**[Aptitude Multiple Choice Question – Rahul Kale (rahul@sunbeaminfo.com)]
[9881144174]**

[Calendar] Q1. How many days are there in x weeks x days?

  A. 7x2   **B. 8X**   **C. 14X**   **D. 7**

x weeks x days = (7x + x) days = 8x days.

1 weeks 1 day = 7 days + 1 day = 8 * 1 days = 8 days = 8 * 1 days

2 weeks 2 days = 2 * 7 days + 2 days = 2 * 7 + 2 days = 14 +2 days = 16 days =8 * 2 days

3 weeks 3 days = 3 * 7 days + 3 days = 3 * 7 + 3 days = 21+ 3 days = 24 days= 8 * 3 days

4 weeks 4 days = 4 * 7 days + 4 days = 4*7+4 days = 28+4 days = 32 days = 8 * 4 days

5 weeks 5 days = 5 * 7 days + 5 days = 5*7+5days = 35+5 days = 40 days = 8 * 5 days

6 weeks 6 days = 6 * 7 days +56 days = 6*7+6days = 42+6 days = 48 days = 8 * 6 days

Answer : B   is correct 8x

[Calendar] Q2. It was Sunday on Jan 1, 2006. What was the day of the week Jan 1, 2010??

- **A. Sunday   B. Saturday   C. Friday   D. Wednesday**

On 31st December, 2005 it was Saturday.

Number of odd days from the year 2006 to the year 2009

2006 = 1

2007 = 1

2008 = 2
2009 = 1

Number of odd days from the year 2006 to the year 2009 = (1 + 1 + 2 + 1) = 5 days.

∴ On 31st December 2009, it was Thursday.

Thus, on 1st Jan, 2010 it is Friday.

Answer :   C   is correct   Friday

Q3. What was the day of the week on 17th June, 1998?

A. Monday   **B. Tuesday**   **C. Wednesday**   **D. Thursday**

17th June, 1998 = (1997 years + Period from 1.1.1998 to 17.6.1998)
Odd days in 1600 years = 0

Odd days in 300 years = (5 x 3) ≡ 1

97 years has 24 leap years + 73 ordinary years.

Number of odd days in 97 years (24 x 2 + 73) = 121 = 2 odd days.

Jan.	Feb.	March	April	May	June	
(31 +	28 +	31 +	30 +	31 +	17)	= 168 days

Therefore 168 days = 24 weeks = 0 odd day.

Total number of odd days = (0 + 1 + 2 + 0) = 3.

Given day is Wednesday.

Answer : C is correct   Wednesday
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Q4. The calendar for the year 2007 will be the same for the year:

    A. 2014   **B. 2016**   **C. 2017**   **D. 2018**

Count the number of odd days from the year 2007 onwards to get the sum equal to 0 odd day.

Year	Odd Day	Year	Odd Day
2007	1	2013	1
2008	2	2014	1
2009	1	2015	1
2010	1	2016	2
2011	1	2017	1
2012	2		

Sum = 14 odd days ≡ 0 odd days.

∴ Calendar for the year 2018 will be the same as for the year 2007.

Answer : D is correct   2018

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Q5. **What will come at the place of question mark ?**
1, 9, 25, 49, ?, 121.

A. 100   **B. 91**   **C. 64**   **D. 81**

1 ^ 2 = 1.

3 ^ 2 = 9.

5 ^ 2 = 25

7 ^ 2 = 49

9 ^ 2 = 81

11 ^ 2 = 121

81   will come at the place of question mark

Answer :   D   is correct   81

[Number System   ]   Q6.What will come at the place of question mark ?

10, 100, 200, 310, ?

A. 430   B. 420   C. 410   D. 400

1st term : 10

2nd term : 100 =   10 + 90

3rd term : 200 = 100+100

4th term : 310 = 200+110

5th Term: 430 = 310+120

Therefore, the answer is 430.

Answer : A   is correct 430

[Coding And Decoding] Q7. if in a certain language PROSE is coded as PPOQE, how is LIGHT coded in that code ?

A. LIGFT   **B. LGGHT**   **C. LGGFT**   **D. LLGFE**

The rule followed in coding PROSE is

$$P + 0 = P$$
$$R - 2 = P$$
$$O + 0 = O$$
$$S - 2 = Q$$
$$E + 0 = E$$

Therefore, code for LIGHT is

$$L + 0 = L$$
$$I - 2 = G$$
$$G + 0 = G$$
$$H - 2 = F$$
$$T + 0 = T$$

Code is LGGFT

Answer :   c   is correct   LGGFT

Q8 .If TOUR is written in a certain code as 1234, CLEAR as 56784 and SPARE as 90847, what will be the 5th digit for SCULPTURE in the same code ?

A. 3   **B. 4**   **C. 6**   **D. 0**

By, comparing letters and digit, we get

T = 1

O = 2

U = 3

R = 4

C = 5

L = 6

E = 7

A = 8

S = 9 and

P = 0

As the 5th letter is SCULPTURE is P and '0' is used for P, therefore, 5th digit is the required code which is '0'.

Answer :   D   is correct   0

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[Puzzle] Q9. A Parking lot Contains 160 vehicles. Each vehicle is either a car or a truck, and each vehicle is either red or green. 70 vehicles are red, and 120 vehicles are cars. If there are 18 green trucks, how many red cars are there?

    A. 54   **B. 50**   **C. 48**   **D. 45**

  Total number of vehicles = 160

  There are 70 red vehicles

  So remaining 90 are green vehicles, out of which 18 are green trucks

  then we get,

  Green cars = 90 - 18 = 72.

  Given, Total Number of cars = 120.

