**ACTUARIAL SCIENCE**

**(ACET)**

**MOCK TEST**

**PAPER I**

**BY**

**SOURAV SIR’S CLASSES**

**KOLKATA & NEW DELHI**

1. A's salary is 40% of B's salary which is 25% of C's salary. What percentage of C's salary is A's salary?

|  |  |
| --- | --- |
| A) 10 | B) 20 |
| C) 30 | D) 40 |

[Answer & Explanation](javascript:showans('2498','Percentage'))**Answer:** A) 10   
  
**Explanation:**

A's Salary  = 40% of B = 40% of (25% of C) = http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfrac%7B40%7D%7B100%7D%5B%5Cfrac%7B25%7D%7B100%7D%5Ctimes%20100%5D% of C = 10% of C

2. Simplify

|  |  |
| --- | --- |
| A) 6 | B) 8 |
| C) 10 | D) 12 |

[Answer & Explanation](javascript:showans('7963','Simplification'))**Answer:** C) 10   
  
**Explanation:**

Apply http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfrac%7Ba%5E%7B3%7D&plus;b%5E%7B3%7D&plus;c%5E%7B3%7D-3abc%7D%7Ba%5E%7B2%7D&plus;b%5E%7B2%7D&plus;c%5E%7B2%7D-ab-bc-ca%7D%3Da&plus;b&plus;c

Hence the answer is 1.5+4.7+3.8=10

3. The sum of the ages of 5 children born at the intervals of 3 years each is 50 years. what is the age of the youngest child ?

|  |  |
| --- | --- |
| A) 4 | B) 8 |
| C) 10 | D) None |

[Answer & Explanation](javascript:showans('1703','Problems%20on%20Ages'))**Answer:** C) 10   
  
**Explanation:**

Let x = the youngest child. Each of the other four children will then be x+3, x+6, x+9, x+12.

We know that the sum of their ages is 50 .

so, x+(x+3)+(x+6)+(x+9)+(x+12) = 50

\inline \Rightarrow x= 4

\inline \therefore The youngest child is 4 years old.

4. The distance between two cities A and B is 330 Km. A train starts from A at 8 a.m. and travel towards B at 60 km/hr. Another train starts from B at 9 a.m and travels towards A at 75 Km/hr. At what time do they meet?

|  |  |
| --- | --- |
| A) 10 a.m | B) 10.30 a.m |
| C) 11 a.m | D) 11.30 a.m |

[Answer & Explanation](javascript:showans('6381','Time%20and%20Distance'))**Answer:** C) 11 a.m   
  
**Explanation:**

Suppose they meet x hrs after 8 a.m

then,

[Distance moved by first in x hrs] + [Distance moved by second in (x-1) hrs] = 330.

Therefore, 60x + 75(x-1) = 330.

 => x=3.

So,they meet at (8+3) i.e, 11a.m.

5. At Arihant Prakasham every book goes hrough 3 phases (or stages) typing, composing and binding. There are 16 typists, 10 composers and 15 binders. A typist can type 8 books in each hour, a composer can compose 12 books in each hour and a binder can bind 12 books in each hour. All of the people at Arihant Prakasham works for 10 hours a day and each person is trained to do only the ob of 1 category.How many books can be prepared in each day?

|  |  |
| --- | --- |
| A) 1500 | B) 1200 |
| C) 1440 | D) 1380 |

[Answer & Explanation](javascript:showans('6708','Time%20and%20Work'))**Answer:** B) 1200   
  
**Explanation:**

T                 C              B

16              10             15

8                12             12

128            120           180             <------- in one hour

1280          1200         1800            <------- in 10 hours

Since, restriction is imposed by composers i.e,since only 1200 books can be composed i 10 hours so not more than 1200 books can be finally pepared.

6. Rs. 5887 is divided between Shyam and Ram, such that Shyam's share at the end of 9 years is equal to Ram's share at the end of 11 years, compounded annually at the rate of 5%. Find the share of Shyam.

|  |  |
| --- | --- |
| A) 3567 | B) 3452 |
| C) 3087 | D) 3544 |

[Answer & Explanation](javascript:showans('3247','Compound%20Interest'))**Answer:** C) 3087   
  
**Explanation:**

Shyam's share (1+0.05)9 = Ram's share (1 + 0.05)11

Shyam's share / Ram's share = (1 + 0.05)11 / (1+ 0.05)9 = (1+ 0.05)2 = 441/400

Therefore Shyam's share = (441/841) 5887 = 3087

7. A, B, C rent a pasture. A puts 10 oxen for 7 months, B puts 12 oxen for 5 months and C puts 15 oxen for 3 months for grazing. If the rent of the pasture is Rs. 175, how much must C pay as his share of rent?

|  |  |
| --- | --- |
| A) Rs. 45 | B) Rs. 50 |
| C) Rs. 55 | D) Rs. 60 |

[Answer & Explanation](javascript:showans('6479','Partnership'))**Answer:** A) Rs. 45   
  
**Explanation:**

A:B:C = (10×7):(12×5):(15×3)

         = 70 :60 :45

         = 14 :12 :9

C's rent = Rs.(175×9/35)

            =Rs. 45.

