Oliveboard

NABARD Grade A 2022 Previous Year Paper Shift 2

NABARD Grade A PYQS

2022: (Q.71 to Q.90) Evening Shift

Instruction for Q.71

What value should come in place of question mark (?) in the following question.
(You need not calculate the exact value)

Q.71)?/325 = 145/?

(a) 440
(b) 163
(c) 375
(d) 652
(e) 216

Answer – (e)

Explanation -

We can choose the value from the given options which will make the two fractions equal.
We can eliminate the values greater than 325 as they will make LHS > RHS.
So, 440, 375 and 652 are eliminated.
163 can also be eliminated as it will make LHS < RHS.

Instruction for Q.72

What approximate value should come in place of Question mark (?) in the following question?

Q.72)√841 + ? + 75 – 93 = 863

(a) 774
(b) 654
(c) 926
(d) 852
(e) 558

Answer – (d)

Explanation -

√841 + ? + 75 – 93 = 863
29 + ? – 18 = 863
? = 852

Instruction for Q.73

What approximate value should come in the place of question mark (?) in the following questions?

Q.73)40 × 55.96 ÷ 7 – 20% of 699.81 + 6^3 = ? - (11479.50 ÷ 7)

(a) 2409
(b) 2930
(c) 2036
(d) 2612
(e) 2236

Answer – (c)

Explanation -

40 x 56/7 – 20% x 700 + 216 = ? – (11480/7)
40 x 8 – 140 + 216 = ? – 1640
320 + 76 = ? – 1640
? = 2036

Instruction for Q.74

In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

Q.74)60, 85, 135, 220, 310, 435

(a) 85
(b) 435
(c) 310
(d) 220
(e) 135

Answer – (d)

Explanation -

The pattern adding 25, 50, 75, 100, 125 successively.
60 + 25 = 85

85 + 50 = 135
135 + 75 = 210
210 + 100 = 310
310 + 125 = 435

Instruction for Q.75

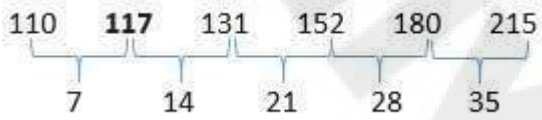
In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

Q.75)110, 118, 131, 152, 180, 215

(a) 118
(b) 131
(c) 152
(d) 180
(e) 215

Answer – (a)

Explanation -



So, 118 is the wrong term.

Instruction for Q.76

In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.

Q.76)19, 35, 71, 135, 235, 380

(a) 235
(b) 71
(c) 135
(d) 35
(e) 380

Answer – (e)

Explanation -

$19 + 4^2 = 35$
$55 + 6^2 = 71$
$71 + 8^2 = 135$
$135 + 10^2 = 235$
$235 + 12^2 = \mathbf{379}$

Q.77)A ferry takes 108 minutes to row to place B from another place A along the stream. The distance between place A and place B is 32.4 km. If the speed of the ferry in still water is seven times more than that of the stream, then how much distance will the ferry cover in 6.4 hours against the stream?

(a) 75.6 km
(b) 58.8 km

(c) 89.6 km
(d) 61.6 km
(e) 86.4 km

Answer – (c)

Explanation -

Along the stream means 'downstream' and against the stream means 'upstream'.
Let the speed of stream be 'S' and speed of boat in still water be 'B'
It is given that B = S + 7S = 8S
Downstream speed = B + S = 9S = (32.4 x 1000) / 108 = 300 m/s
S = 300/9 = 100/3 m/s
Required distance = upstream speed x time = (B – S) x 6.4 x 60 = 7S x 6.4 x 60 = 7 x 100/3 x 6.4 x 60 = 89600m = 89.6km

Q.78)Pipe 'A' and pipe 'B' together can fill 32% of a tank in 8 hours while pipe 'C' takes 35 hours to empty it. Pipe 'A' and pipe 'B' were opened together. After 24 hours, pipe 'C' is also opened. Find the total time taken to fill the empty tank this way.

(a) 30 hours
(b) 27 hours 30 min
(c) 35 hours
(d) 25 hours
(e) 15 hours

Answer – (b)

Explanation -

Total time taken by A and B together to fill the tank = 8/32% = 8 x 100/32 = 25 hours
Tank filled by A and B in 24 hours = 24 x 1/25 = 24/25
Remaining portion = 1/25
Tank filled by A, B and C together in 1 hour = 1/25 – 1/35 = (7 – 5)/175 = 2/175
Time taken to fill $1/25^{th}$ portion = (1/25) / (2/175) = 175/(2 x 25) = 3.5 hours
Total time taken = 24 + 3.5 = 27.5 hours

Q.79)Rs.7800 is divided into two parts such that if one part be invested at 3% and the other at 5%, the annual interest from both the investments is Rs. 320. Find each part.

