


RAN-2403000503063003
S.Y. B. Sc. (Sem.-III) Examination March - 2026
Fundamental of Vedic Mathematics - III (MH-SEC-303)
Time: 1 Hour]
[Total Marks: 25
સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book
- (2) All questions are compulsory.
- (3) Figures to the right indicate marks of the questions.
- (4) Follow usual notations and conventions.

Seat No.:

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Student's Signature

Q.1. Answer any FIVE from the following questions.
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1. Write formula for the general solution of an equation $\frac{m}{x+a} + \frac{m}{x+b} = 0$
2. Solve : $\frac{x}{2} + 3 = 4$.
3. Find $\frac{1}{5 \times 9} + \frac{1}{9 \times 13}$
4. Use the Samuccaya Sutra to solve: $\frac{3x}{x+1} + \frac{3x}{x+2} = 0$
5. What is the discriminant of quadratic expression $ax^2 + bx + c = 0$.
6. Solve $\begin{cases} x+y=22 \\ x-y=4 \end{cases}$

Q.2. Attempt any TWO.
10

1. Solve the Quadratic equation:
 - (i) $2x^2 + 8x + 1 = 0$,
 - (ii) $x^2 - 2x - 4 = 0$
2. Solve:
 - (i) $\begin{cases} 7x - 4y = 48 \\ 4x - 7y = 18 \end{cases}$
 - (ii) $\begin{cases} x^2 + y^2 = 9 \\ 2x^2 + 3y^2 = 27 \end{cases}$
3. Solve : $\frac{3}{3x-1} + \frac{6}{2x+3} = \frac{4}{x+2}$

Q.3. Attempt any TWO.
10

1. Solve :
 - (i) $(x+1)(x+6)(x+8) = (x+3)(x+5)(x+7)$,
 - (ii) $\frac{x^2+5x+1}{x^2-x+3} = \frac{x+5}{x-1}$

2. (i) Find the sum of the 1st three terms of the series:

$$\frac{1}{(x+7)(x+8)} + \frac{2}{(x+8)(x+10)} + \frac{14}{(x+10)(x+24)} + \dots$$

- (ii) Find the sum of the 1st four terms of the series:

$$\frac{1}{(x+2)(3x+1)} + \frac{1}{(3x+1)(5x+0)} + \frac{1}{(5x+0)(7x-1)} + \dots$$

3. Factorize : $2x^2 + 6y^2 + 3z^2 + 7xy + 11yz + 7zx$.
