

## TEST 3

Questions: 25

Time: 30 minutes

**For Questions 1 to 7, refer to the passage given below:**

True music must be more than a human trait, say scientists who have found a musical pattern in birds and whales. Careful studies of bird song and whale song indicate that birds not only create original music but also sing complex songs.

Whales compose veritable symphonies, complete with repeated themes and movements. If songs can be defined as any rhythmic utterance then the humpback whale songs are constructed according to laws that are strikingly similar to those used by human composers. Other animals cited as musically adept are the wood thrushes, ruby crowned kinglets and marsh wrens.

There is even a drummer called palmed cockatoo of Australia which is known to break twigs and use a hollow log and drum away rhythmic beats. This is part of its courtship ritual.

That birds and whales are known to pass songs to each other is part of their creative acts. Just how the brain, human or otherwise, processes music and learns to enjoy it is being studied. Studies show that a four-month baby prefers pleasant tones to harsh ones. Rats and other test animals also demonstrate the same.

The fact that music may have such deep effects may mean it is a primitive emotion. Yet the relation between music and emotion is difficult to explain.

Q - 1. Scientists have confirmed that .. ?

- |                                |                       |
|--------------------------------|-----------------------|
| 1] Music is only a human trait | 2] Music is complex.  |
| 3] Music is emotional          | 4] Music is primitive |
| 5] None of these               |                       |

Q - 2. The word 'complex' as used in the first para means which of the following?

- |                 |              |              |              |             |
|-----------------|--------------|--------------|--------------|-------------|
| 1] multifaceted | 2] multiplex | 3] intricate | 4] obsessive | 5] inferior |
|-----------------|--------------|--------------|--------------|-------------|

Q - 3. Which of the following has not been mentioned in the passage as being musically adept?

- |                                     |                          |
|-------------------------------------|--------------------------|
| 1] Wood thrushes                    | 2] Ruby crowned kinglets |
| 3] Marsh wrens.                     | 4] Mockingbirds          |
| 5] All of these have been mentioned |                          |

Q - 4. The animal composing music almost similar to humans is which of the following?

- |                          |                |                  |
|--------------------------|----------------|------------------|
| 1] Wood thrushes         | 2] Whales      |                  |
| 3] Ruby crowned kinglets | 4] Marsh wrens | 5] None of these |

15. All options except [5] are synonyms of *psychedelic*.  
Hence [ 5 ]
16. Only [2] can be inferred from the passage, because the author compares what the market perhaps demands nowadays to what was available and offered previously. It is a relative comparison.  
Hence [ 2 ]
17. The passage states that Saxbe during his tenure had to cope with the distrust between New Delhi and Washington, which suggests that the relations were far from cordial. The first line of the passage also suggests that India's relations with the US in the 1970s were not as upbeat as they seem today.  
Hence [ 3 ]
18. The passage clearly suggests that it is a book review. "*the chapters devoted to India ...*", "*... more than justify the title of the book*", "*A must read for those interested in ....*".  
It is also clear that the book is authored by Saxbe, who has been a US diplomat.  
Hence [ 4 ]
19. Of the options given, the passage focuses more on Saxbe's recount on India.  
Hence [ 4 ]
20. Nothing about Nixon's visit to India is stated in the passage.  
Hence [ 5 ]
21. "*To see the elephant*" means to see life, to see the world. This is stated in the passage.  
Hence [ 5 ]
22. It is evident that Saxbe is not too happy about the kind of money spent on the visit. The tone is one of disapproval.  
Hence [ 3 ]
23. *estrangement* means alienation.  
Hence [ 4 ]
24. *abode* means a dwelling place.  
Hence [ 2 ]

TEST 5

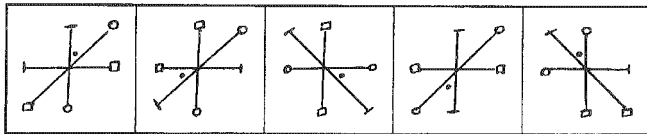
Questions: 24

Time:30 minutes

For Questions 1 to 5, choose the figure that does not fit into the group, or is the odd man out

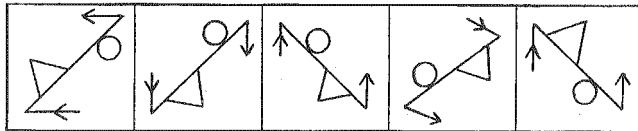
Each question consists of three figures, in which the second figure bears a certain relationship with the first. You have to choose among the options the figure that bears an identical relationship with the third figure.

