IBPS CLERKS

Practice Test 5

NUMERICAL ABILITY

1. The ratio of monthly salaries of two persons, A and B is 8 : 7. If the salary of A is increased by 20% and that of B by 11%, the new ratio becomes 96 : 77. What is A's salary?

   1) Rs. 800
   2) Rs. 700
   3) Rs. 750
   4) Can't be determined
   5) None of these

2. Simple interest on a certain sum at 7 p.c.p.a for four years is Rs. 3584. What will be the compound interest on the same principal at 4 p.c.p.a in two years?

   1) Rs. 1054.48
   2) Rs. 1044.48
   3) Rs. 1044.84
   4) Rs. 1064.84
   5) None of these

3. The cost of pure milk is Rs. 16 per litre. On adding water, the mixture is sold at Rs. 15/litre. In this way the milk man earns 25% profit. What is the ratio of milk and water in the mixture?

   1) 25 : 7
   2) 7 : 25
   3) 15 : 1
   4) 1 : 15
   5) None of these

4. Four person- M, N, O and P distributed a sum of Rs. 44352 among themselves. M got $\frac{3}{8}$ the of total amount. N got $\frac{1}{6}$ th part of the remaining amount. Thereafter, the remaining amount was divided between O and P in the ratio 3 : 2. The amount received by P is :

   1) Rs. 1648
   2) Rs. 1848
   3) Rs. 1884
   4) Rs. 1684
   5) Rs. 1448

5. Three persons A, B and C start a business with ₹ 12800, ₹16800 and ₹9600 respectively. At the end of the year. B received ₹ 13125 as share in total profit. What is the share of Mr. C in the profit?

   1) ₹ 7850
   2) ₹ 7550
   3) ₹ 7500
   4) ₹ 8500
   5) None of these

6. One - third of a diagonal of a square is $3\sqrt{2}$ units. What is the measure of the side of the square?

   1) 6 units
   2) 3 units
   3) 18 units
   4) 9 units
   5) None of these

7. 56 men can do a job in 14 days. How many additional men are required to do the same job in 8 days?

   1) 42
   2) 24
   3) 52
   4) 25
   5) None of these

8. A shopkeeper has goods of worth ₹6000. He sold half of the goods at a gain of 12%. At what profit percent should he sell the remaining half of the stock so that he gets 18% profit on the whole?

   1) 25%
   2) 24%
   3) 18%
   4) 21%
   5) None of these

9. A 210 metre long train crosses a man running at 9 kmph in opposite direction in 6 seconds. Find the speed of the train.

   1) 98 kmph
   2) 97 kmph
   3) 107 kmph
   4) 117 kmph
   5) None of these

10. Average score of a cricketer in 13 matches is 42 runs. If the average score in the first five matches be 54 runs, what is the average score in the last eight matches?

    1) 36.5
    2) 34.5
    3) 35.4
    4) 38.5
    5) None of these

11. The perimeter of a rectangle whose length is 6 metre more than its breadth is 84 metre. What is the area of the triangle whose base is equal to the diagonal of the rectangle and height is equal to the length of the rectangle?

    1) 360 sq. metre
    2) 380 sq. metre
    3) 360 metre
    4) 400 sq. metre
    5) None of these

12. Due to decrease of 10% in the price of tea per kg, a consumer buys 250gm of tea more than before for Rs. 270. What is the original price of tea?

    1) ₹130/kg
    2) ₹120/kg
    3) ₹115/kg
    4) ₹140/kg
    5) None of these

Directions (Q. 78-87): What will come in place

1) 529　　　　　　2) 519
3) 591　　　　　　4) 592
5) 539

30. In which week was the number of printed pages maximum?

1) First　　　　　　2) Second
3) Third　　　　　　4) Fourth
5) Fifth

31. The difference between the pages printed by printers A and E in the second week is

1) 46　　　　　　2) 42
3) 62　　　　　　4) 52
5) None of these

32. The difference between the total pages printed by printers B and C (all weeks taken together) is

1) 65　　　　　　2) 70
3) 66　　　　　　4) 77
5) None of these

33. Pipe A can fill a tank in 8 hours while another pipe B can fill it in 16 hours. A third pipe C can empty the full tank in 32 hours. All three pipes are opened simultaneously. In what time will an empty tank be filled?

1) 5.5 hours　　　　　　2) 6 hours
3) 6.4 hours　　　　　　4) 7 hours
5) 7.2 hours

34. A and B are two numbers. Six times square of B is 540 more than square of A. The ratio of A and B is 3 : 2. Find the number B?

1) 12　　　　　　2) 18
3) 14　　　　　　4) 21
5) None of these

35. Eight years ago, the age of Vishal was four times that of Shekhar's. After 8 years, Vishal's age will be twice of Shekhar's age. Vishal's present age is

1) 24 years　　　　　　2) 28 years
3) 30 years　　　　　　4) 32 years
5) None of these

$= \dfrac{1}{\sqrt{2}} \times$ diagonal

$= \dfrac{1}{\sqrt{2}} \times 9\sqrt{2} = 9$ units

7. (1) $M_1D_1 = M_2D_2$

$\Rightarrow 56 \times 14 = M_2 \times 8$

$\Rightarrow M_2 = \dfrac{56 \times 14}{8} = 98$ men

Number of additional workmen = 98 - 56 = 42

8. (2) For 18% gain.,

Total S.P.

