 515.20, Discount = 8%.

(Question No 3) (Chapters 3, 6 and 7)

1. If we invest Rs 1000 in a savings account @ 10% profit per year, how much would we have in one year?

2. Simplify $x^3 y^2 \div x^4 y^{3/5}$.

3. Evaluate $\log x = 4.4236$, find x.

4. Evaluate $\log 200 + \log 5$.

5. Simplify without using a logarithm table: $\log 57.86 + \log 4.385 - \log 2.391 - \log 3.072$.

6. The annual income of a flat is Rs 14,00,000. Find the tax payable at a rate of 16%.

7. What sum would have to be borrowed if Rs. 174 is marked up at 5% in 4 years?

8. Simplify $\sqrt[5]{118} \div \sqrt[5]{2}$.

9. Solve $(3^2)^5 \div (9^3 \times 27^{-1})$.

10. Simplify $a^{2/3} b^{3/4} \times a^{1/3} b^{3/4}$.

11. Write down the value of $\log 52.13$.

12. If the simple profit on Rs. 640 for 12 years is Rs. 384, find the rate of profit.

13. Convert 5,00,000 Pak Rupees to Euros. (1 Euro = Rs. 112.4088).

14. A sales tax of 16% is imposed on televisions. If the marked price of the television is Rs. 18,000, calculate the total amount one has to pay to purchase it.

15. If the annual value of a flat is Rs. 6,00,000, find the tax payable at a rate of 15%.

16. Simplify and write your answer in scientific notation:

$$\frac{0.96 \times 10^7}{2 \times 10^4}$$

17. Solve:

$$2\log 5 + \log 8 - \frac{1}{2}\log 4$$

18. Solve $\log_3(x+1) = 2$.

19. Convert 250 US Dollars into Pounds when the Pound Sterling rate is 129.7968 Dollar.

20. What sum would be borrowed if Rs. 174 is marked up at 5% in 4 years?

21. Simplify:

$$\frac{5a^{2/3}b^{3/5}}{20a^{1/5}b^{1/4}}$$

22. The radius of Earth is 6400 km. Convert it into meters and write the solution in scientific notation.

23. Find the geometric mean (G.M.) between $2x^2$ and $8y^4$.

24. Find the arithmetic mean (A.M.) between 7 and -3.

25. Evaluate:

$$\left(\frac{2}{5}\right)^{-1} \div \left(\frac{4}{125}\right)^{-2} \times 625$$