(a) Rs.2400, Rs.5400
(b) Rs.3500, Rs.4300
(c) Rs.4400, Rs.3400
(d) Rs.4100, Rs.3700
(e) Rs.3000, Rs.4800

Answer – (b)

Explanation -

(P x 3/100) + ((7800 – P) x 5/100) = 320
3P/100 + 39000/100 – 5P/100 = 320
2P/100 = 390 – 320
2P = 7000
P = 3500
7800 – P = 4300

Q.80)The cost price of article A and B is Rs. 'X' and Rs. (X + 480), respectively. Article A is sold at 20% profit while article B is sold at 10% loss. If selling price of article B is Rs. 90 more than that of article A and article B is sold after giving a discount of 10%, then find the marked price of article B.

(a) Rs. 1620
(b) Rs. 2000
(c) Rs. 2925
(d) Rs. 3300
(e) Rs. 1900

Answer – (a)

Explanation -

SP of A = 1.2X
SP of B = 9/10(X + 480)
9/10(X + 480) = 1.2X + 90
9X + 4320 = 12X + 900
3X = 3420
X = 1140
SP of B = 9/10(X + 480) = 9/10 x 1620 = 1458
MP of B = 1458/0.9 = 1620

Q.81)'A' and 'B' started a business by investing certain sum in the ratio 2:3, respectively for 6 years. If 30% of the total profit is donated in an orphanage and A's share is Rs. 7056, then find the total profit generated from the business.

(a) Rs. 24200
(b) Rs. 23200
(c) Rs. 25200
(d) Rs. 27200
(e) Rs. 26200

Answer – (c)

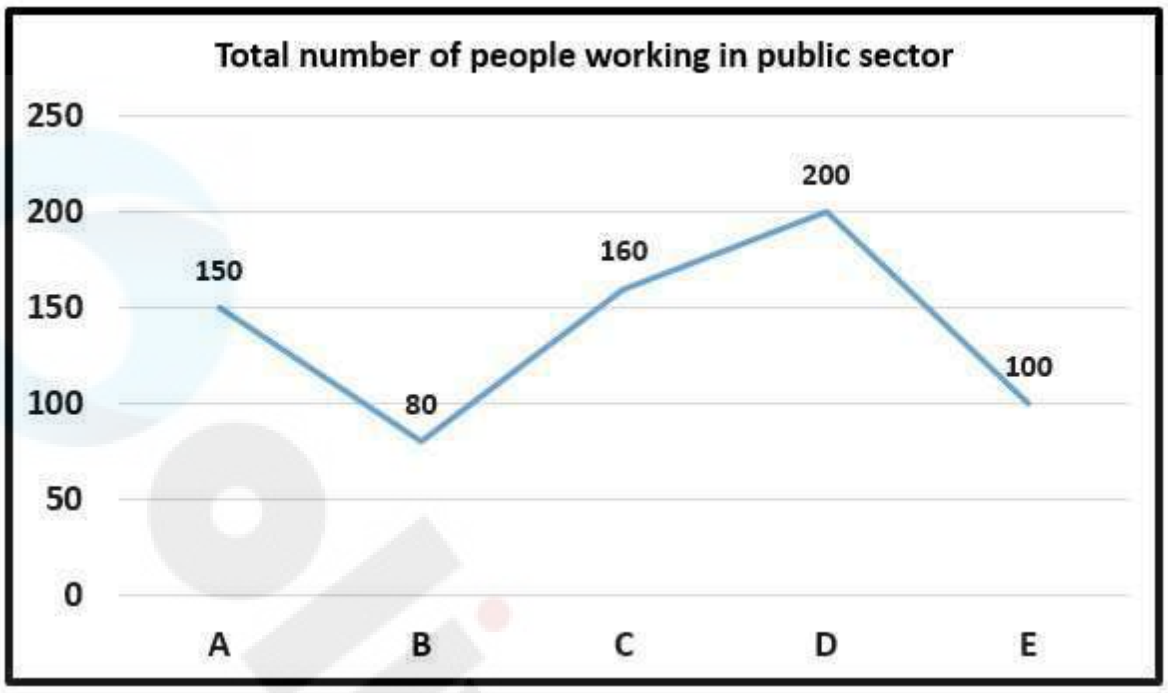
Explanation -

Let total profit be P
If 30% or 3/10 of profit is donated in orphanage, then remaining 7/10 will be distributed between A and B.
A's share = 2/5 x 7/10 x P = 7056
14P/50 = 7056
P = 25200

Instruction for Q.82 to Q.86

Answer the questions based on the information given below.