8. A father left a will of Rs.35 lakhs between his two daughters aged 8.5 and 16 such that they may get equal amounts when each of them reach the age of 21 years. The original amount of Rs.35 lakhs has been instructed to be invested at 10% p.a. simple interest. How much did the elder daughter get at the time of the will?

|  |  |
| --- | --- |
| A) 17.5 lakhs | B) 21 lakhs |
| C) 15 lakhs | D) 20 lakhs |

[Answer & Explanation](javascript:showans('3027','Simple%20Interest'))**Answer:** B) 21 lakhs   
  
**Explanation:**

Let Rs.x be the amount that the elder daughter got at the time of the will. Therefore, the younger daughter got (3,500,000 - x).

The elder daughter’s money earns interest for (21 - 16) = 5 years @ 10% p.a simple interest.

The younger daughter’s money earns interest for (21 - 8.5) = 12.5 years @ 10% p.a simple interest.

As the sum of money that each of the daughters get when they are 21 is the same,

http://latex.codecogs.com/gif.latex?%5Cinline%20x+%5Cfrac%7B5%5Ctimes%2010%5Ctimes%20x%7D%7B100%7D%3D%283%2C500%2C000-x%29+%20%5Cfrac%7B12.5%5Ctimes%2010%5Ctimes%20%283%2C500%2C000-x%29%7D%7B100%7D

http://latex.codecogs.com/gif.latex?%5Cinline%20%5CRightarrow%20x+%5Cfrac%7B50x%7D%7B100%7D%3D3%2C500%2C000-x+%20%5Cfrac%7B125%7D%7B100%7D%5Ctimes%203%2C500%2C000-%5Cfrac%7B125x%7D%7B100%7D

http://latex.codecogs.com/gif.latex?%5Cinline%20%5CRightarrow%202x+%5Cfrac%7B50x%7D%7B100%7D+%5Cfrac%7B125x%7D%7B100%7D%3D3%2C500%2C000%281+%5Cfrac%7B5%7D%7B4%7D%29

http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfrac%7B200x+50x+125x%7D%7B100%7D%3D%28%5Cfrac%7B9%7D%7B4%7D%29%283%2C500%2C000%29

http://latex.codecogs.com/gif.latex?%5Cinline%20%5CRightarrow%20x%3D2%2C100%2C000%3D21%20%5C%3B%20lakhs

9. If Deepesh had walked 20 km/h faster he woulh have saved 1 hour in the distance of 60km. what is the usual speed of Deepesh?

|  |  |
| --- | --- |
| A) 100 | B) 120 |
| C) 150 | D) None of these |

[Answer & Explanation](javascript:showans('6725','Time%20and%20Distance'))**Answer:** A) 100   
  
**Explanation:**

Let the original speed  be x km/h, then

\inline \frac{600}{x}-\frac{600}{(X+20)}=1

\inline \Rightarrow 600\left ( \frac{x+20-x}{x(x+20)} \right )=1

\inline \Rightarrow \: \: x^{2}+120x-12000=0

\inline \Rightarrow \: \: (x-120)(x-100)=0

\inline \Rightarrow \: \: x=100 \: \: and\: \: x=120

\inline \therefore original speed = 100km/h

10. In an election between two candidates, one got 55% of the total valid votes, 20% of the votes were invalid. If the total number of votes was 7500, the number of valid votes that the other candidate got, was :

|  |  |
| --- | --- |
| A) 2500 | B) 2700 |
| C) 2900 | D) 3100 |

[Answer & Explanation](javascript:showans('2526','Percentage'))**Answer:** B) 2700   
  
**Explanation:**

Total number of votes = 7500

Given that 20% of Percentage votes were invalid

=> Valid votes = 80%

Total valid votes = http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%207500%5Ctimes%20%5Cfrac%7B80%7D%7B100%7D

1st candidate got 55% of the total valid votes.

