**ACTUARIAL SCIENCE**

**(ACET)**

**MOCK TEST**

**PAPER II**

**BY**

**SOURAV SIR’S CLASSES**

**KOLKATA & NEW DELHI**

1. A vessel is filled with liquid, 3 parts of which are water and 5 parts of syrup. How much of the mixture must be drawn off and replaced with water so that the mixture may be half water and half syrup?

|  |  |
| --- | --- |
| A) 1/3 | B) 1/4 |
| C) 1/5 | D) 1/7 |

Answer & Explanation Answer: C) 1/5   
  
Explanation:

Suppose the vessel initially contains 8 litres of liquid.

Let x litres of this liquid be replaced with water.  
Quantity of water in new mixture =  http://latex.codecogs.com/gif.latex?%5Cinline%20%283-%5Cfrac%7B3x%7D%7B8%7D+x%29litres.

Quantity of syrup in new mixture =  http://latex.codecogs.com/gif.latex?%5Cinline%20%285-%5Cfrac%7B5x%7D%7B8%7D%29 litres.

{\color{Blue} \therefore } http://latex.codecogs.com/gif.latex?%5Cinline%20%283-%5Cfrac%7B3x%7D%7B8%7D+x%29%3D%285-%5Cfrac%7B5x%7D%7B8%7D%29

=>   5x + 24 = 40 - 5x

=>   10x = 16    => x = 8/5

So, part of the mixture replaced = http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cleft%20%28%20%5Cfrac%7B8%7D%7B5%7D%20%5Ctimes%20%5Cfrac%7B1%7D%7B8%7D%5Cright%20%29 = 1/5.

|  |  |
| --- | --- |
|  | 2. If selling price is doubled, the profit triples. Find the profit percent. |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | |  | | --- | | A) | | |  | B) 100 | |  | |  | | --- | | C) 105 | | |  | D) 120 |   Answer & Explanation  Answer: Option B  Explanation:  Let C.P. be Rs. x and S.P. be Rs. y.  Then, 3(y - x) = (2y - x)   http://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif y = 2x.  Profit = Rs. (y - x) = Rs. (2x - x) = Rs. x.   |  |  |  |  |  | | --- | --- | --- | --- | --- | |  |  |  |  |  | |  | |

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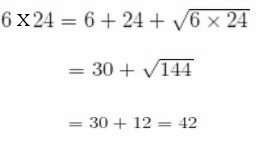
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 3. Find x if http://latex.codecogs.com/gif.latex?%5Cinline%20%5Clog_%7B%5Cfrac%7B1%7D%7B%5Csqrt%7B2%7D%7D%7D%281/%5Csqrt%7B8%7D%29%3D%5Clog_%7B2%7D%284%5E%7Bx%7D+1%29.%5Clog_%7B2%7D%284%5E%7Bx+1%7D+4%29   |  |  | | --- | --- | | A) 0 | B) 1 | | C) 2 | D) None of these |   Answer & Explanation Answer: A) 0  Explanation:  \inline \log_{\frac{1}{\sqrt{2}}}(1/\sqrt{8})=\log_{2}(4^{x}+1).\log_{2}(4^{x+1}+4)  \inline \Rightarrow     \inline \frac{\log_{2}(1/\sqrt{8})}{\log_{2}(1/\sqrt{2})}=\log_{2}(4^{x}+1).\log_{2}(4^{x+1}+4)  \inline \Rightarrow    \inline 3=\left [ \log_{2}4+\log_{2}(4^{x}+1) \right ]\left [ \log_{2}(4^{x}+1) \right ]  \inline \Rightarrow    (2+t)t = 3,    where t = \inline \log_{2}(4^{x}+1)  \inline \Rightarrow     t = -3, 1  If \inline \log_{2}(4^{x}+1)= -3, then \inline 4^{x}=-7/8 which is not possible  If \inline \log_{2}(4^{x}+1)=1, then \inline 4^{x}+1=2\: \: \: \Rightarrow 4^{x}=1   * x = 0 |  |

4. If http://latex.codecogs.com/gif.latex?%5Cinline%20%7B%5Ccolor%7BBlack%7D%20x*y=x+y+%5Csqrt%7Bxy%7D%7D, the value of 6\*24 is:

|  |  |
| --- | --- |
| A) 41 | B) 42 |
| C) 43 | D) 44 |

Answer & Explanation Answer: B) 42

Explanation:



5. A, B and C enter into a partnership with a capital in which A's contribution is Rs. 10,000. If out of a total profit of Rs. 1000, A gets Rs. 500 and B gets Rs. 300, then C's capital is :

|  |  |
| --- | --- |
| A) 4000 | B) 5000 |
| C) 6000 | D) 7000 |

Answer & Explanation Answer: A) 4000   
  
Explanation:

A : B : C = 500 : 300 : 200 = 5 : 3 : 2.

