ST. JOSEPH'S EVENING COLLEGE (AUTONOMOUS)
IV SEMESTER BCA EXAMINATIONS APRIL 2018

QUANTITATIVE APTITUDE

Duration: 2.5 Hours **Max. Marks: 70**

SECTION - A

I) Answer any SIX of the following questions. (6x3=18)

1. What is number? List any four different kinds of numbers.
2. Write four laws of indices.
3. If $\sqrt{2}=1.4142$, Find the value of $\sqrt{2}/(2+\sqrt{2})$.
4. Worker A takes 8hrs to do a job. B takes 10hrs to do the same job. How long should it take both A and B working together but independently to do the same job.
5. Give the formula for speed, time and distance.
6. Find the mean proportional between 0.08 and 0.18.
7. Express 0.004% in decimal.
8. Which is the greatest in 16(2/3) %, 1(2/3) % and 0.17?

SECTION – B

II) Answer any FOUR of the following questions. (4x8=32)

9. Arrange the functions 17/18, 31/36, 43/45, 59/60 in ascending order.
10. Evaluate $\sqrt{6084}$ by factorization method.
11. A can do a piece of work in 7 days of 9hrs each and B can do it in 6days of 7hrs each. How long will they take to do it working together 8(2/5) hour a day.
12. At what time between 2 and 3^{o}clock will the hands of a clock are together.
13. When a producer allows 36% commission on the detail price of his product, he exams a profit of 8.8%, what should be his profit percent if the commission is reduced by 24%?
14. IF $2^{x-1}+2^{x+1}=1280$, then find the value of x.

SECTION - C

III) Answer any TWO of the following questions. (2x10=20)

15. i) Evaluate
    a) $(0.00032)^{3/3}$
    b) $(256)^{016} * (16)^{0.18}$ (4)

    ii) A bag contains 6 white and 4 black balls. 2 balls are drawn at random. Find the probability that they are of the same color. (4)

    iii) If A: B = 5:9 and B: C=4:7 find A: B: C. (2)

16. a) The banker discount on 1650 Rs due a certain time hence is 165Rs, find the banker gain. (5)
    b) Insert missing number 5, 10, 13, 26, 29, 58, 61…… (5)
17. a) The height of a pole is $2\sqrt{3}$ meters and the length of its shadow is 2 meters end, find the angle of elevation of the sum. (5)

    b) The sum of how many terms of the series 6+12+18+24+……..is 1800? (5)