Hence the 2nd candidate should have got 45% of the total valid votes

=> Valid votes that 2nd candidate got = total valid votes x http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%20%5Cfrac%7B45%7D%7B100%7D

http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%20%3D7500%5Ctimes%20%5Cfrac%7B80%7D%7B100%7D%5Ctimes%20%5Cfrac%7B45%7D%7B100%7D%3D2700

11. Which of the following could not be the lengths of the sides of a right angled triangle?

|  |  |
| --- | --- |
| A) 3, 4, 5 | B) 5, 12, 13 |
| C) 8, 15, 17 | D) 12, 15, 18 |

[Answer & Explanation](javascript:showans('4486','Ratio%20and%20Proportion'))**Answer:** D) 12, 15, 18   
  
**Explanation:**

Using Pythagoras theorem we can see that 122 + 152 is not equal to 182  
Neither is 102 + 242 = 252

12. The average of 26,29,n,35 and 43 lies between 25 and 35. If n is always an integer and greater than the average  of the given integers then the value of n is :

|  |  |
| --- | --- |
| A) 33 | B) 34 |
| C) 33 | D) None of these |

[Answer & Explanation](javascript:showans('6882','Average'))**Answer:** C) 33<n  
  
**Explanation:**

Average of 26,29,35 and 43 is 33.25 . Also the average of 26 , 29, n, 35 and 43 lies between 25 and 35 i.e,

\inline 25<\frac{26+29+n+35+43}{5}<35

\inline \Rightarrow 125 < 26+29+n+35+43 < 175

\inline \Rightarrow 125 < 133 + n < 175

\inline \Rightarrow  n < 42

Since the value of n is an integer and greater than 33.25 then 33 < n < 42 for every integer n.

</n

13. 2 men and 7 boys can do a piece of work in 14 days; 3 men and 8 boys can do the same in 11 days. Then, 8 men and 6 boys can do three times the amount of this work in

|  |  |
| --- | --- |
| A) 18 days | B) 21 days |
| C) 24 days | D) 30 days |

[Answer & Explanation](javascript:showans('6758','Chain%20Rule'))**Answer:** B) 21 days   
  
**Explanation:**

\inline \fn_jvn (2\times 14) men +(7\times 14)boys=(3\times 11)men+(8\times 11)boys

\inline \fn_jvn \Leftrightarrow  5 men= 10 boys  \inline \fn_jvn \Leftrightarrow  1man= 2 boys

\inline \fn_jvn \therefore  (2 men+ 7 boys) = (2 x 2 +7) boys = 11 boys

     ( 8 men + 6 boys) = (8 x 2 +6) boys = 22 boys.

Let the required  number of days be x.

More boys , Less days     (Indirect proportion)

More work , More days    (Direct proportion)

\inline \fn_jvn \left.\begin{matrix} Boys\: 22:11\\ Work\: 1:3 \end{matrix}\right\}::14:x

\inline \fn_jvn \therefore \: \: (22\times 1\times x)=(11\times 3\times 14)   \inline \fn_jvn \Leftrightarrow  \inline \fn_jvn x= \frac{462}{22}=21

Hence, the required number of days = 21

14. A retailer buys product from a shopkeeper at discount of 40% on the list price (marked price) and sells them to the customer at a discount of 25% on the list price.What is his profit percentage ?

|  |  |
| --- | --- |
| A) 10% | B) 15% |
| C) 20% | D) 25% |

[Answer & Explanation](javascript:showans('10363','Profit%20and%20Loss'))**Answer:** D) 25% 

**Explanation:**

Let the list price be Rs.100.

Therefore,the retailer is buying the products at Rs.60 and selling it to the customer at Rs.75, earning a profit of Rs.15.

Therefore, his percentage is http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfrac%7B15%7D%7B60%7D%5Ctimes%20100 = 25%

15. A man sitting in a train which is traveling at 50 kmph observes that a goods train, traveling in opposite direction, takes 9 seconds to pass him. If the goods train is 280 m long, find its speed.?

|  |  |
| --- | --- |
| A) 60 | B) 62 |
| C) 64 | D) 65 |

[Answer & Explanation](javascript:showans('1664','Problems%20on%20Trains'))**Answer:** B) 62   
  
**Explanation:**

Relative speed =http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%20%5Cfrac%7B280%7D%7B9%7D  m / sec = http://latex.codecogs.com/gif.latex?%5Cinline%20%5Cfn_jvn%20%28%5Cfrac%7B280%7D%7B9%7D%5Ctimes%20%5Cfrac%7B18%7D%7B5%7D%29 kmph = 112 kmph.