Let their capitals be 5x, 3x and 2x respectively.

Then, 5x = 10000

=>  x = 2000.

C's capital = 2x = Rs. 4000.

6. The least multiple of 7, which leaves a remainder of 4, when divided by 6, 9, 15 and 18 is:

|  |  |
| --- | --- |
| A) 74 | B) 94 |
| C) 184 | D) 364 |

Answer & Explanation Answer: D) 364   
  
Explanation:

L.C.M. of 6, 9, 15 and 18 is 90.

Let required number be 90k + 4, which is multiple of 7.

Least value of k for which (90k + 4) is divisible by 7 is k = 4.

http://latex.codecogs.com/gif.latex?%5Cinline%20%5CthereforeRequired number = (90 x 4) + 4   = 364.

7. The value of x satisfying the following relation:

http://latex.codecogs.com/gif.latex?%5Cinline%20%5Clog_%7B%5Cfrac%7B1%7D%7B2%7D%7Dx%3D%5Clog_%7B2%7D%283x-2%29

|  |  |
| --- | --- |
| A) 1/3 | B) -1/3 |
| C) 3 | D) None of these |

Answer & Explanation Answer: D) None of these   
  
Explanation:

\inline \log_{\frac{1}{2}}x=\log_{2}(3x-2)

\inline \Rightarrow    \inline -\log_{2}x = \log_{2}(3x-2)

\inline \Rightarrow    \inline \log_{2}(x^{-1})= \log_{2}(3x-2)

\inline \Rightarrow        \inline x^{-1}=(3x-2)

\inline \Rightarrow      \inline 3x^{2}-2x-1=0

\inline \Rightarrow      \inline 3x^{2}-3x+x-1=0

\inline \Rightarrow     \inline 3x(x-1)+1(x-1)=0

\inline \Rightarrow      x = 1, x= -1/3

but at x=-1/3, log x is not defined.

The only admissible value of x is 1.

8. A student multiplied a number by 3/5 instead of 5/3, What is the percentage error in the calculation ?

|  |  |
| --- | --- |
| A) 54 % | B) 64 % |
| C) 74 % | D) 84 % |

Answer & Explanation Answer: B) 64 %   
  
Explanation:

Let the number be x.

Then, ideally he should have multiplied by  x by 5/3. Hence Correct result was http://latex.codecogs.com/gif.latex?%5Cinline%20x%5Ctimes%20%5Cfrac%7B5%7D%7B3%7D%3D%5Cfrac%7B5x%7D%7B3%7D.

By mistake he multiplied x by 3/5 . Hence the result with error  = http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfrac%7B3x%7D%7B5%7D

Then, error = http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfrac%7B5x%7D%7B3%7D-%5Cfrac%7B3x%7D%7B5%7D%3D%5Cfrac%7B16x%7D%7B15%7D

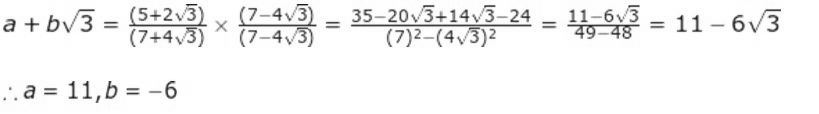
Error %  = http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfrac%7BError%7D%7BTrue%5C%3A%20value%7D%5Ctimes%20100%20%3D%20%5Cfrac%7B%5Cfrac%7B16%7D%7B15%7Dx%7D%7B%5Cfrac%7B5%7D%7B3%7Dx%7D%5Ctimes%20100 = 64 %

9. http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%20%7B%5Ccolor%7BBlack%7DIf%5C;%20%5Cfrac%7B5+2%5Csqrt%7B3%7D%7D%7B7+4%5Csqrt%7B3%7D%7D=a+b%5Csqrt%7B3%7D,then:%7D

|  |  |
| --- | --- |
| A) a=-11,b=-6 | B) a=-11,b=6 |
| C) a=11,b=-6 | D) a=11,b=6 |

