

10	Simplify. $\frac{x}{x-a} + \frac{a}{a-x}$
11	If $n(\xi) = 74$, $n(A) = 45$, $n(B) = 38$ and $n(A \cup B) = 81$ find $n(A \cap B)$.
12	Write the gradient and the intercept of the line $y = 4x - 3$
13	The price of a dozen of exercise books is Rs. x and 5 pens is Rs. y . Write the price of a pen and 5 exercise books in terms of x and y .
14	If $y = \frac{3x}{\sqrt{a}}$ find the value of "a" when $x = 2$ and $y = 1$.
15	If $10^{1.5706} = 37.16$ find the value of antilog 0.5706
16	When a consumer buys goods worth is Rs. 3250 from a shop. 15% percentage of vat should be paid. What is the total amount that should be paid for it ?
17	In the following diagram, find the angles denoted by simple letters a and b.
18	If $2y - 3x = 4$, $3x + 1 = 3$ find the value of y .
19	By examining the function $y = x^2 - 5$ and find the coordinate of the turning point.
20	The ratio of the amounts of money P and Q have is 3 : 2 and the ratio of the amounts of money Q and R have is 3 : 2. Find the ratio of the amount of money P, Q and R have.

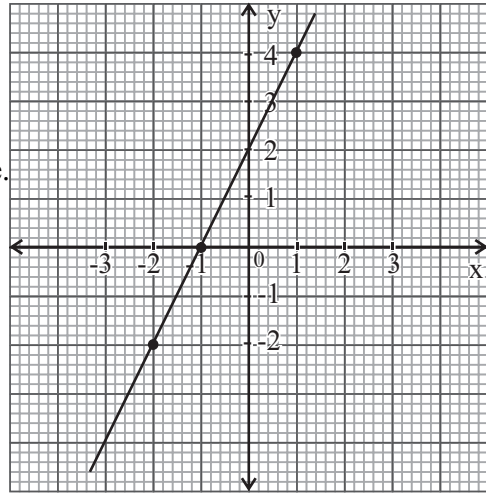
(2 x 20 = 40)

Paper - II

- Answer first question and four other questions. 16 marks in first question and 11 marks in each other questions.

01 (a) A graph of an equation of the form $y = mx + c$ is shown in the figure below.

- What is the value of c ?
- What is the value of m ?
- Write the equation of the straight line.



(b) (i) Prepare a table of values with $-3 \leq x \leq +3$ to draw the graph of $y = -x^2 + 2$

- Draw the graph $y = -x^2 + 2$
- Using the graph

- Write the equation of the axis of symmetry of the graph.
- Write the coordinate of the turning point.
- Find the maximum or minimum value of the function.
- Find the roots of $-x^2 + 2 = 0$

02 (a) Out of 200 grade 11 students in a certain school 160 have passed Mathematics. 150 have passed Science and 10 have not passed any of the two subjects.

- Represent the above data in a venn diagram.
- Find the number of students

- who have passed both Mathematics and Science.
- who have passed only Mathematics.
- who have passed only Science.

(b) If a cycle traveled with a speed of 5ms^{-1} in the first 10 s and with a 10ms^{-1} in the next 40 s.

- Find the
- distance travelled in the first 10 s.
 - distance travelled in the next 40 s.
 - total distance travelled.
 - total time taken.
 - average speed.

- 03 (a) Simplify using the laws of logarithms and find the value of x .
 $\log_2 2 + \log_2 (x + 1) = \log_2 4 + \log_2 3$
- (b) Simplify using the logarithms table. $\frac{2.38 \times 75.43}{13.85}$
- 04 (a) Solve the equation. $\frac{x + 5}{3} + \frac{x + 2}{2} = 11$
- (b) The sum of two numbers is equal to five times of their difference. Three times the larger number is greater than four times the smaller number by one.
- (i) Taking the large number as x and smaller number as y and form two equations which include x and y .
- (ii) Solve the equations and find the two numbers.
- 05 In the parallelogram ABCD. The bisector of the angle \hat{DAB} meets DC at y and the bisector of the angle \hat{DCB} meets AB at x .
- (i) Denote these data in a diagram.
- (ii) Prove that (a) $Dy = Bx$
 (b) $Ay = Cx$
 (c) $AxCy$ is a parallelogram.
 (d) AB is produced to E such that $AB = BE$ prove that BDCE is a parallelogram.
- 06 (i) Factorise $8x^2 - 42x - 11$
- (ii) Solve the equation $8x^2 - 42x - 11 = 0$
- (iii) Simplify $\frac{5}{4x + 3} + \frac{3}{2x - 1} - \frac{1}{2}$
- 07 (a) Chandrasiri obtains a loan of Rs. 240000 under 15% simple interest per year.
- (i) Calculate the interest he has to pay for the year.
- (ii) Calculate the interest he has to pay for three years.
- (iii) What is the amount he has to pay to get released from the loan after three years.
- (b) Nimali pays Rs. 4500 for a quarter as the assessment tax for his property to the Pradesiya Sabha. If the assessed value of the property is Rs. 1200000
- (i) Find the amount of assessment tax to be paid for a year.
- (ii) Find the percentage of the assessment rate charged by this Pradesiya Sabha.

2025

1ம் தவணை வகுப்புகள்

தரம் 6 முதல் 11 வரையான
மாணவர்களிற்கான தமிழ் மற்றும் ஆங்கில
மொழிமூல வகுப்புக்கள் ஆரம்பமாகவுள்ளன.

ஆரம்பம் 01.01.2025



இலங்கையின் எப்பாகத்திலிருந்தும்
Zoom app மூலம் எமது வகுப்புகளில்
இணைந்து கொள்ள முடியும்.

அனைத்துப் பாடங்களும் ஒரே கல்வி நிறுவனத்தின் கீழ்...



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