26. If the simple profit on Rs. 640 for 12 years is Rs. 384, find the rate of profit.

27. If the annual value of a flat is Rs. 6,00,000, find the tax payable at a rate of 15%.

28. Simplify $\sqrt{2} \div (32)^{1/9}$.

29. Simplify:

$$\frac{x^2 x x^5 x^6}{x^2 x^4 x x}$$

30. Convert 4.5×10^5 centimeters into meters and write the solution.

31. Convert 5,00,000 Pak Rupees into Euros if 1 Euro = Rs. 112.4088.

32. Find the 16% sales tax on a computer if the price of a computer is Rs. 34,800.

33. Simplify:

$$(a^3b^2)^{14} \times (a^{12}b)^{34}$$

34. Simplify:

$$\sqrt[2]{\sqrt{27a^9}}$$

35. Simplify and write your answer in scientific notation:

$$\frac{2.61 \times 4 \times 10^8}{10^3}$$

36. Solve:

$$\log 5 + \log 20 + \log 24 + \log 25 - \log 60$$

37. How much time will a sum of Rs. 9,400 take to become Rs. 10,951 if invested at $3\frac{2}{3}\%$ per annum?

38. The annual income of a flat is Rs. 14,00,000. Find the tax payable at 16%.

39. Simplify:

$$\sqrt{27} \times \sqrt{81}$$

40. Simplify:

$$5x^{1/3} \times 2x^{1/5}$$

41. The radius of the Earth is 6400 km. Convert it into meters and write the solution in scientific notation.

42. Solve:

$$\log(x + 3) = 2$$

43. Simplify:

$$\frac{\sqrt{81}}{\sqrt{27}}$$

44. Evaluate:

$$\log 200 + \log 5$$

45. Simplify:

$$6x^{3/7} \times \frac{1}{3}x^{1/3}y^{2/5}$$

46. Write the first two terms:

$$a_n = n + 3$$

47. If $a_n - 3 = 2n - 12$, then find a_n.

48. Find the compound profit on Rs. 54,000 for one year at 12% per annum.

49. The annual value of a flat is Rs. 14,00,000. Find the property tax payable at a rate of 16%.

50. The radius of the Earth is 6400 km. Convert it into meters and write the solution in scientific notation.

51. If log x = 0.1597, then find the value of x.

52. Find the value of:

$$\log 22.13 + \log 0.354 + \log 7 - \log 3$$

53. Simplify:

$$(x^5 y^3)^{1/2} (x^7 x^3)^{-1/3}$$

54. Simplify and write the answer in exponential form:

$$\sqrt[4]{\frac{x^5 y^6}{z^2}}$$

55. Write in decimal form:

$$0.525 \times 10^7$$

56. If log x = 0.5019, find x.

57. Evaluate:

$$\log 5 + \log 20 + \log 24 + \log 25 - \log 60$$

58. Find the arithmetic mean (A.M) between $\sqrt{7}$ and $3\sqrt{7}$.

59. Find the 11th term of the geometric progression (G.P) 2, 6, 18.

60. Convert 290 Saudi Riyal into Pakistani Rupees if the rate is 1 Riyal = 58.82 Rupees.

61. Simplify and give the answer in exponent form:

$$\sqrt[3]{8a^9}$$

62. Simplify and express the answer with positive indices:

$$\left(\frac{a^{-1/2}}{4c^2}\right)^{-2}$$

63. Evaluate:

$$2\log 3 + 3\log 4 + 4\log 5 - 2\log 6$$

64. What sum would be borrowed in Rs. 174 as markup at 5% in 4 years?

(Question No 4) (Chapters 8, 9 and 10)

Find EUF if E={1,2,3,5,7},F={2,4,6,8}$E = \{1,2,3,5,7\}$, $F = \{2,4,6,8\}$.

Find B×A$B \times A$ if A={3,5,6},B={1,3}$A = \{3,5,6\}$, $B = \{1,3\}$.

Represent the point F(−3,7)$F(-3,7)$ on a graph.

Find the range of data: 10,18,9,6,22.

Find the mode of data: 6,2,4,3,4,5,4,5.

Find A∩B$A \cap B$ if A={1,2,3,4,6,12}$A = \{1,2,3,4,6,12\}$, B={1,2,3,4,6,9,18}$B = \{1,2,3,4,6,9,18\}$.

Find B×A$B \times A$ if A={2,3,4}$A = \{2,3,4\}$, B={1,3}$B = \{1,3\}$.

Represent the point A(2,−4)$A(2,-4)$ on a graph.

Find the mean of the data: 184,191,172,168,187,189,196,186,193,195.

Find the range of data: 6,8,13,11,18,27,23.

Find the arithmetic mean (A.M) between -3 and 7.

Find the geometric mean (G.M) between -2 and -8.