Answer & Explanation Answer: C) a=11,b=-6

Answer: C) a=11,b=-6   
  
Explanation:



10. The difference between a positive proper fraction and its reciprocal is 9 / 20. Then the fraction is :

|  |  |
| --- | --- |
| A) 3/5 | B) 3/10 |
| C) 4/5 | D) 5/4 |

Answer & Explanation Answer: C) 4/5   
  
Explanation:

Let the required fraction be x. Then, (1 / x )- x = 9/20  
1 - x(2) / x = 9 / 20  =>  20 - 20 \* x(2) = 9 \* x.  
20 \* x(2) + 9 \* x - 20 = 0.  
=> (4 \* x + 5) (5 \* x - 4) = 0.  
=> x = 4 / 5.

11. If http://latex.codecogs.com/gif.latex?%5Cinline%20A%3D%5Cfrac%7B%5Clog_%7B3%7D2187%7D%7B5%7D and http://latex.codecogs.com/gif.latex?%5Cinline%20B%3D%5Clog_%7B243%7D2187, then which one of the following is correct?

|  |  |
| --- | --- |
| A) A | B) A=B |
| C) A>B | D) can't be determined |

Answer & Explanation Answer: B) A=B   
  
Explanation:

\inline A = \frac{\log_{3}2187}{5}=\frac{1}{5}\log_{3}2187

                          =  \inline \frac{1}{5}\log_{3}(3^{7})=\frac{7}{5}\log_{3}3=\frac{7}{5}

and \inline B=\log_{243}2187=\frac{\log_{3}2187}{\log_{3}243}=\frac{\log_{3}3^{7}}{\log_{3}3^{5}}=\frac{7}{5}

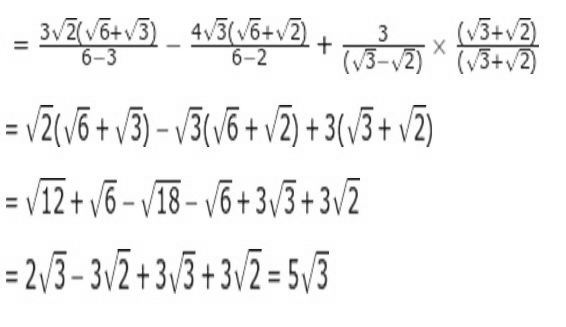
\therefore    A = B

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|  |  |
| --- | --- |
| A) sqtr{3}-sqrt{2} | B) sqtr{3}+sqrt{2} |
| C) 5sqrt{3} | D) 1 |

Answer & Explanation Answer: C) 5sqrt{3}   
  
Explanation:

Given exp



13. The number of ways that 7 teachers and 6 students can sit around a table so that no two students are together is

|  |  |
| --- | --- |
| A) 7! x 7! | B) 7! x 6! |
| C) 6! x 6! | D) 7! x 5! |

Answer & Explanation Answer: B) 7! x 6!   
  
Explanation:

The students should sit in between two teachers. There are 7 gaps in betweeen teachers when they sit in a round table. This can be done in http://latex.codecogs.com/gif.latex?%5Cinline%207P_%7B6%7D ways. 7 teachers can sit in (7-1)! ways.

http://latex.codecogs.com/gif.latex?%5Cinline%20%5Ctherefore Required no.of ways in http://latex.codecogs.com/gif.latex?%5Cinline%207P_%7B6%7D.6%21 = http://latex.codecogs.com/gif.latex?%5Cinline%207%21.6%21

14. In a plane 8 points are colliner  out of 12 points, then the number of triangles we get with those 12 points is

|  |  |
| --- | --- |
| A) 20 | B) 160 |
| C) 164 | D) 220 |

Answer & Explanation Answer: C) 164   
  
Explanation:

For a triangle we need 3 non colliner points. So with 12 points (when all the 12 are such that any three non collinear is http://latex.codecogs.com/gif.latex?%5Cinline%2012C_%7B3%7D. But among them 8 points are collinear.

http://latex.codecogs.com/gif.latex?%5Cinline%20%5Ctherefore If all these 8 points are different we get http://latex.codecogs.com/gif.latex?%5Cinline%208C_%7B3%7D,triangles as they are collinear.

