

Roll No.

Total Pages : 3

323104

December 2023

B.Sc. (H) Mathematics/B.Sc. (Mathematics and Computing)

- Ist SEMESTER

Calculations Skills with Vedic Mathematics

(SEC23-M-101)

Time : 3 Hours]

[Max. Marks : 75


Instructions :

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
2. *Answer any four questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART-A

1. (a) List the name of three sutras of Vedic Mathematics. (1.5)
- (b) Add $74+69$. (1.5)
- (c) Subtract $10000 - 462$. (1.5)
- (d) Find the duplex of 478. (1.5)

323104/80/111/296

 [P.T.O.]

- (e) Find the square of 85. (1.5)
 (f) Multiply 103 by 97. (1.5)
 (g) Multiply 1111 by 1111. (1.5)
 (h) Divide 22 by 8. (1.5)
 (i) Find the LCM of 12, 24 and 48. (1.5)
 (j) Find the HCF of 4, 12 and 16. (1.5)

PART-B

2. (a) Add $486 + 654 + 987$. (5)
 (b) Subtract $459876 - 389924$. (5)
 (c) Multiply 95 by 91 using Nikhilam Navatascaramam Dasatah. (5)
3. (a) Add $1\frac{3}{4} + 2\frac{1}{3}$. (5)
 (b) Subtract $5428 - 3765$. (5)
 (c) Multiply 96 by 98. (5)
4. (a) Multiply 147 by 99. (5)
 (b) Divide 10025 by 88. (5)
 (c) Find the LCM of 7, 35, 40 and 70. (5)

5. (a) Divide 11199171 by 99979. (5)
 (b) Find the square of 709. (5)
 (c) Find the HCF of 145 and 232. (5)
6. (a) Find the square of 8254 using Duplex method (Dwanda Yoga). (5)
 (b) Find the square root of 5184. (5)
 (c) Multiply 566 by 281. (5)
7. (a) Find the square of 45612. (5)
 (b) Find the square root of 20736 using Duplex method. (5)
 (c) Divide 387 by 32. (5)