Speed of goods train = (112 - 50) kmph = 62 kmph.

|  |  |
| --- | --- |
|  | 16. If log10 2 = 0.3010, the value of log10 80 is: |
| |  |  | | --- | --- | | [A.](javascript:%20void%200;) | 1.6020 | | [B.](javascript:%20void%200;) | 1.9030 | | [C.](javascript:%20void%200;) | 3.9030 | | [D.](javascript:%20void%200;) | None of these | |

Answer: Option B

Explanation:

|  |  |
| --- | --- |
| log10 80 | = log10 (8 x 10) |
|  | = log10 8 + log10 10 |
|  | = log10 (23 ) + 1 |
|  | = 3 log10 2 + 1 |
|  | = (3 x 0.3010) + 1 |
|  | = 1.9030. |

## 17. After striking the floor, a rubber ball rebounds to 4/5th of the height from which it has fallen. Find the total distance that it travels before coming to rest if it has been gently dropped from a height of 120 metres.

A. 540 m

B. 960 m

C. 1080 m

D. 1020 m

**Answer & Solution**

Answer: **Option C**

Solution: The first drop is 120 metres. After this the ball will rise by 96 metres and fall by 96 metres. This process will continue in the form of infinite GP with common ratio 0.8 and first term 96. The required answer is given by the formula:  
**a/(1-r)**   
Now,  
[{120/(1/5)}+{96/(1/5)}]   
= 1080 m.

## 18. What is the total number of ways in which Dishu can distribute 9 distinct gifts among his 8 distinct girlfriends such that each of them gets at least one gift?

A. 72 \* 8!

B. 144 \* 8!

C. 36 \* 8!

D. 9!

**Answer & Solution**

Answer: **Option C**

Solution:

As every girl friend should get one gift.  
The number of ways 8 distinct gifts can be selected is: 9C8 = 9 ways.  
The number of ways each GF gets one gift each out of these 8 selected gifts 8!  
Total number of ways 8 gifts can be distributed is 9 \*8!.  
Now the last one gift can be given to any of the 8 GF hence, the total number of ways of distributing =(9 \*8! \*82)= 36 \* 8! ways.

1. If Mar 18th,1994 falls on Friday then Feb 25th,1995 falls on which day?

|  |  |
| --- | --- |
| A) Wednesday | B) Monday |
| C) Saturday | D) Sunday |

[Answer & Explanation](javascript:showans('4635','Calendar'))**Answer:** A) Wednesday   
  
**Explanation:**

First,we count the number of odd days for the left over days in the given period.Here,given period is 18.3.1994 to 25.2.1995

Mar Apr May June July  Aug Sept Oct Nov Dec Jan

13  30  31   30    31   31   30   31  30   31   25 (left days)

6 + 2 + 3 + 2 + 3 + 3 + 2 + 3 + 2 + 3 + 4(odd days) = 5 odd day

So,given day Friday + 5 = wednesday is the required result.

2. At what time, in minutes, between 3 o'clock and 4 o'clock, both the needles will coincide each other?

|  |  |
| --- | --- |
| A) 11 4/11 | B) 13 4/11 |
| C) 15 4/11 | D) 16 4/11 |

[Answer & Explanation](javascript:showans('4559','Clocks'))**Answer:** D) 16 4/11   
  
**Explanation:**

At 3 o'clock, the minute hand is 15 min. spaces apart from the hour hand.  
To be coincident, it must gain 15 min. spaces.55 min. are gained in 60 min.  
15 min. are gained in  
= (60/55 x 15)min  
=16+4/11  
The hands are coincident at 16 + 4/11 min past 3

3. I.  Class A has a higher enrollment than Class B.

II. Class C has a lower enrollment than Class B.

III.Class A has a lower enrollment than Class C.

If the first two statements are true, the third statement is

|  |  |
| --- | --- |
| A) true | B) false |
| C) uncertain | D) none |

[Answer & Explanation](javascript:showans('5298','Logic'))**Answer:** B) false   
  
**Explanation:**

From the first two statements, we know that of the three classes, Class A has the highest enrollment, so the third statement must be false.

4. If Neena says, "Anita's father Raman is the only son of my father-in-law Mahipal", then how is Bindu, who is the sister of Anita, related to Mahipal ?

|  |  |
| --- | --- |
| A) Daughter | B) Wife |
| C) Daughter-in-law | D) None of these |

[Answer & Explanation](javascript:showans('2933','Blood%20Relations'))**Answer:** D) None of these   
  
**Explanation:**

Only son of Neena's father-in-law Mahipal Neena's husband. So, Raman is Neena's husband and Anita and Hindu are his daughters.

 Thus, Bindu is the grand daughter of Mahipal.