In http://latex.codecogs.com/gif.latex?%5Cinline%2012C_%7B3%7D triangles, we do not get http://latex.codecogs.com/gif.latex?%5Cinline%208C_%7B3%7D triangles

http://latex.codecogs.com/gif.latex?%5Cinline%20%5Ctherefore The number of triangles we get = http://latex.codecogs.com/gif.latex?%5Cinline%2012C_%7B3%7D-8C_%7B3%7D=164

15. At a casino in mumbai, there are three tables A, B and C. The payoffs at A is 10:1, at B is 20:1 and at C is 30:1. If a man bets Rs 200 at each table and win at two of the tables, what is the maximum and minimum difference between his earnings can be?

|  |  |
| --- | --- |
| A) Rs.2500 | B) Rs.2000 |
| C) Rs.4000 | D) None of these |

Answer & Explanation Answer: C) Rs.4000

Explanation:

Maximum earning will be only when he will won on the maximum yielding table.

    A ----> 10:1

    B ----> 20:1

    C ----> 30:1

i.e, he won on B and C but lost on A

20 x 200 + 30 x 200 -1 x 200 = 9800

minimum earning will be when he won on  table A and B and lose on that table 3.

\fn_jvn \therefore    10 x 200 + 20 x 200 - 1 x 200

        6000-200 = 5800

\fn_jvn \therefore   Difference= 9800 - 5800 = 4000

16. Alloy A contains 40% gold and 60% silver. Alloy B contains 35% gold and 40% silver and 25% copper. Alloys A and B  are mixed in the ratio of 1:4 .What is the ratio of gold and silver in the newly formed alloy is?

|  |  |
| --- | --- |
| A) 20% and 30% | B) 36% and 44% |
| C) 25% and 35% | D) 49% and 36% |

Answer & Explanation Answer: B) 36% and 44%   
  
Explanation:

Assume the weight of alloy a is 100 kg

\inline \fn_jvn \therefore  The weight of alloy B is 400kg

\inline \fn_jvn \therefore               Gold          silver         copper

         A       40kg          60kg          0kg

         B      140kg         160kg        100kg

      total    180kg          220kg        100kg

\inline \fn_jvn \therefore Ratio of gold and silver in new alloy =\inline \fn_jvn \frac{180}{500}:\frac{200}{500}

                                                        = 36% :44%

17. Two boys starting from the same place walk at a rate of 5kmph and 5.5kmph respectively. What time will they take to be 8.5km apart, if they walk in the same direction?

|  |  |
| --- | --- |
| A) 15 hours | B) 16 hours |
| C) 17 hours | D) 18 hours |

Answer & Explanation Answer: C) 17 hours   
  
Explanation:

In this type of questions we need to get the relative speed between them,   
The relative speed of the boys = 5.5kmph – 5kmph  
= 0.5 kmph  
  
Distance between them is 8.5 km  
Time = Distance/Speed  
Time= 8.5km / 0.5 kmph = 17 hrs

18. Jack takes 20 minutes to jog around the race course one time, and 25 minutes to jog around a second time. What is his average speed in miles per hour for the whole jog if the course is 3 miles long?

|  |  |
| --- | --- |
| A) 6 | B) 8 |
| C) 9 | D) 10 |

Answer & Explanation Answer: B) 8   
  
Explanation:

Average speed = total distance / total time

Total distance covered = 6 miles; total time = 45 minutes = 0.75 hours

Average speed = 6/ 0.75 = 8 miles/hour

**REASONING**

1. At 3.40, the hour hand and the minute hand of a clock form an angle of:

|  |  |
| --- | --- |
| A) 120 degrees | B) 125 degrees |
| C) 130 degrees | D) 135 degrees |

Answer & Explanation Answer: C) 130 degrees   
  
Explanation:

Angle traced by hour hand in 12 hrs. = 360º.

Angle traced by it in  {\color{Black} \frac{11}{3}} hrs=  {\color{Black} \left ( \frac{360}{12} \times \frac{11}{3}\right )^{o}}={\color{Black}110 ^{o}}

Angle traced by minute hand in 60 min. = 360º.

Angle traced by it in 40 min. ={\color{Black}\left ( \frac{360}{60} \times 40\right )^{o}}={\color{Black}240^{o}}

{\color{Black} \therefore } Required angle (240 - 110)º = 130º.

