

চাকরির পরীক্ষায় কর্মসূচি কোচিং

চার কেন্দ্রীয় বাহিনীতে

২৫২৭১ কনস্টেবল, রাইফেলম্যান

নিয়োগ-পরীক্ষার নমুনা প্রশ্নোত্তর

ছবির পাঠার পর

56(d):
$$\begin{array}{ccccccc} & 118 & & 182 & & 186 & & 222 & & 226 \\ & \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow \\ + 64 & & & + 4 & & + 36 & & + 4 & & \end{array}$$

57(b):
$$\begin{array}{ccccccc} & 2 & & 7 & & 27 & & 107 & & 427 \\ & \downarrow & & \downarrow & & \downarrow & & \downarrow & & \downarrow \\ \times 4-1 & & \times 4-1 & & \times 4-1 & & \times 4-1 & & \end{array}$$

58(b):
$$\begin{array}{ccccccc} & 242 & & 393 & & 4164 & & 5255 \\ & \downarrow & & \downarrow & & \downarrow & & \downarrow \\ \times & & \times & & \times & & \times & & \end{array}$$

Direction (59 to 60):

59(d): Submarine is different from the other three.

60(b): NOKIA is the manufacturer of mobile phone While all others are tele communication service providers.

61(a): HOTEL = $\frac{8+15+20+5+12}{5} = \frac{60}{5} = 12$.

LAMB = $\frac{12+1+13+2}{4} = \frac{28}{4} = 7$.

62(b):
$$\begin{array}{ccccc} Z & E & B & R & A \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 26 & 5 & 2 & 18 & 1 \end{array} = 2652181$$

$$\begin{array}{ccccc} C & O & B & R & A \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 3 & 15 & 2 & 18 & 1 \end{array} = 3152181$$

63(a): t st/t s t/t s t/t s t.

64(d): According to question

C > A > B ... (i)

E > D > A ... (ii)

D > C ... (iii)

From all the three statements E > D > C > A > B

Therefore, E is the oldest among them.

65(d): A is the brother of B. ∴ A is male

C is the father of D. ∴ C is a male

Therefore, E is a female

A and D are brothers

Therefore, D is a male

Deductions

(i) A and D are brother of B

(ii) C is the father of A, B and D

(iii) C is the mother of A, B and D

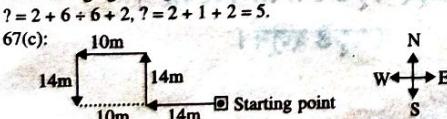
(iv) E is the wife of C.

66(d): $\begin{array}{c|c|c|c} + & \Rightarrow - & - & \Rightarrow x \\ x & \Rightarrow + & \Rightarrow - & + \end{array}$

Given expression $2 + 6 \times 6 + 2 = ?$

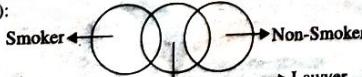
After changing the signs:

? = $2 + 6 + 6 + 2$, ? = $2 + 1 + 2 = 5$.



Required distance = $10 + 14 = 24$ metres.

68(d):



Some smokers may be lawyers and vice-versa

Some non-smokers may be lawyers and vice versa

But smokers are entirely different from the non-smokers.

69(c): Given set (3, 7, 15)

1st number + 4 = 2nd number

2nd number + 8 = 3rd number

$3 + 4 = 7$ and $7 + 8 = 15$

Option (a): $2 + 4 = 6$ and $6 + 4 = 10$

Option (b): $4 + 4 = 8$ and $8 + 10 = 18$

Option (c): $5 + 4 = 9$ and $9 + 8 = 17$

Option (d): $7 + 5 = 12$ and $12 + 7 = 19$.

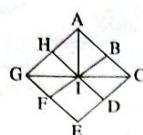
70(d): The order of the word according to dictionary:

each → eager → eagle → early → earth
(5) (3) (1) (4) (2)

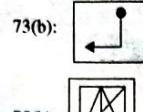
71(c): Meaning ful order:

(1) Infant → (5) Child → (4) Adolescent → (3) Adult → (2) Old

72(b):



The triangles are : AIH, AIB, BIC, CID, GIH, GIF, ECG, ACG, AIG, AIC.