$= \dfrac{6000 \times 118}{100} = Rs.7080$

S.P of goods worth Rs. 3000 at 12% profit.

$= \dfrac{3000 \times 112}{100} = Rs.3360$

Expected S.P of remaining goods

= 7080 - 3360 = Rs. 3720

If the gain per cent be x% then

$= \dfrac{3000 \times (100 + x)}{100} = 3720$

$\Rightarrow 100 + x = \dfrac{3720}{30} = 124$

$\Rightarrow x = 124 - 100 = 24\%$

9. (4) If the speed of train be x kmph, then Relative speed = (x + 9) kmph

$\therefore \dfrac{\text{Length of train}}{\text{Relative speed}} = \text{Time}$

$\Rightarrow \dfrac{\frac{210}{1000}}{x + 9} = \dfrac{6}{60 \times 60}$

$\Rightarrow \dfrac{21}{(x + 9)} = \dfrac{1}{6}$

$\Rightarrow x + 9 = 21 \times 6 = 126$

$\Rightarrow x = 126 - 9 = 117$ kmph

10. (2) Total runs in last eight matches

$= 13 \times 42 - 5 \times 54 = 546 - 270 = 276$

$= 276$

$\therefore$ Required average

$= \dfrac{276}{8} = 34.5$

11. (1) If breadth = x metre.

Length = (x + 6) metre

$\therefore 2(x + 6 + x) = 84$

$\Rightarrow 2x + 6 = 42 \Rightarrow 2x = 36$

$\Rightarrow x = 18$

$\therefore$ Length = 18 + 6 = 24 metre = height of triangle

Diagonal of rectangle

$= \sqrt{18^2 + 24^2}$

$= \sqrt{324 + 576} = \sqrt{900}$

= 30 metre = Base of trianlge

$\therefore$ Area of triangle $= \dfrac{1}{2} \times$ base $\times$ height

$= \dfrac{1}{2} \times 30 \times 24 = 360$ sq. metre

12. (2) Original rate of tea = ₹ x/kg

New rate $= x \times \dfrac{90}{100}$

$= ₹ \dfrac{9x}{10}/kg$

$\therefore \dfrac{270}{\frac{9x}{10}} - \dfrac{270}{x} = \dfrac{250}{1000}$

$\Rightarrow \dfrac{300}{x} - \dfrac{270}{x} = \dfrac{1}{4}$

$\Rightarrow \dfrac{30}{x} = \dfrac{1}{4} \Rightarrow x = 30 \times 4$

$= ₹ 120$ per kg

13. (3) $? = \dfrac{34.5 \times 14 \times 42}{2.8} = 7245$

14. (2) 2135.21 - 676.76 - ? = 1294.25

$\Rightarrow$ 1458.45 - ? = 1294.25

$\Rightarrow$? = 1458.45 $\quad$ -1294.25

= 164.2

15. (4) $? = \dfrac{3}{5} \times (4624 \div 136)$

$$= \frac{628 + 519 + 503 + 347 + 598}{5}$$

$$= \frac{2595}{5} = 519$$

30. (5) Number of printed pages:

First week $\Rightarrow$ 3519

Second week $\Rightarrow$ 3025

Third week $\Rightarrow$ 3367

Fourth week $\Rightarrow$ 2550

Five week $\Rightarrow$ 3538

31. (4) Required difference = 621 - 569 = 52

32. (2) Total pages:

Printer B $\Rightarrow$ 2665

Printer C $\Rightarrow$ 2595

Difference = 2665 - 2595 = 70

33. (3) Part of the tank filled in 1 hour by all three pipes

$$= \frac{1}{8} + \frac{1}{16} - \frac{1}{32} = \frac{4 + 2 - 1}{32}$$

$$= \frac{5}{32}$$

Hence, the tank will be filled in $\frac{32}{5} = 6.4$ hours.

34. (1) A = 3x : B = 2x

$\therefore 6 \times B^2 - A^2 = 540$

$\Rightarrow 6 \times 4x^2 - 9x^2 = 540$

$\Rightarrow 15x^2 = 540$

$\Rightarrow x^2 = \frac{540}{15} = 36$

$\Rightarrow x = \sqrt{36} = 6$

$\therefore B = 2x = 2 \times 6 = 12$

35. (1) 8 years ago, Shekhar's age = x years

Vishal's age = 4x years

After 8 years from the present,

$4x + 8 = 2(x + 8)$

$\Rightarrow 4x + 8 = 2x + 16$

$\Rightarrow 2x = 8 \Rightarrow x = 4$

$\therefore$ Vishal's present age

$= 4x + 8 = 16 + 8 = 24$ years