2. (A)  '134' means 'you are well';

(B)  '758' means 'they go home';

(C)  '839' means 'we are home';

Which of the statements can be dispensed with while answering the above question?

|  |  |
| --- | --- |
| A) A only | B) B only |
| C) A or C only | D) B or C only |

Answer & Explanation Answer: A) A only   
  
Explanation:

**Justification:**

We can find the code for 'home' from the second and third statements.

For finding the code for 'they', we need the code for 'go' which cannot be determined from the given data.  
Clearly, statement A is not necessary.

3. A horse is facing north. It turns 90 degrees in the clockwise direction, then 180 degrees in the anti-clockwise and then another 90 degrees in the same direction. Which direction is the horse facing now?

|  |  |
| --- | --- |
| A) East | B) South |
| C) Southwest | D) Southeast |

Answer & Explanation Answer: B) South   
  
Explanation:

Starting from the initial point facing north, the horse turns 90 degrees clockwise, which means it turns towards East. Similarly, the other directions can be considered and written as : EWS Thus, the direction it is facing now is South.

4. Arrange the following in a logical order :

1. Shoulder     2. Wrist     3. Elbow     4. Palm     5. Finger

|  |  |
| --- | --- |
| A) 2, 4, 5, 3, 1 | B) 3, 1, 4, 2, 5 |
| C) 3, 4, 5, 2, 1 | D) 5, 4, 2, 3, 1 |

Answer & Explanation Answer: D) 5, 4, 2, 3, 1   
  
Explanation:

Clearly, Here are the names of parts of a hand, Which may be arranged

(i) from top to bottom, i.e, Shoulder, Elbow, Wrist, Palm, Finger - Which is 1, 3, 2, 4, 5  (or)

(ii) from bottom to top, i.e, Finger, Palm, Wrist, Elbow, Shoulder - Which is 5, 4, 2, 3, 1

Out of these, the sequence 5, 4, 2, 3, 1 is given in the alternatives provided. Hence, the answer is (D).

5. If train is called bus, bus is called tractor, tractor is called car, car is called scooter, scooter is called bicycle, bicycle is called moped, which is used to plough a field ?

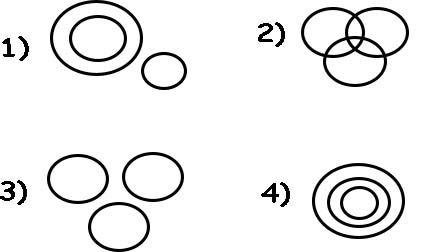
|  |  |
| --- | --- |
| A) Train | B) Bus |
| C) Tractor | D) Car |

Answer & Explanation Answer: D) Car   
  
Explanation:

A 'tractor' is used to plough a field.

But a 'tractor' is called 'car'.  
So, a 'car' will be used to plough the field.

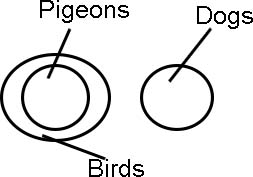
6. Select from four alternative diagrams, the one that best illustrates the relationship among the three classes  :  *Pigeons, Birds, Dogs*



|  |  |
| --- | --- |
| A) 1 | B) 2 |
| C) 3 | D) 4 |

Answer & Explanation Answer: A) 1   
  
Explanation:

All *Pigeons* are *Birds*. But,*Dogs* are entairly different.



7. Arrange the words given below in a meaningful sequence.

1.Presentation  2.Recommendation  3. Arriva  4.Discussion  5.Introduction

|  |  |
| --- | --- |
| A) 5, 3, 4, 1, 2 | B) 3, 5, 4, 2, 1 |
| C) 3, 5, 1, 4, 2 | D) 5, 3, 1, 2, 4 |

Answer & Explanation Answer: C) 3, 5, 1, 4, 2   
  
Explanation:

The correct order is :