76(c): $\frac{20}{100} \times (P + Q) = \frac{50}{100} \times (P - Q)$

$\Rightarrow 20 \times (P + Q) = 50 \times (P - Q)$

$\Rightarrow 20P + 20Q = 50P - 50Q \Rightarrow 30P = 70Q$

$\Rightarrow \frac{P}{Q} = \frac{70}{30} = \frac{7}{3} \therefore P : Q = 7 : 3$

77(c): S.I. = Rs. $\left(8000 \times \frac{5}{100} \times 3 \right) = \text{Rs. } 1200$

C.I. = Rs. $\left[8000 \times \left(1 + \frac{5}{100} \right)^3 - 8000 \right]$

= Rs. $\left[\left(8000 \times \frac{21}{20} \times \frac{21}{20} \times \frac{21}{20} \right) - 8000 \right] = \text{Rs. } (9261 - 8000)$

= Rs. 1261

$\therefore \text{C.I.} - \text{S.I.} = \text{Rs. } (1261 - 1200) = \text{Rs. } 61$

78(c): Let the breadth be x metres

Then its length = $3x$ metres

$\therefore 3x \times x = 12 \Rightarrow x^2 = 4 \Rightarrow x = 2$

∴ Length = 6m, Breadth = 2m

Perimeter = $2(6 + 2) \text{ m} = 16 \text{ m}$.

79(c): Let the number of lemons bought be $(2 \times 5) = 10$

CP = Rs. $\left(\frac{1}{2} \times 10 \right) = \text{Rs. } 5$

SP = Rs. $\left(\frac{3}{5} \times 10 \right) = \text{Rs. } 6$

Gain% = $\left(\frac{1}{5} \times 100 \right) \% = 20\%$.

80(d): 2 children - 1 men

(8 children + 12 men) = $(4 + 12)$ men = 16 men

Let the required number of days be x

Less men, more days

$12 : 16 :: 9 : x \Rightarrow x = \frac{16 \times 9}{12} = 12 \text{ days.}$

81(b): $\sqrt{\frac{25}{81} - \frac{1}{9}} = \sqrt{\frac{(25-9)}{81}} = \sqrt{\frac{16}{81}} = \frac{4}{9}$

82(d): $\sqrt{1 + \frac{x}{144}} = \frac{13}{12} \Rightarrow 1 + \frac{x}{144} = \left(\frac{13}{12} \right)^2 = \frac{169}{144}$

$\Rightarrow \frac{x}{144} = \left(\frac{169}{144} - 1 \right) \Rightarrow \frac{x}{144} = \frac{25}{144}$

$\therefore x = 25$.

83(b): Given Exp = $\sqrt{4 + \sqrt{4 + \sqrt{10000}}} = \sqrt{4 + \sqrt{4 + \sqrt{10000}}} = \sqrt{4 + \sqrt{144}} = \sqrt{4 + \sqrt{12}} = \sqrt{16} = 4$

= $\sqrt{4 + \sqrt{144}} = \sqrt{4 + \sqrt{12}} = \sqrt{16} = 4$.

84(b): Given Exp = $\left(\frac{1}{2} - \frac{1}{3} \right) + \left(\frac{1}{3} - \frac{1}{4} \right) + \left(\frac{1}{4} - \frac{1}{5} \right) + \dots + \left(\frac{1}{100} - \frac{1}{101} \right)$

= $\left(1 - \frac{1}{101} \right) = \frac{100}{101}$.

85(b): Given Exp = $\left(1000 - \frac{4}{999} \right) \times 999 = (999000 - 4) = 998996$.

86(a): Let the original fraction be $\frac{a}{b}$. Then, $\frac{25\% \text{ of } a}{400\% \text{ of } b} = \frac{5}{18}$

$\Rightarrow \frac{\frac{250}{100} \times a}{\frac{400}{100} \times b} = \frac{5}{18} \Rightarrow \frac{5}{8} \times \frac{a}{b} = \frac{5}{18} \Rightarrow \frac{a}{b} = \left(\frac{5}{18} \times \frac{8}{5} \right) = \frac{4}{9}$.