Q-1



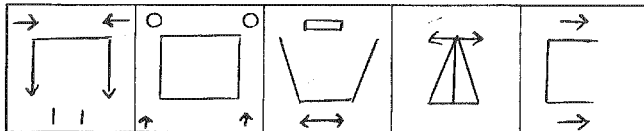
1] 2] 3] 4] 5]

Q-2



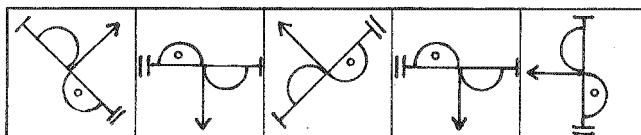
1] 2] 3] 4] 5]

Q-3



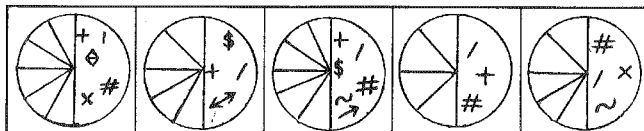
1] 2] 3] 4] 5]

Q-4



1] 2] 3] 4] 5]

Q-5



1] 2] 3] 4] 5]

### TEST 4 - SOLUTIONS

1. Let there be 'x' students.  
 Original sum = 240.  
 Original average =  $240/x$   
 New sum of the group =  $240 + 27 + 27 = 294$   
 New size of the group =  $x + 2$   
 $\therefore$  New average =  $294/(x + 2)$   
 This is greater than the old average by one.  
 $\therefore 294/(x + 2) = (240/x) + 1$   
 $\therefore x^2 - 52x + 480 = 0$   
 $\therefore x^2 - 40x - 12x + 480 = 0$   
 $\therefore (x - 40)(x - 12) = 0$   
 $\therefore x = 40$  or  $x = 12$       Hence [ 3 ]
  
2. If there are 40 students, old average =  $240/40 = 6$   
 $\therefore$  New average =  $6 + 1 = 7$   
 If there are 12 students, old average =  $240/12 = 20$   
 $\therefore$  New average =  $20 + 1 = 21$   
 Hence [ 3 ]
  
3. If a third professor aged 40 joins the group, the total age of the group becomes  $294 + 40 = 334$ .  
 But the number of new members in the group would become either  
 $12 + 2 + 1 = 15$  or  $40 + 2 + 1 = 43$ , depending on whether we previously had 12 students or  
 40 students.  
 This in turn will lead to two possible values for the new average.  
 Hence [ 5 ]
  
4. 800 units are ordered.  
 On first 500, discount = 10%. On next 300, discount = 15% Overall discount = Weighted average  
 discount  

$$= \frac{500 \times 10\% + 300 \times 15\%}{500 + 300} = \frac{5 \times 10\% + 3 \times 15\%}{5 + 3} = \frac{95\%}{8} = 11.875\%$$
 Hence [ 4 ]
  
5. Given  $f(x) = 3x + 4$   
 $\therefore f(4x + 3) = 3(4x + 3) + 4$  [replace 'x' by '4x + 3']  
 $= 12x + 9 + 4 = 12x + 13$   
 Hence [ 5 ]
  
6. Let old area =  $\pi r^2$ . New area =  $9\pi r^2$  or  $\pi(3r)^2$   
 $\therefore$  When radius increases from r to 3r, circumference will increase from  $2\pi r$  to  $2\pi(3r) = 6\pi r$   
 Increase is  $6\pi r - 2\pi r = 4\pi r$  over a base of  $2\pi r$   
 This is a 200% increase. Hence [ 2 ]