Arrival   Introduction   Presentation   Discussion  Recommendation

      3                    5                        1                    4                       2

|  |  |
| --- | --- |
|  | 8. Look at this series: F2, \_\_, D8, C16, B32, ... What number should fill the blank? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A) A16 |  | B) G4 | |  | C) E4 |  | D) E3 |   Answer & Explanation  **Answer:** Option **C**  **Explanation:**  The letters decrease by 1; the numbers are multiplied by 2. |

|  |  |
| --- | --- |
|  | 9. Look at this series: 8, 43, 11, 41, \_\_, 39, 17, ... What number should fill in the blank? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A) 8 |  | B) 14 | |  | C) 43 |  | D) 44 |   Answer & Explanation  **Answer:** Option **B**  **Explanation:**  This is a simple alternating addition and subtraction series. The first series begins with 8 and adds 3; the second begins with 43 and subtracts 2. |

|  |  |
| --- | --- |
|  | 10. P5QR, P4QS, P3QT, \_\_\_\_\_, P1QV |
| |  |  |  |  | | --- | --- | --- | --- | |  | A) PQW |  | B) PQV2 | |  | C) P2QU |  | D) PQ3U |   Answer & Explanation  **Answer:** Option **C**  **Explanation:**  The first two letters, PQ, are static. The third letter is in alphabetical order, beginning with R. The number series is in descending order beginning with 5. |

|  |  |
| --- | --- |
|  | 11. Which of the following diagrams indicates the best relation between Women, Mothers and Engineers ? |
| |  |  |  |  | | --- | --- | --- | --- | | A) | http://www.indiabix.com/_files/images/verbal-reasoning/venn-diagram/4-19-1-c1.png | B) | http://www.indiabix.com/_files/images/verbal-reasoning/venn-diagram/4-19-1-c2.png | | C) | http://www.indiabix.com/_files/images/verbal-reasoning/venn-diagram/4-19-1-c3.png | D) | http://www.indiabix.com/_files/images/verbal-reasoning/venn-diagram/4-19-1-c4.png |   Answer & Explanation  **Answer:** Option **A**  **Explanation:**  All mothers are women and some mothers and some women may be engineers. |

12. The angle between the minute hand and the hour hand of a clock when the time is 4.20, is:

|  |  |
| --- | --- |
| A) 0 | B) 10 |
| C) 30 | D) 60 |

Answer & Explanation Answer: B) 10   
  
Explanation:

Angle traced by hour hand in http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%20%5Cfrac%7B13%7D%7B3%7Dhrs = http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%20%5Cleft%20%28%20%5Cfrac%7B360%7D%7B12%7D%5Ctimes%20%5Cfrac%7B13%7D%7B3%7D%20%5Cright%20%29%5Eo= http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%20130%5Eo

Angle traced by min. hand in 20 min = http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%20%5Cleft%20%28%20%5Cfrac%7B360%7D%7B60%7D%5Ctimes%2020%20%5Cright%20%29%5Eo =http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%20120%5Eo

Required angle = (130 - 120)º = 10º

13. What was the day of the week on 28th May, 2006?

|  |  |
| --- | --- |
| A) Thrusday | B) Friday |
| C) Saturday | D) Sunday |

Answer & Explanation Answer: D) Sunday   
  
Explanation:

28 May, 2006 = (2005 years + Period from 1.1.2006 to 28.5.2006)

Odd days in 1600 years = 0

Odd days in 400 years = 0

5 years = (4 ordinary years + 1 leap year) = (4 x 1 + 1 x 2) 6 odd days

Jan. Feb. March April May

(31 + 28 + 31 + 30 + 28 ) = 148 days

148 days = (21 weeks + 1 day) 1 odd day.

Total number of odd days = (0 + 0 + 6 + 1) = 7 0 odd day.

Given day is Sunday.

14. A and B are a married couple, A being the male member. D is the only son of C, who is the brother of A. E is the sister of D. B is the daughter-in-law of F, whose husband has died. How is E related to C ?

|  |  |
| --- | --- |
| A) Sister | B) Daughter |
| C) Cousin | D) Mother |

Answer & Explanation Answer: B) Daughter   
  
Explanation:

A is a male and married to B. So, A is the husband and B is the wife. C is the brother of A. D is the son of C. E. who is the sister of D will be the daughter of C. B is the daughter-in-law of F whose husband has died means F is the mother of A.

Clearly. E is the daughter of C.

15. Find the odd man out.

6, 9, 15, 21, 24, 28, 30

|  |  |
| --- | --- |
| A) 28 | B) 21 |
| C) 24 | D) 30 |

Answer & Explanation Answer: A) 28   
  
Explanation:

Each of the numbers except 28, is a multiple of 3.

