

*Note: (a) All questions are compulsory.*

*(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems*

*(c) Make suitable assumptions, wherever necessary.*

*(d) Use of Calculator is NOT allowed.*

Q.No	Question	CO	Marks
Q1	Write short notes (max 50 words) a) Vedas b) Puranas c) Dashopnishad	1	1x3= 3
Q2	Perform the following subtractions: (a) 25454 – 24532 ; (c) 516321 – 324587; (b) (c) 37425 – 18415 (d) 85416521 - 65686729	3	0.5x4 = 2
Q3	Perform the following multiplications: (a) 958749 x 11; (b); 458205 x 12 (c) 45 x 99; (d) 5640792 x 9999999 (e) 605 x 9999; (f) 7851 x 999999; (g) 752 x 99; (h) 962157 x 999 (i) 998 x 988; (j) 1020 x 1008; (k) 1009 x 996; (l) 1018 x 991	3	0.5x12 = 6
Q4	Solve the following: (a) 256 x 386; (b) 7468 x 6524	3	1x2 = 2
Q5	Solve the following algebraic equations: (a) (6x-4y) (8x+7y); (b) (a-5b) (25a-6b); (c) (3x <sup>2</sup> +6x-5) (8x <sup>2</sup> -2x+6); (d) (5x <sup>2</sup> -8x+8) (3x+6) (e) (6a-8) (3x+7y); (f) (3x <sup>2</sup> +5x-8) (2y <sup>2</sup> +3y-6)	5	0.5x6 = 3
Q6	Find out the divisibility of the following cases and show the steps of calculation: (a) Is 33377266 divisible by 13? (b) Is 48782158 divisible by 19? (c) Is 743680 divisible by 7? (d) Is 612276 divisible by 37?	5	1x4 = 4

<b>Q7</b>	Perform the following divisions and your answer in mixed fraction: (a) 25748 / 93;                      (b) 5685795 / 997; (c) 98574529 / 9988;                (d) 6587542 / 115	<b>5</b>	<b>1x4 = 4</b>
<b>Q8</b>	Find out the squares of the following numbers: (a) 1008; (b) 10012; (c) 9996; (d) 99987; (e) 58; (f) 367	<b>5</b>	<b>0.5x6 = 3</b>
<b>Q9</b>	Calculate the cubes of the following numbers: (a) 136; (b) 10016; (c) 97; (d) 9993	<b>5</b>	<b>0.5x4 = 2</b>
<b>Q10</b>	Calculate square root of: (i) Perfect squares – (a) 23716; (b) 11881 (ii) Imperfect squares – (a) 3150; (b) 17440	<b>5</b>	<b>1x4 = 4</b>
<b>Q11</b>	Calculate cube root of the following perfect cubes: (a) 175616; (b) 857375; (c) 1030301; (d) 195112	<b>5</b>	<b>0.5x4 = 2</b>

JUTESTS3 EXAMINATION