87(b): Pass marks = $(113 + 85) = 198$

Let the maximum marks be x , then $36\% \text{ of } x = 198$

$\frac{36}{100} \times x = 198 \therefore x = \left(198 \times \frac{100}{36} \right) = 550$.

88(d): Given Exp = $\frac{(3.65)^2 + (2.35)^2 - 2 \times 3.65 \times 2.35}{1.69}$

= $\frac{(3.65 - 2.35)^2}{1.69} = \frac{(1.3)^2}{1.69} = \frac{1.3 \times 1.3}{1.69} = 1$.

89(b): H.C.F. of Co-primes = 1

H.C.H. × L.C.M. = Their product = 117

∴ 1 × L.C.M. = 117, L.C.M. = 117.

90(a): Let the numbers be $3x, 4x, 5x$

Then L.C.M. = 60x

$60x = 2400, x = 40$

∴ The number are 120, 160, 200

$$\begin{array}{r} 120 | 160 | 1 \\ 120 | 120 | 3 \\ 40 | 120 | 3 \\ 40 | 120 | 120 \end{array}$$

∴ Clearly their H.C.H. is 40.

91(c): Middle number = $(8 \times 6.5) + (8 \times 9.5) - (15 \times 7)$

= $(52 + 76 - 105) = (128 - 105) = 23$.

92(c): A : B : C = 2700 : 81000 : 72000 = 3 : 9 : 8

Let the total profit be Rs. x

Then, B's share = Rs. $\left(x \times \frac{9}{20} \right)$

$\therefore \frac{9x}{20} = 3600 \Rightarrow x = \frac{36000 \times 20}{9} = 80000$

93(d): A's 10 days work = $\left(\frac{1}{25} \times 10 \right) = \frac{2}{5}$

Remaining work = $\left(1 - \frac{2}{5} \right) = \frac{3}{5}$

(A + B)'s 1 Day's work = $\left(\frac{1}{25} + \frac{1}{20} \right) = \frac{9}{100}$

$\frac{9}{100}$ work is finished by (A + B) in 1 day

$\frac{3}{5}$ work is finish by (A + B) in days $\left(\frac{100}{9} \times \frac{3}{5} \right) = 6 \frac{2}{3}$ days

Total time taken = $\left(10 + 6 \frac{2}{3} \right) = 16 \frac{2}{3}$ days.

94(b): Let the speed of the second train be x km/h

Their relative speed = $(50 + 11) \text{ km/h} = \left[(50+11) \times \frac{5}{18} \right] \text{ m/sec}$

Sum of their lengths = $(100 + 120) \text{ m} = 220 \text{ m}$

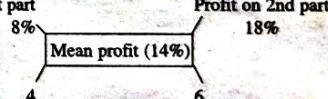
$\therefore \frac{220}{(50+11) \times \frac{5}{18}} = 6$

$\Rightarrow 30(50 + x) = 3960 \quad 30x = 3960 - 1500 = 2460$

$\Rightarrow x = 82$

Speed of the second train = 82 km/h.

95(a): Profit on 1st part



Ratio of 1st and 2nd part = 4 : 6 = 2 : 3

Quantity sold of 8% profit = $\left(1000 \times \frac{2}{5} \right) \text{ kg} = 400 \text{ kg.}$

96(d): S.I. for 2 years = Rs. $(5680 - 5200) = \text{Rs. } 480$

S.I. for 1 years = Rs. $\left(\frac{480}{2} \right) = \text{Rs. } 240$

S.I. for 5 yrs = Rs. $(240 \times 5) = \text{Rs. } 1200$

Principal = Rs. $(5200 - 1200) = \text{Rs. } 4000$

Rate = $\left(\frac{1200 \times 100}{4000 \times 5} \right) \% = 6\% \text{ p.a.}$

97(a): Area = $\frac{\text{Total cost}}{\text{Rate}} = \frac{510}{8.50} \text{ m}^2 = \left(510 \times \frac{2}{17} \right) \text{ m}^2 = 60 \text{ m}^2$