5. Choose the correct alternative Eye :Myopia : : Teeth : ?

|  |  |
| --- | --- |
| A) Cataract | B) Trachoma |
| C) Eczema | D) Pyorrhea |

[Answer & Explanation](javascript:showans('1489','Analogy'))**Answer:** D) Pyorrhea   
  
**Explanation:**

Second is a disease of the first

6. In the following question, a matrix of certain characters is given.These characters follow a certain trend, row-wise or column wise.Find out this trend and choose the missing character accordingly

|  |  |  |
| --- | --- | --- |
| **11** | **6** | **8** |
| **17** | **12** | **?** |
| **25** | **34** | **19** |
| **19** | **28** | **11** |

|  |  |
| --- | --- |
| A) 16 | B) 15 |
| C) 13 | D) 9 |

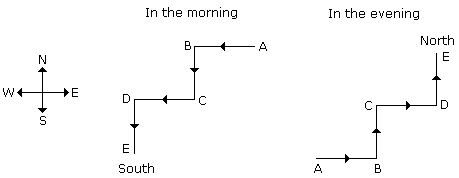
[Answer & Explanation](javascript:showans('5375','Inserting%20The%20Missing%20Character'))**Answer:** A) 16   
  
**Explanation:**

In the first column, 17 - 11 = 25 - 19 = 6.  
In the second column, 12 - 6 = 34 - 28 = 6.  
Let the missing number in the third column be y.  
Then, y - 8 = 19 - 11 = 8 or y = 16.

7. Amit started walking positioning his back towards the sun. After some time, he turned left, then turned right and towards the left again. In which direction is he going now?

|  |  |
| --- | --- |
| A) North or South | B) North or West |
| C) East or West | D) South or West |

[Answer & Explanation](javascript:showans('5338','Direction%20Sense%20Test'))**Answer:** A) North or South   
  
**Explanation:**



If he starts walking the morning then finally he will face towards South and if he starts in the evening then finally he will face towards North.

8. If Z = 52 and ACT = 48, then BAT will be equal to

|  |  |
| --- | --- |
| A) 39 | B) 41 |
| C) 44 | D) 46 |

[Answer & Explanation](javascript:showans('5318','Coding%20and%20Decoding'))**Answer:** D) 46   
  
**Explanation:**

In the given code, A = 2, B = 4, C = 6,.... , Z = 52.

So, ACT = 2 + 6 + 40 = 48 and

BAT = 4 + 2 + 40 = 46

9. If in a certain language if ENTRY is coded as 12345 and STEADY is coded as 931785, then state which is the correct code for below word. NEATNESS

|  |  |
| --- | --- |
| A) 25196577 | B) 21732199 |
| C) 21362199 | D) 21823698 |

[Answer & Explanation](javascript:showans('5315','Coding%20and%20Decoding'))**Answer:** B) 21732199   
  
**Explanation:**

The alphabets are soded as shown :

N is coded as 2,

E as 1,  
A as 7,  
T as 3   and  
S as 9.  
So, NEATNESS is coded as 21732199.

10. If FRIEND is coded as HUMJTK, how is CANDLE written in that code ?

|  |  |
| --- | --- |
| A) EDRIRL | B) DCQHQK |
| C) ESJFME | D) DEQJQM |

[Answer & Explanation](javascript:showans('5310','Coding%20and%20Decoding'))**Answer:** A) EDRIRL   
  
**Explanation:**

The first, second, third, fourth, fifth and sixth letters of th word are respectively moved two, three, four, five, six and seven steps forward to obtain the corresponding letters of the code.

11. Some blades are hammers.Some hammers are knives.Some knives are axes.

**Conclusions:**

         1.Some axes are hammers

         2.Some knives are blades

         3.Some axes are blades

|  |  |
| --- | --- |
| A) None follows | B) Only 1 follows |
| C) Only 2 follows | D) Only 3 follows |

[Answer & Explanation](javascript:showans('2829','Statement%20-%20Conclusions'))**Answer:** A) None follows   
  
**Explanation:**

Since each combination has of premises has 2 particular premises, so no defenite conclusion follows

12. There are six children playing football, namely A, B, C, D, E and F. A and E are brothers. F is the Sister of E. C is the only son of A's Uncle. B and D are the daughters of the brother of C's father. How is D related to A?

|  |  |
| --- | --- |
| A) Uncle | B) Sister |
| C) Niece | D) Cousin |

[Answer & Explanation](javascript:showans('10231','Blood%20Relations'))**Answer:** D) Cousin   
  
**Explanation:**

Clearly, D's father is the brother of C's father and C's father is A's Uncle. So, D's father is also A's Uncle. Thus, D is A's cousin.