### TEST 1 - SOLUTIONS

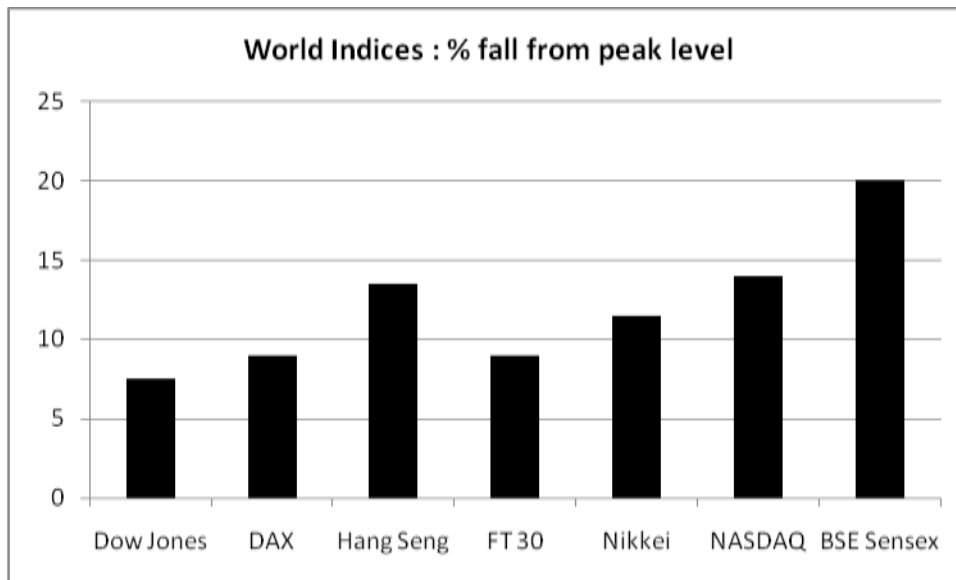
1. Actual revenue from Product A = 15% of 4800 lacs  
 Projected revenue from Product A = 15% of 4900 lacs  
 $\therefore$  Actual value falls short of projected value by 15% of 4900 - 15% of 4800 = 15% of (4900 - 4800)  
 = 15% of 100 = 15 lacs. Hence [ 1 ]
  
2. Projected revenue from Product D = 22% of 4900 lacs = 1078 lacs  
 Actual revenue from Product D = 20% of 4800 lacs = 960 lacs  
 $\therefore$  Actual fell short of projected by 1078 - 960 = 118 lacs. Hence [ 5 ]
  
3. Projected revenue from Product B = 16% of 4900 lacs  
 Projected revenue from Product C = 19% of 4900 lacs  
 Combined projected revenue = 16% + 19% = 35% of 4900 lacs = 1715 lacs.  
  
 Actual revenue from Product B = 17% of 4800 lacs  
 Actual revenue from Product C = 21 % of 4800 lacs  
 Combined actual revenue = 17% + 21 % = 38% of 4800 lacs = 1824 lacs.  
 $\therefore$  Actual exceeds projected by 1824 - 1715 = 109 lacs. Hence [ 2 ]
  
4. Between options [1] and [3] we are comparing 19% of 4900 with 15% of 4900.  
 Obviously [1] is greater.  
 Among options [2], [4] and [5] we are comparing 20% of 4800, 15% of 4800 and 17% of 4800.  
 Obviously [2] is greater.  
 The choice is between [1] 19% of 4900 and [2] 20% of 4800.  
 19% of 4900 = 931  
 20% of 4800 = 960. Hence [ 2 ]
  
5. Although the totals have changed, the percentages remain the same.  
 Therefore, it is still a choice between [1] and [2].  
 19% of 6500 = 1235  
 20% of 6150 = 1230. Hence [ 1 ]
  
6. By observation, TASS has incurred the highest expenses. Hence [ 3 ]
  
7. Brokerage paid on TASS = 12.5 lacs  
 Brokerage paid on AMI = 16.7 lacs  
 As a percentage,  $(16.7/12.5) = 167/125 \approx 170/125 \approx 34/25 \approx 136/100$  or 136%  
 Hence [ 4 ]
  
8. Total spent on Registrar's fees = 46.75 lacs  
 Total spent on Printing & Distribution = 37.28 lacs  
 As a percentage,  $(46.8/37.3) \approx 46/37 \approx 45/36 \approx 5/4$  or 125%  
 Hence [ 3 ]

## TEST 3

Question : 19

Time: 25 minutes

For Questions 1 to 6, refer to the graph below:



- Q - 1. What has been the average % fall from the peak level for the indices given?
- 1] 12.1 %      2] 8.9%      3] 9.8%      4] 11.6%      5] 12.9%
- Q - 2. If the DAX was at 4652 at its peak, how much is it after the fall?
- 1] 3965      2] 3999      3] 4118      4] 4210      5] 4278
- Q - 3. If the BSE Sensex is at 4688 after the fall, how much was its peak value?
- 1] 5827      2] 5860      3] 5912      4] 5852      5] 5871
- Q - 4. How many more points has the DAX fallen as compared to the FT - 30?
- 1] Zero      2] 9.5      3] 19      4] 177      5] Insufficient Data
- Q - 5. If the BSE and the Nikkei were at the same peak value, at what percentage of the Nikkei is the BSE now trading (after the fall)?
- 1] 80%      2] 90%      3] 110%      4] 111.2%      5] Insufficient Data
- Q - 6. Which index has had the second largest fall in points?
- 1] BSE      2] Hang Seng      3] FT - 30      4] NASDAQ      5] Insufficient Data

***For Questions 6 to 10, refer to the following:***

Each question consists of a word followed by five meanings. You have to choose the option which is most nearly opposite in meaning to the original word.