**ENGLISH**

**ANTONYMS**

**1.**

**Foremost :**

A. Hindmost

B. Unimportant

C. Disposed

D. Mature

E. Premature

**Answer & Solution**

Answer: **Option B**

Solution:

**Hindmost :** furthest back, latest or ultramodern.  
  
**Disposed :** inclined or willing.  
  
**Mature :** fully developed physically, full-grown.  
  
**Premature :** occurring or done before the usual or proper time, too early.  
  
**Unimportant :** lacking in importance or significance.  
  
**Foremost :** most prominent in rank, importance, or position.  
  
So, antonym is **Unimportant**.

**2.**

**Protects :**

A. Defends

B. Deprives

C. Deserts

D. Devises

E. Secures

**Answer & Solution**

Answer: **Option C**

Solution:

**Defends :** protect from harm or danger.  
  
**Deprives :** prevent (a person or place) from having or using something  
  
**Devises :** plan or invent (a complex procedure, system, or mechanism) by careful thought  
  
**Secures :** fix or attach (something) firmly so that it cannot be moved or lost  
  
**Deserts :** punishment  
  
**Protects :** keep safe from harm or injury  
  
Correct option is **Deserts.**

**3.**

**Beautiful :**

A. Wonderful

B. Graceful

C. Ugly

D. Handsome

E. Marvelous

**Answer & Solution**

Answer: **Option C**

Solution:

**Wonderful, Graceful, Handsome** and **Marvelous** are more or less synonyms of Beautiful.  
  
**Ugly** posses opposite meaning of Beautiful.

**SYNONYMS**

**4.**

**FOSTERING :**

A. Safeguarding

B. Neglecting

C. Ignoring

D. Nurturing

**Answer & Solution**

Answer: **Option D**

Solution:

**Safeguarding :** a measure taken to protect someone or something or to prevent something undesirable.  
  
**Neglecting :** fail to care for properly.  
  
**Ignoring :** refuse to take notice of or acknowledge; disregard intentionally.  
  
**Nurturing :** care for and protect (someone or something) while they are growing.  
  
**Fostering :** encourage the development of (something, especially something desirable).  
  
Synonym of **Fostering** is **Nurturing.**

**5.**

**PROPEL:**

A. Drive

B. Jettison

C. Burst

D. Acclimatize

E. Modify

**Answer & Solution**

Answer: **Option A**

Solution:

**Jettison :** throw or drop (something) from an aircraft or ship.  
  
**Burst :** break open or apart suddenly and violently, especially as a result of an impact or internal pressure.  
  
**Acclimatize :** become accustomed to a new climate or new conditions, adjust  
  
**Modify :** make partial or minor changes to (something).  
  
**Drive :** propel or carry along by force in a specified direction.  
  
**Propel :** carry along by force in a specified direction.  
  
Synonym of **Propel** is **Drive.**

**6.**

**MASSIVE:**

A. Lump sum

B. Strong

C. Little

D. Gaping

E. Huge

**Answer & Solution**

Answer: **Option E**

Solution:

**Lump sum :** a single payment made at a particular time, as opposed to a number of smaller payments or installments.  
  
**Strong :** having the power to move heavy weights or perform other physically demanding tasks.  
  
**Little :** small in size, amount, or degree.  
  
**Gaping :** wide open.  
  
**Huge :** extremely large; enormous.  
  
**Massive :** exceptionally large.  
  
Synonym of **Massive** is **Huge.**

### Sentence Completion

**7.**

**Rajeev failed in the examination because none of her answers were \_\_\_\_\_\_\_ to the questions asked.**

A. allusive

B. revealing

C. pertinent

D. referential

**Answer & Solution**

Answer: **Option C**

Solution: pertinent

**8.**

**There are \_\_\_\_\_\_\_ views on the issue of giving bonus to the employees.**

A. independent

B. divergent

C. modest

D. adverse

**Answer & Solution**

Answer: **Option B**

Solution: divergent means **tending to be different or develop in different directions.**

**9.**

**Man who has committed such an \_\_\_\_\_\_\_ crime must get the most severe punishment.**

A. injurious

B. unchritable

C. unworhty

D. abominable

**Answer & Solution**

Answer: **Option D**

Solution:

**Abominable** means very bad or terrible.

### Common Error Detection

**10.**

**Ram was / senior to / Sam in college.**

A. Ram was

B. senior to

C. Sam in college

D. No Error

**Answer & Solution**

Answer: **Option D**

Solution: **Sentence is correct.**

**11.**

**It was him / who came running / into the classroom.**

A. It was he

B. who came

C. running

D. into the classroom

E. No Error

**Answer & Solution**

Answer: **Option A**

Solution:

**Change, It was him → It was he**

**12.**

**The capital of Yemen / is situating / 2190 meters above / the sea level.**

A. The capital of Yemen

B. is situating

C. 2190 meters above

D. the sea level

E. No Error

**Answer & Solution**

Answer: **Option B**

Solution: **Change, is situating → is situated**

**13.**

**Find the correctly spelt word.**

A. Adulation

B. Adlation

C. Aduletion

D. Addulation

**Answer & Solution**

Answer: **Option A**

Solution: Adulation

**14.**

**Find the correct spelt word.**

A. Adulterate

B. Adeldurate

C. Adulterat

D. Adultarate

**Answer & Solution**

Answer: **Option A**

Solution: Adulterate

**15.**

**Find the correct spelt word.**

A. Adventitious

B. Adventitous

C. Adventitus

D. Adventituous

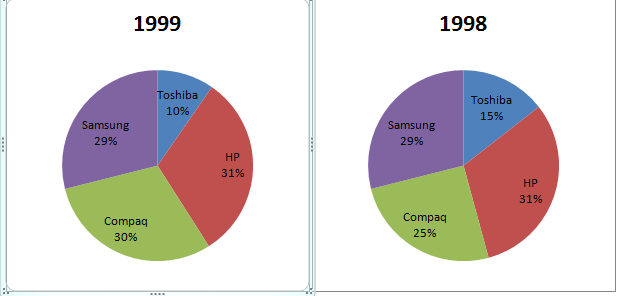
**Answer & Solution**

Answer: **Option A**

Solution: Adventitious

**DATA INTERPRETATION**

Directions (1-5): Based on the data given on the pie-chart. Solve the questions which follow :  
  
Percentage Sales of different Models of Computers In Kolkata In Two Different years . Given total sales in 1998 is 7890 and increase 16.5% in 1999-



## 1.

## The percentage change in the sales of Toshiba in 1999 is approximately :

A. 16%

B. 61%

C. 22%

D. 68%

## Answer & Solution

Answer: **Option C**

Solution: Total sales in 1998 = 7890.  
Sales of Toshiba = 12% = (7890 \*12) /100 = 946  
  
Total sales in 1999 = 7890 + (16.5% of 7890) = 9191  
Sales of Toshiba = 8% of 9191 = 735  
Change in sales = 947 - 735 = 212.  
  
% change = (212\*100) /986 = 21.5% = 22%

## 2.

## Which brand of computers among those shown, exhibited the second highest rate of growth in two years and had less sales in 1999 than 1998?

A. HP

B. Compaq

C. Samsung

D. All of These

## Answer & Solution

Answer: **Option D**

Solution: There is no percentage change in the given three company.  
Thus, All of these is the correct answer.

## 3.

## What is the ratio between the Compaq sales in 1998 and those IBM in 1999?

A. 0.94

B. 1.06

C. 1.13

D. 0.89

## Answer & Solution

Answer: **Option B**

Solution: Sale of Compaq in 1998,  
= 21% = (7890 \*21) /100 =1657  
  
Sales of IBM in 1999,  
= 17% = (9191 \*17) /100 = 1562.  
  
Ratio = 1657 /1562= 1.06  
  
**We have calculated total sales in 1999 is 9191 in question no. 1.**

## 4.

## For which brand of computers, did the sales increase the maximum in terms of absolute value between the two years?

A. IBM

B. Samsung

C. HP

D. Compaq

## Answer & Solution

Answer: **Option D**

Solution: The maximum increase in sales is of Compaq which is 4%. Thus, it will got maximum absolute value too.

## 5.

## IBM's sales in 1998 is what percentage of the sales of Samsung in 1999?

A. 46.34%

B. 52.34%

C. 57%

D. 60.8%

## Answer & Solution

Answer: **Option D**

Solution: IBM's sales in 1998 = 17% of 7890 = 1341.  
  
Samsung sales in 1999 = 24% of 9191 = 2205.  
Required answer = (1341 /2205) \*100 = 60.8%