13. Find the wrong number in the series.

3, 8, 15, 24, 34, 48, 63

|  |  |
| --- | --- |
| A) 15 | B) 24 |
| C) 34 | D) 48 |

[Answer & Explanation](javascript:showans('7321','Series'))**Answer:** C) 34   
  
**Explanation:**

The difference between consecutive numbers of the given series are respectively 5, 7, 9, 11, 13, and 15.

Therefore, 24+11=35 But in your problem it is given as 34.so 34 is wrong number

14. Choose the missing terms out of the given alternatives ejo, tyd, ins, xch, ?

|  |  |
| --- | --- |
| A) mrw | B) nrw |
| C) nsx | D) nsw |

[Answer & Explanation](javascript:showans('1479','Series'))**Answer:** A) mrw   
  
**Explanation:**

There is a gap of 4 letters between the first and second, second and third letters of each term, and also between the last letter of the term and first letter of next term.

15. Choose the number pair/group which is different from others?

|  |  |
| --- | --- |
| A) 7: 22 | B) 12 : 37 |
| C) 8 : 33 | D) 15 : 46 |

[Answer & Explanation](javascript:showans('1705','Classification'))**Answer:** C) 8 : 33   
  
**Explanation:**

In all other pairs, 2nd number = (1st number × 3) + 1.

|  |  |
| --- | --- |
|  | 16. Look at this series: 2, 1, (1/2), (1/4) ... What number should come next? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A) (1/3) |  | B) (1/8) | |  | C) (2/8) |  | D) (1/16) |   Answer & Explanation  Answer: Option B  Explanation:  This is a simple division series; each number is one-half of the previous number.  In other terms to say, the number is divided by 2 successively to get the next result.  4/2 = 2  2/2 = 1  1/2 = 1/2  (1/2)/2 = 1/4  (1/4)/2 = 1/8 and so on. |

|  |  |
| --- | --- |
| **1.** | We can coax physical nature into \_\_\_\_\_\_\_\_ many of our wishes but we cannot \_\_\_\_\_\_\_\_ authority over it or make it change its ways one jot. |

|  |  |  |
| --- | --- | --- |
|  | **A.** | granting, empower |
|  | **B.** | satiating, display |
|  | **C.** | satisfying, exercise |
|  | **D.** | stimulating, exercise |

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|  |  | Answer – **(C)**  **Solution:**  We can satisfy the wishes and exercise authority over someone or something. |

2. **Common information for questions numbered 2 to 6**

Economists have long recognized a persistent and unfounded belief among the population which has come to be known as the anti-foreign bias. As a result of this bias, most people systematically underestimate the economic benefits of interactions with foreign nations. Some psychologists believe that this bias is rooted in a natural distrust of the "other," while others believe that a form of folk wisdom, seemingly in accord with common sense but nonetheless incorrect, explains the bias. This wisdom asserts that in any transaction there is a winner and a loser and any foreign nation that wants to engage in trade must be doing so because it seeks its own advantage. But nothing could be further from truth.

No less an authority than Adam Smith, one of the fathers of the modern free market system, spoke glowingly of foreign trade in his influential treatise Wealth of Nations. "What is prudence in the conduct of every private family, can scarce be folly in a great kingdom," said Smith. His point is simple. A baker trades his bread to the cobbler for shoes and both men benefit from the trade because of the value of specialization. The same principle works for nations. Even more startling, a basic economic theorem, the Law of Comparative Advantage, states that mutually beneficial trade is possible even if one nation is less productive than the other.

Suppose a citizen of Country X can produce either 10 computers or five bushels of wheat and a citizen of Country Y can produce either three computers or two bushels of wheat. If one citizen from Country X switches from producing wheat to computers and three citizens from Country Y switch from producing computers to wheat, there is a net gain of one computer and one bushel of wheat.

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| **3.** | **RC Question 1/4**  The passage is primarily concerned with which of the following? |

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|  | **A.** | Arguing for an increase in trade with foreign nations. |
|  | **B.** | Providing a historical context for a long-standing belief. |
|  | **C.** | Demonstrating the fallacy of a particular way of thinking. |
|  | **D.** | Illustrating an economic principle through an example. |
|  | **E.** | Describing Adam Smith’s contributions to the theory of trade. |