13. Represent the point F(-3,7) on graph paper.

14. Find the range of data: 10,18,9,6,22.

15. Find the mode of data: 6,2,4,3,4,3,4,5,4,5.

16. If $a_n = n + 3$, then find a_1 and a_2.

17. If 3 and 6 are two arithmetic means (A.Ms) between a and b, find a and b.

18. If $A = \{a, b, c\}$ and $B = \{a, e, i, o, u\}$, then find $A \cup B$.

19. If $C = \{1, 2\}$, then find $C \times C$.

20. Represent the point A(-3,7) on graph paper.

21. Find the arithmetic mean (A.M) for the given data: 6,8,10,14,13,12.

22. If $a_n = \frac{n+1}{2n+5}$, then find a_1 and a_2.

23. Find the 7th term of the geometric progression (G.P): 2,8,32,...

24. If $A = \{1, 4, 7, 8\}$, $B = \{4, 6, 8, 9\}$, and $C = \{3, 4, 5, 7\}$, then find $(A \cup B) \cap C$.

25. Represent the point F(-3,7) on graph paper.

26. Find the range of data: 10,18,9,6,22.

27. Find the arithmetic mean (A.M) between $x^2 - x + 1$ and $x^2 + x + 1$.

28. Find the 5th term of an arithmetic progression (A.P): 4, -12, 36, ...

29. If the arithmetic mean (A.M) between a and 16 is 24, find the value of a.

30. If $A = \{2, 3, 4, 8\}$ and $B = \{1, 3\}$, then find $A \times B$ and $B \times A$.

31. If $A = \{1, 4, 7, 8\}$ and $C = \{3, 4, 5, 7\}$, then find $A \cap C$.

32. Represent the point F(3) on graph paper.

34. Find the sum of the first 10 terms of the arithmetic sequence: 3, 7, 11, 15, ...

35. If the simple interest on Rs. 7500 for 4 years is Rs. 3000, find the rate of interest per annum.

36. Solve for x: $2x + 5 = 3x - 7$.

37. Find the least common multiple (LCM) of 18, 24, and 36.

38. Convert 500 miles into kilometers if 1 mile = 1.609 km.

39. If $A = \{2, 4, 6, 8, 10\}$ and $B = \{3, 6, 9, 12\}$, then find $A \cap B$.

40. Calculate the compound interest on Rs. 10,000 at 5% per annum for 2 years.

41. If $x^2 - 5x + 6 = 0$, find the roots of the equation.

42. Find the perimeter of a rectangle with length 15 cm and width 8 cm.

43. Evaluate $\log_2 16$.

44. Find the probability of getting a head when tossing a fair coin.

45. If the area of a square is 64 cm², find its perimeter.

46. Solve $3x - 4 < 5$ and represent the solution on a number line.

47. Convert 75% into a fraction in its simplest form.

48. Find the value of $3! + 4!$.

49. If $A = \{1, 2, 3, 4, 5\}$ and $B = \{3, 4, 5, 6, 7\}$, then find $A \cup B$.

50. A car travels 240 km in 4 hours. Find its speed in km/h.

51. Find the median of the data set: 12, 15, 14, 10, 18, 20, 25.

52. Evaluate $5^3 \div 5^2$.

53. Convert 0.25 into a percentage.

54. Find the surface area of a cube with side length 6 cm.

55. Find the greatest common divisor (GCD) of 48 and 72.

56. Solve for x: $x^2 = 49$.

57. Find the simple interest on Rs. 5000 at 6% per annum for 3 years.

58. If a number is increased by 25%, it becomes 150. Find the original number.

59. Convert 0.75 into a decimal.

60. Find the circumference of a circle with radius 7 cm.

Most Important Short Questions

1   Define ratio

2   Define inheritance

3   Define cost price

4   What is meant by direct proportion?

5   Define compound proportion

6   What is meant by profit?

7   Define Usher

8   Differentiate between Profit and Loss

9   Define Percentage

10   Define Zakat

11   Define Profit

12   What is meant by Ushr?

13   What is meant by down payment?

14   What is meant by excise duty?

15   What is meant by direct tax?

16   Define current account

17   Define property tax

18   Define pay order

19   Define bank draft

20   Define Mark Up

21   Define Direct Tax

22   What is meant by Income Tax?

23   Define Common Logarithm

24   What is meant by current account?

25 Define discount

26 What is meant by Property Tax?

27 Define inverse proportion

28 Write down a few indirect taxes

29 Define life insurance

30 Convert in decimal form

31 Define cost price

32 Define saving account

33 What is meant by rate of zakat?

34 What is income tax?

35 Define loss. Write its formula

36 Define proportion

37 What is meant by Zakat?

38 Define personal income

39 Define inheritance

40 Define excise duty

41 Define down payment

42 Define arithmetic mean

43 Define sales price

44 Define premium

45 Write two characteristics of arithmetic mean

46 Define range

47 Define complement of a set

48 Define rental numbers and give an example

49 Define binary relation

50 Define median

51 Define mode

52 Define ordered pairs

53 Write the commutative property of union and intersection.

54 What is meant by cartesian plane?

55 Define Ordered Pair.

56 Define frequency.

57 Define Arithmetic sequence.

58 Define histogram.

59 Define into function.

60 Define geometric mean.

61 Define intersection of sets.

62 State associative property of intersection of sets.

63 Define moving average.

64 Define overlapping sets.

65 Define variance.

66 Define sequence and give one example.

67 Define set.