The line graph shows the number of peoples who work in public sector from five different apartments namely A, B, C, D and E.



The Table below shows the ratio of number of people who are working in public sector to number of people working in private sector from the same apartments.

Apartments	People in public sector : people in private sector
A	3 : 2
B	1 : 2
C	4 : 3
D	5 : 3
E	2 : 3

Q.82)Find the difference between number of private and public people in society D?

(a) 20
(b) 70
(c) 90
(d) 80
(e) 50

Answer – (d)

Explanation -

Apartment	Public sector	Private sector	Total
A	150	100	250
B	80	160	240
C	160	120	280
D	200	120	320

E	100	150	250

Required difference = 200 – 120 = 80

Q.83)Find the ratio of the total number of people in society E to the number of people who are in private sector from society B.

(a) 25:16
(b) 23:16
(c) 25:17
(d) 16:25
(e) 17:16

Answer – (a)

Explanation –

Apartment	Public sector	Private sector	Total
A	150	100	250
B	80	160	240
C	160	120	280
D	200	120	320
E	100	150	250

Required ratio = 250 : 160 = 25 : 16

Q.84)Find the total number of people in society A, B and D.

(a) 670
(b) 780
(c) 840
(d) 750
(e) 810

Answer – (e)

Explanation -

Apartment	Public sector	Private sector	Total
A	150	100	250
B	80	160	240
C	160	120	280
D	200	120	320
E	100	150	250

A + B + D = 250 + 240 + 320 = 810

Q.85)If number of people who are working in private sector in society F is 50% more than total number of people in society E, then find the number of people who are working in private sector in society F.

(a) 375
(b) 305
(c) 345
(d) 325

(e) 335

Answer – (a)

Explanation -

Apartment	Public sector	Private sector	Total
A	150	100	250
B	80	160	240
C	160	120	280
D	200	120	320
E	100	150	250

Number of people in private sector in F = 250 + 125 = 375

Q.86)If in Society A, the ratio of number of people who are in private sector was miscalculated as 3:2 instead of 5:4, then find the actual number of people who are in society A.

(a) 200
(b) 250
(c) 270
(d) 230
(e) 240

Answer – (c)

Explanation -

Apartment	Public sector	Private sector	Total
A	150	100	250
B	80	160	240
C	160	120	280
D	200	120	320
E	100	150	250

Number of people in public sector in A = 150
Now, number of people in private sector (if ratio is 5:4) = 4/5 x 150 = 120
Total number = 150 + 120 = 270

Q.87)The total age of A, B and C four years hence will be 88 years. Find the age of C five years hence, if the present age of A and B is 35 years and 25 years respectively.

(a) 19 years
(b) 22 years
(c) 13 years
(d) 21 years
(e) 24 years

Answer – (d)

Explanation -

A + 4 + B + 4 + C + 4 = 88
A + B + C = 76
A + B = 35 + 25 = 60
So, C = 76 – 60 = 16
Age of C five years hence = 16 + 5 = 21

Q.88)378 ml of mixture 'A' contains milk and water in the ratio 4:5 respectively. If the quantity of milk in mixture 'B' is 37.5% more than that in mixture 'A' and is 35% of the total quantity of mixture 'B', then find the total quantity of mixture 'B'.

(a) 530 ml
(b) 502 ml
(c) 572 ml
(d) 660 ml
(e) 180 ml

Answer – (d)

Explanation -

Milk in mixture A = 4/9 x 378 = 4 x 42 = 168
Milk in mixture B = 137.5/100 x (168) = 11/8 x 168 = 231
Total quantity of B = 231/35% = 231/35 x 100 = 660

Q.89)The breadth of a rectangular hall is 1/4 of its length. If the area of the floor is 256 sq. m., then the difference between the length and breadth of the hall is:

(a) 52 m
(b) 24 m
(c) 4 m
(d) 17 m
(e) 14 m

Answer – (b)

Explanation -

Let length = 4P
So, breadth = P
Area = 4P x P = 256
$P^2 = 64$
P = Breadth = 8
Length = 4P = 32
Difference = 32 – 8 = 24

Q.90)A and B individually can complete the work in 20 days and 30 days respectively. If the time taken by C alone to complete the work is 1.25 times the time taken by A and B together to complete the work, find the time taken by C to complete the work while working alone.

(a) 21 days
(b) 27 days
(c) 15 days
(d) 24 days
(e) 12 days

Answer – (c)

Explanation -

Time taken by A and B together = 1/20 + 1/30 = 5/60 = 1/12 = 12 days
Time taken by C alone = 1.25 x 12 = 15 days