  Then, number of red cars =

                     = 120 - 72
                     = 48 red cars

  Answer : C   is correct 48 red cars

[Average] Q10. The average marks obtained by 150 students is 30. If the average marks of passed   candidates was 40 and that of failed candidates was 20. Find the number of candidates who passed the exam?

A. 25   B. 50   C. 75   D. 100

The number of students who passed examination = x

The number of students who failed examination = 150 - x

According to question,

$$60x + (150 - x) * 20 = 150 * 40$$

$$60x + 150 * 20 - 20x = 150 * 40$$

$$60x + 150 * 20 - 20x = 150 * 40$$

$$60x + 3000 - 20x   = 6000$$

$$40x = 3000$$

$$x = 75$$

Answer :   C   is correct   75

Q11. In a group of 5 if a man weighing 80 kg is replaced by another man the average weight of the group decreases by 3 kg. The weight of the new man is

    A. 77 kg   **B. 75 kg**   **C. 60 kg**   **D. 65 kg**

a= Original average 0f 5 men

S= Sum of ages of 4 persons + Age of 5th person

S= S5+80

Now, a = S/5 = (S4+80)/5

a = (S4/5)+16 ——(1)

Let 80 kg weight be replaced by weight 'w' of a new man such that .

average decreases by 3 kg.

a-3 = (s4+w)/5

a-3 = (S4/5)+(w/5) ——(2)

From (1) and (2),

a-3 = a – 16+ (w / 5)

13 = w / 5

  w= 65

  Weight of the new man is years 65

  Answer : C is correct   65 kg

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Q12. The average marks obtained by 150 students is 30. If the average marks of passed candidates was 40 and that of failed candidates was 20. Find the number of candidates who fail the exam?

      A. 25   **B. 85**   **C. 75**   **D. 45**

The number of students who passed examination = x

The number of students who failed examination = 150 - x

According to question,

60x + (150−x) * 20 =150 * 40

60 x + 3000 - 20x =6000

40x = 3000

x = 3000/40   = 75

The number of students who failed examination = 150 – x =   150 – 75 = 75

Answer : C is correct   75

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Q13. If TUNE is coded as UUOE, LORD is coded as MOSE, how is FLAME written in this code?

   A. GMANE   **B. FLBMF**   **C. GMANF**   **D. None of these**

   Each consonant in the word is moved one step forward to code the word

   The vowels remain unchanged.

   The letters F, L, and M are moved one step forward, and

   vowels A and E remain unchanged.

   So, FLAME is written as GMANE in this code

   Answer :   A   is correct   GMANE

Q14. Find the greatest number which divides 34, 90, and 104 and leaves the same remainder in each case.

A. 15   **B. 17**   **C. 14**   **D. 18**

Difference between numbers = 90-34 = 56, and 104- 90=14

HCF of 56 and 14 = 14

Hence, 14 is the largest number which divides the given number

and leaves the same remainder in each case.

Answer :   C   is correct   14

[Speed]   Q15.   The driver of a car driving at the speed of 68km/hr locates a bus 40 meter ahead of him. After 10 seconds, the bus is 60 meters behind. The speed of the bus is –

A. 30 km/hr   B. 32 km/hr   C. 25 km/hr   D. 38 km/hr

Relative Speed = Total distance / Total time

$$=(60+40) / 10   = 100 / 10$$
$$= 10 m / s$$

Converting m/s into km / hr

10 m / s * 18 / 5 = 2 * 18 km / hr

$$= 36 km / hr$$

Relative Speed = (speed of car - speed of bus)

Speed of bus = speed of car - relative speed.

$$= 68 – 36 =   32 km / hr$$

Answer : B   is correct 32 km / hr

Q16. In a class of forty students, A's rank from top is twelfth. B is eight ranks below A. what is B's rank from bottom?

A. 19th   B. 20th   C. 22nd   D. 21st

Total students = 40

12(A) ………20(B)

B's rank from bottom = 40 – (12+8) + 1 = 21st

Answer :   D   is correct   21st

Q17. A city has a population of 3,00,000 out of which 1,80,000 are males. 50% of the population is literate. If 70% of the males are literate, the number of literate females is :

A. 24000   **B. 30000**   **C. 54000**   **D. 60000**

50 % Literate population = (300000) * 50 / 100 = 150000

70 % Male literate population = (180000) * 70 / 100 = 126000

Literate female population = 150000 – 126000 = 24000

Answer : A is correct   24000
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Q18. B is the husband of P. Q is the only grandson of E, who is wife of D and mother-in-law of P. How is B related to D?

A. Nephew   **B. Cousin**   **C. Son -in-law**   **D. Son**

B is the husband of P.

So, B is a male.

Q is the only grandson of E

So, Q is male.

E is wife of D

So, E is a female and D is a male.

Also, E is mother-in-law of P. And P is wife of B.

So, B is son of E. And, E is wife of D.

Hence, B is son of D.

Answer : D is correct   Son

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[Calendar] Q19. Today is Thursday. What will be the day of the week after 94 days?

A. Sunday   **B. Monday**   **C. Tuesday**   **D. Wednesday**

94 days

= (13 × 7 (days in a week)) + 3

= 3 odd days.

The required day is 3 days beyond Thursday

   i.e., Sunday

      Answer :   A   is correct   Sunday

Q20.   Pointing to a person, Deepak said, "His only brother is the father of my daughter's father". How is the person related to Deepak?

      A. Father   **B. Grandfather**   **C. Uncle**   **D. Brother-in-law**

Father of Deepak's daughter's father → Deepak's father.

Hence,

the person in the brother of Deepak's father.

Therefore

the person is the uncle of Deepak

Answer :   C   is correct   Uncle