Area = 60 m^2 , Length = 8 m

Breadth = $\frac{\text{Area}}{\text{Length}} = \frac{60}{8} \text{ m} = 7.5 \text{ m}$

98(a): $\sin^2 60^\circ + \cos^2 30^\circ + \cot^2 45^\circ + \sec^2 60^\circ - \operatorname{cosec}^2 30^\circ$

= $\left(\frac{\sqrt{3}}{2} \right)^2 + \left(\frac{\sqrt{3}}{2} \right)^2 + (1)^2 + (2)^2 - (2)^2 = \left(\frac{3}{4} + \frac{3}{4} + 1 + 2 - 2 \right) = \frac{10}{4} = \frac{5}{2}$

99(b): $2 \sin^2 30^\circ - 3 \cos^2 45^\circ + \tan^2 60^\circ$

= $2 \times \left(\frac{1}{2} \right)^2 - 3 \times \left(\frac{1}{\sqrt{2}} \right)^2 + (\sqrt{3})^2 = \left(2 \times \frac{1}{4} - 3 \times \frac{1}{2} + 3 \right)$

= $\left(\frac{1}{2} - \frac{3}{2} + 3 \right) = \frac{4}{2} = 2$.

100(b): $\frac{\sin 30^\circ - \cos 60^\circ + \tan 45^\circ}{\cos 30^\circ - \tan 45^\circ + \sin 90^\circ}$

= $\frac{\left(\frac{1}{2} - \frac{1}{2} + 1 \right)}{\frac{\sqrt{3}}{2} - \frac{1}{2} + 1} = \frac{2}{\sqrt{3} \times \frac{1}{2}} = \frac{2\sqrt{3}}{3}$

অঙ্গত করেছেন: অভিযন্তক সাম

আপনার ব্যবহৃত হলুদ কটা স্বাস্থ্যকর?

টাটা সম্পর্কে আমরা বিশ্বাস
 রাখি যাতে ন্যাচারেল অয়েলস
 ইন্টাক্ষ থাকে আর প্রতিটি
 প্যাক অবিরাম কারকিউমিন
 জোগানোর গ্যারেন্টি সহ সীল
 করা থাকে। ফলে যখন এটি
 আপনার রামায়ণে পৌছয়,
 তখন আপনি উপভোগ করেন
 শুধুই স্বচ্ছ সোনালিবর্ণের
 উৎকৃষ্ট হলুদ।

TATA
sampann

₹6 OFF

ন্যাচারেল অয়েল ইন্টাক্ষ পুরু আমাদের বিশ্বক
 মশলার সংস্কৃত স্ফুর প্রাই করে দেখুন।



প্রতিষ্ঠিত কৃষি প্রক্রিয়া পোকানো এবং সজনশীল
শুধুমাত্রে জন ব্যবহৃত, যেগুলি সৃষ্টি হচ্ছে
আবাসিকভাবে তৈরী কৃষি পোকের জন্য।
পরিষেবা করা আভঙ্গগ্রাম নমুনার ভিত্তিতে।

TATA
sampann

বৰ্ণাক্ষেত্র প্ৰকাশনী প্ৰাইভেট লিমিটেড-এৰ পক্ষে অমৰেন্দ্ৰ চৰ্জনবৰ্তী কৰ্তৃক ২৯/১এ, ওগ্র বালিগঞ্জ সেকেন্ড লেন, কলকাতা-১৯ থেকে প্ৰকাশিত ও এবিপি প্ৰাঃ লিঃ, মোজা: বড়বেড়িয়া, পোঃ জগন্নাথপুৰ, ধানা: বাৰাসাত,
জেলা: ২৪ পৰগনা (উঃ) থেকে মুদ্ৰিত। প্ৰধান সম্পাদক: অমৰেন্দ্ৰ চৰ্জনবৰ্তী। সম্পাদক: মহাখেতা সমাজদাৰ। ফোন: ২২৮৩-২৩২০, ২২৯০-০০০৮। ফ্যাক্স: ২২৮৭-৬৪৪৮।
E-mail: swarnakshar.prakasani@gmail.com Website: www.swarnakshar.in