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|  |  | Answer – **(C)**  **Solution:**  This is a main idea question. An active reading of the passage reveals the following major points:  **(1)** Economists have long recognized a persistent and unfounded belief among the population which has come to be known as the anti-foreign bias.  **(2)**No less an authority than Adam Smith, one of the fathers of the modern free market system, spoke glowingly of foreign trade in his influential treatise Wealth of Nations.  **(3)**Even more startling, a basic economic theorem, the Law of Comparative Advantage, states that mutually beneficial trade is possible even if one nation is less productive than the other.  With these key points, the author shows that foreign trade can be a mutually beneficial exchange despite the belief of the population. The passage is not arguing for an increase in trade, so **choice A** is out.  The historical context— Adam Smith—refutes the belief of the population, so eliminate **choice B.**  **Choice D** is too narrow. The reason the author illustrates the economic principle is to show the fallacy of the belief.  **Choice E** is also too narrow because it only focuses on Adam Smith. |

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| **4.** | **RC Question 2/4**  The author most likely mentions the "baker" and the "cobbler" in order to: |

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|  | **A.** | provide a concrete illustration of an economic principle |
|  | **B.** | discuss the types of goods available during Adam Smith’s time |
|  | **C.** | evaluate an example used in Smith’s Wealth of Nations |
|  | **D.** | show that all trade is based on specialization |
|  | **E.** | give a real world example of the importance of foreign trade |

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|  |  | Answer – **(A)**  **Solution:**  This is a logical structure question. It asks how certain information fits into the larger framework of the passage. The author uses the examples after giving Smith’s quote and writing "His point is simple. A baker trades his bread to the cobbler for shoes and both men benefit from the trade because of the value of specialization." Thus, the baker and the cobbler illustrate the point made by Smith.  **Choice B** does not reflect the purpose of the lines.  The purpose is not to evaluate Smith’s book, meaning **choice C** is incorrect.  **Choice D** uses extreme language and **choice E** is incorrect because the lines are not a "real world example of foreign trade." |

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| **5.** | **RC Question 3/4**  The author most probably uses the word "startling" in reference to the Law of Comparative Advantage because: |

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|  | **A.** | it is surprising that the general public is unaware of the Law of Comparative Advantage |
|  | **B.** | the Law proves that all foreign trade is mutually beneficial |
|  | **C.** | it is puzzling that no one before Adam Smith thought of the Law |
|  | **D.** | the Law of Comparative Advantage holds even when there is an imbalance in the capabilities of the nations |
|  | **E.** | most countries do not consider the Law of Comparative Advantage when devising their trade policies |

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|  |  | Answer – **(D)**  **Solution:**  This is a supporting idea question. Return to the part of the passage where the author uses the word "startling." The passage says "Even more startling, a basic economic theorem, the Law of Comparative Advantage, states that mutually beneficial trade is possible even if one nation is less productive than the other."  Thus, it is startling that trade is possible when one nation is more productive than the other, as **choice D** states. None of the other choices are supported. |

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| **6.** | **RC Question 4/4**  As it is described in the passage, which of the following most closely resembles "folk wisdom?" |

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|  | **A.** | A farmer decides that it is going to rain after scanning the sky for dark clouds. |
|  | **B.** | A child asks his parents why the sky is blue and the parents reply "because it is." |
|  | **C.** | A driver believes taking local roads instead of the highway will allow her to reach her destination faster because there will be less traffic on the local roads. |
|  | **D.** | A person spends 10 dollars on lottery tickets every week because he believes that "someone has to win." |
|  | **E.** | A mother tells her child to put on a jacket so he won’t catch cold, even though colds are caused by viruses. |

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|  |  | Answer – **(E)**  **Solution:**  This is an apply information question. First, read the passage and see what it says about "folk wisdom." This information is in the first paragraph:  Folk wisdom is "seemingly in accord with common sense but nonetheless incorrect."  **Choice A** is wrong because it is correct that darkening clouds can indicate rain.  **Choice B** doesn’t match the part about being "in accord with common sense" because the parents give a nonsensical answer.  **Choice C** is in accord with common sense but isn’t necessarily incorrect.  **Choice D** is similar in that it is correct that "someone has to win."  That leaves **choice E**. Although it makes common sense that the child should put on a jacket not to "catch cold," colds are caused by viruses. So it is incorrect to believe a jacket could stop a virus. |

ANTONYMS

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| **7.** | Knowing |

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|  | **A.** | wasteful |
|  | **B.** | clumsy |
|  | **C.** | fast |
|  | **D.** | dense |

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|  |  | Answer – **(D)**  **Solution:**  Knowing having information or knowledge; **dense** means dull or stupid |

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| 8. | Able |

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| --- | --- | --- |
|  | **A.** | wilful |
|  | **B.** | inept |
|  | **C.** | careful |
|  | **D.** | feasible |

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|  |  | Answer – **(B)**  **Solution:**  Able means having skill or ability; **inept** means lacking skill |

