Quantitative Part-III

1.Muslim High School has 840 students, and the ratio of the number of students taking Spanish to the number not taking Spanish is 4:3. How many of the students take Spanish?

A. 280
B. 360
C. 480
D. 560
E. 630

2. Of the 200 seniors at Millat High School, exactly 40 are in the band. 60 are in the orchestra, and 10 are in both. How many students are in neither the band nor the orchestra?

A. 130
B. 110
C. 100
D. 140
E. 160

3. Consider the sequence 1, 2, 3, 1, 2, 3, 1, 2, 3,…….. What is the sum of the first 100 terms?

A. 100
B. 180
C. 198
D. 199
E. 200

4. If 2x - 1 = 9 then what is 10x - 5?

A. 35
B. 45
C. 55
D. 75
E. 95

5. A googol is the number that is written as 1 followed by 100 zeros. If g represents a googol, how many digits are there in g^2.

A. 102
B. 103

C. 199
D. 201
E. 202

6. When a gymnast competes at the Olympics, each of six judges awards a score between 0 and 10. The highest and lowest scores are discarded, and the gymnast's final mark is the average (arithmetic mean) of the remaining scores. What would be a gymnast's mark if the judges' scores were 9.6, 9.4, 9.5, 9.7, 9.2, and 9.6?

A. 9.5
B. 9.525
C. 9.55
D. 9.575
E. 9.6

7. Successive discounts of 20% and 15% are equal to a single discount of

A. 30%
B. 32%
C. 34%
D. 35%
E. 36%

8. It takes Eric 20 minutes to inspect a car. Jane only needs 18 minutes to inspect a car. If they both start inspecting cars at 8:00 a.m., what is the first time they will finish inspecting a car at the same time?

A. 9:30 A.M.
B. 9:42 A.M.

C. 10:00 A.M.
D. **11:00 A.M**.
E. 2:00 P.M.

9. For all numbers s and t, the operation * is defined by S * T = (S - 1)(T + 1), if (-2)* x = -12 then x =

A. 2
B. 3
C. 5
D. 6
E. 11

10. How many two-element subsets of {1, 2, 3, 4} are there that do not contain the pair of elements with 2 and 4?

A. One
B. Two
C. Four
D. Five
E. Six

11. If x = -3 then what is the value of $-3x^2$?

A. -27
B. -18
C. 18
D. 27
E. 81

12. If positive integers x and y are not both odd, which of the following must be even?

A. Xy
B. X + Y
C. X - Y
D. X + Y -1
E. 2(X + Y) - 1

13. If a printer can print 2 pages of text per second, then at this rate, approximately how minutes will it take to print 5,000 pages of text?

A. 4
B. 25

C. 42
D. 250
E. 417

14. If the average (arithmetic mean) of x and y is 60 and the average (arithmetic mean) of y and z is 80, what is the value of z - x?

A. 70
B. 40
C. 20
D. 10
E. It Cannot Be Determined From The Information Given.

15. As a salesperson, Phyllis can choose one of two methods of annual payment; either an annual salary of $35,000 with no commission or a annual salary of $10,000 plus a 20 percent commission on her total annual sales. What must her total annual sales be to give her the same annual pay with either method?

A. $100,000
B. $120,000
C. $125,000
D. $130,000
E. $132,000

16. If paper costs 1¢ a sheet, and a buyer gets a 2% discount on all the paper she buys after the first 1,000 sheets, how much will it cost to buy 5,000 sheets of paper?

A. $49.20
B. $50.00
C. $3.920
D. $4.920
E. $5,000

17. Tanveer's salary is 150% of Javed's salary. Javed's salary is 80% of Servere's salary. What is the ratio of Server's salary to Tanveer's salary?

A. 1 To 2
B. 2 To 3
C. 5 To 6
D. 6 To 5
E. 5 To 4

18. If a box if notepaper costs $4.20 after a 40% discount, what was its original price?

A. $2.52
B. $4.60
C. $5.33
D. $7.00
E. $10.50

19. A pound of water is evaporated from 6 pounds of seawater containing 4% salt. The percentage of salt in the remaining solution is

A. 3.6%
B. 4%
C. 4.8%
D. 5.2%
E. 6%

20. The product of 75^3 and 75^7 is

A. 75^5
B. 75^{10}
C. 150^{10}
D. 5625^{10}
E. 75^{21}

21. Jamal bought two dozen apples for 3 dollars. At this rate, how much will 18 apples cost?

A. $1.20
B. $2.25
C. $2.50
D. $2.75
E. $4.50