BHARAT SCHOOL OF BANKING-PERCENTAGE

1. A number increased by 20% and then decreased by 20%. Finally the number is:
(a) Decreased by 4%   (b) increased by 4%
(c) Does not change   (d) decreased by 0.4%

2. Two numbers are less than third number by 30% and 37% respectively. How much percent is the second number less than by the first
(a) 20%   (b) 30 %
(c) 10%   (d) 40%

3. In an examination, 34% of the students failed in mathematics and 42% failed in English. If 20% of the students failed in both the subjects, then find the percentage of students who passed in both the subjects.
(a) 40%   (b) 41%
(c) 43%   (d) 44%

4. In the new budget, the price of kerosene oil rose by 25%. By how much percent must a person reduce his consumption so that his expenditure on it does not increase?
(a) 20%   (b) 30%
(c) 22%   (d) 24%

5. The value of a machine depreciates at the rate of 10% per annum. If its present is Rs.1, 62,000. What was the value of the machine 2 years ago?
(a) 200000   (b) 20000
(c) 2000   (d) None of these

6. A student multiplied a number by 3/5 instead of 5/3. What is the percentage error in the calculation?
(a) 60%   (b) 62%
(c) 64%   (d) 65%

7. Two number x and y are respectively 20% and 50% more than a third number x is how month percent of y?
(a) 30 %   (b) 45%
(c) 60 %   (d) 80%

8. 13% of a number exceeds 5% of the same by 16. The number is :
(a) 500   (b) 450
(c) 300   (d) 200

9. If A exceeds B by 60% and B is less than C by 20%, then A:C is
(a) 32:25   (b) 25:32

(c) 8:5   (c) 4:5

10. In an examination, a student had to obtain 33% of the maximum marks to pass. He got 125 marks and failed by 40 marks .the maximum marks were :
(a) 500   (b) 600
(c) 800   (d) 1000

 ANSWERS WITH EXPLANATIONS:

1.   (a):
Final change = $a^2/100$ à (20*20)/100, 4% decrease
2.   (c):
Let the third number is x.
then first number = (100-30)% of x = 70% of x = 7x/10
Second number is (63x/100)
Difference = 7x/10 - 63x/100 = 7x/10
So required percentage is, difference is what percent of first number
=> (7x/100 * 10/7x * 100)% = **10%**

3.   (d):
Failed in mathematics, n(A) = 34
Failed in English, n(B) = 42
n(AUB) = n(A) + n (B) − n (A∩ B)
= 34 + 42- 20 = 56
Failed in either or both subjects are 56
Percentage passed = (100−56)%=**44%**

4.   (a):
Reduction in consumption = [((R/(100+R))*100]%
 [(25/125)*100]%=**20%**.

5.   (a):
 Value of the machine 2 years ago
= Rs.[162000/(1-(10/100)^2)]=Rs.[162000*(10/9)*(10/9)]= **Rs.200000**

6.   (c):
Let the number be x
Then, error = (5/3)x – (3/5)x =(16/15)x
Error% = [(16x/15) /(5x/3)] * 100% = **64%**
7.   (d):
Let the third number is 100
∴The number x = 120 and the number y = 150

∴ x is how much percent of y = x*100/y = 120*1oo/150 = 80%

8.   (d):

Let the number is X

∴13% of the x-5% of x = 16

∴13*x/100 – 5*x/100 = 16 àX = 200

9.   (a):

Let the C = 100 then the B = 80

And A = 80*160/100 = 128

∴ A : C 128:100 = 32:25

10. (a):

Let the maximum marks were x

∴x*33/100 = 125+40 =165

∴x = 165*100/33 = 500