**Choose the most logical order of sentences from among the given choices to construct a coherent paragraph**

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| **9.** | 1). The inherent expectations of a high short-term return on advertising investment that is common to most traders who are attempting to scale up operations is not conductive to a long-term consistency in advertising direction.  2). The lack of significant players with national reach is only one of the factors that explains the relatively low attention given to mass marketing by the retail sector in India.  3). Mass marketing by Indian retail chains has hitherto been the exception rather than the rule.  4). The focused brand image which leads to pithy, punchy advertising has been difficult because most retailers have not been focused in terms of their own vision for their retail brand. Most advertising has tended to focus on the presence of locations or the range.  5). Advertising then tends to focus significantly on announcement of in store promotions and events, where the payoffs in terms of immediate increases in customer entry and average cash memo size are more visible. |

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|  | **A.** | 15342 |
|  | **B.** | 32415 |
|  | **C.** | 45123 |
|  | **D.** | 23451 |

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|  |  | Answer – **(B)**  **Solution:**  3 tells us what the paragraph is all about and therefore it is opening statement.  2 is explanatory. |

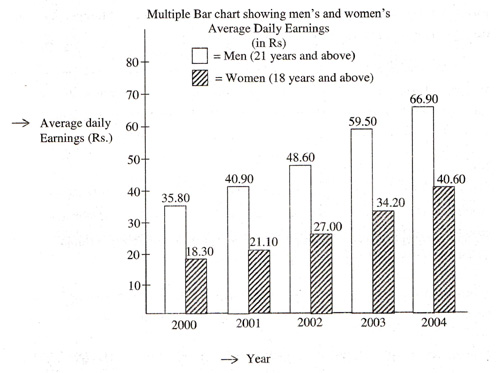
|  |  |
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| **10.** | 1). Of course, sitting out in the country I possessed less information than anyone else at headquarters about was going on, but they called me anyway.  2). But as soon I arrived at my country house, the telephone began ringing.  3). And it kept right on ringing with questions from people back at the office about the most mundane matters.  4). In the summer of 1992, the first year I became president of XYZ, I decided to take a two-week vacation. |

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|  | **A.** | 4213 |
|  | **B.** | 4312 |
|  | **C.** | 4123 |
|  | **D.** | 4231 |

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|  |  | Answer – **(D)**  **Solution:**  Since all options begin with 4, 4 is the opening statement. '23' also form a mandatory pair as 'it' in 3 refers to the telephone mentioned in statement 2. |

**DATA INTERPRETATION**

# Direction (1-3) :The following is a multiple bar chart showing man's and women's average daily earnings in certain industries. Study the chart and answer the questions given below.



## 1.

## In which year is the percentage increase in the average daily earnings of men over the preceding year, the maximum ?

A. 2001

B. 2002

C. 2003

D. 2004

## Answer & Solution

Answer: **Option C**

Solution: % increase in 2004,  
= {(66.90 - 59.50) /59.50} \*100] = 12.43%  
  
**% increase in 2003,   
= [{(59.50 -48.60) /48.60} \*100] = 22.24**% increase in 2002,  
= [{(48.60 - 40.90) /40.90} \*100] = 18.82%  
  
% increase in 2001,  
= [{(40.90 -35.80) /35.80} \*100] = 14.25  
  
Thus, maximum increase in daily earning of men over preceding year is in 2003.

## 2.

## The difference between the average daily earnings of men and women over successive years :

A. Increase

B. Decrease

C. Remains the same

D. None of these

## Answer & Solution

Answer: **Option A**

Solution: Difference between earning of man and women in 2000,  
= 35.8 -18.3 = 17.5  
  
Difference between earning of man and women in 2012,  
= 40.90 - 21.10 = 19.8  
  
Difference between earning of man and women in 2002,  
= 48.60 - 27.0 = 21.6  
  
Difference between earning of man and women in 2003,  
= 59.50 -34.20 = 25.3  
  
Difference between earning of man and women in 2004,  
= 66.90 - 40.60 = 26.3  
  
pattern show, its increasing.

## 3.

## In which year is the ratio of man's average daily earnings to women's average daily earnings is the highest ?

A. 2000

B. 2001

C. 2002

D. 2003

E. 2004

## Answer & Solution

Answer: **Option**

Solution: Required ratio in 2000,  
= 35.80 /18.30 = 1.9  
  
Required ration in 2001,  
= 40.9 /21.1 = 1.93  
  
Required ration in 2002,  
= 48.60 /27.0 = 1.8  
  
Required ration in 2003,  
= 59.5 /34.20 = 1.73  
  
Required ration in 2004,  
= 66.90 /40.60 = 1.64   
  
It is highest in 2001.