6. **precipitate**

- 1] fancy      2] threaten      3] retard      4] unexpected      5] empty

7. **acute**

- 1] right      2] real      3] symbolic      4] skilled      5] moderate

8. **adherent**

- 1] sticky      2] skeptic      3] unjustified      4] bold      5] fanatic

9. **obnoxious**

- 1] pleasant      2] strange      3] clear      4] happy      5] active

10. **deliberation**

- 1] argument      2] unpurposeful      3] impulsiveness      4] glory      5] delay

***For Questions 11 to 15, refer to the following:***

Each question below consists of five words, four of which have the same meaning or belong to the same category. Mark as your answer the word that is the odd man out.

11. 1] chair      2] sofa      3] chest drawer      4] chevron      5] settee

12. 1] terrier      2] strake      3] deck      4] sail      5] mast

13. 1] garrison      2] battalion      3] brigade      4] regiment      5] cluster

14. 1] stomach      2] spine      3] nose      4] liver      5] skull

15. 1] gale      2] gust      3] draft      4] tide      5] breeze

## TEST 2 – SOLUTIONS

1. 'were not merely extravagant but....' rules out options [ 1 ] and [2]. Also, extravagant implies that they would prove costly, but the word we are looking for is not just something synonymous with extravagance but something else which is also not right.  
Hence [ 4 ]
2. 'copyright ..... surfaces' and 'copyright .. persists' are obvious misfits. Moreover, for the first blank, paintings, photographs etc. are not occupations but creations.  
Hence [ 3 ]
3. immigration free. ∴ no visas. option [3] is out. Also, if people can move freely, governments will have to *compete* to retain them. Hence [ 2 ]
4. 'factors cannot be overcome ..... and are likely to be ...'. The word we are looking for should imply that the factors, instead of being overcome, are likely to be further bolstered or reinforced by aid.  
Hence [ 2 ]
5. The word should be in the past tense and that rules out [2].  
Nothing about the context suggests [4].  
The choice is between *effected* and *affected*. We are looking for a word that indicates how the events in an author's life have an impact on his works. The right word therefore is *affected*.  
*Effected* means resulted in, or led to an outcome. Hence [ 3 ]
6. Option [2] should have been '*the distinction between*' or '*to distinguish between*'.  
Hence [ 2 ]
7. Option [4] should be '*at various levels*'.  
Hence [ 4 ]
8. Option [3] should be '*just thirty years after*'.  
Hence [ 3 ]
9. Option [3] should read '*and protect the inhabitants*'. Hence [ 3 ]  
**Note:** Option [2] cannot be changed to '*servicing*' to match with '*protecting*' in [3] because option [1] ends in '*to*'.
10. Option [2] should read '*be summoned at short notice*'.  
Hence [ 2 ]
11. All words, except [3] are types of *knives*. *Stave* has various meanings including *rung of a ladder*, *stanza*, *verse*. Hence [ 3 ]
12. All words, except [5], refer to an object that is used for *lifting purposes*. An *escalator* on the other hand is a staircase with endless chain of steps moving up or down. Hence [5]
13. All words, except [2], are related to the *stock market*. Hence [2]  
[Note: the animals *bear*, *bull* and *stag* are used in stock market parlance. Not *dog* though]

**TEST 2 - SOLUTIONS**

1. From St 1, 2, 3 and 4 we get the following:

Germany	-	100m × 200m ×	-	???
UK	-	1500m	-	Gold × Silver ×

We also separately get:

India ×	-	5 km Marathon	-	Silver
???	-	100m	-	Bronze

Now St 5 says that the athlete from Germany does not win a medal.

∴ He could not be in the 5km marathon or the 100m race. ∴ He has to be in the 110m hurdles.

Also, St 6 says that neither India nor France wins the Gold. Moreover, Germany does not win Gold as it does not win a medal [ St 5 ] and UK does not win Gold [St 3 ].

∴ Gold has to be USA.

Also, Silver and Bronze are won in the 5km marathon and 100m race. UK participates in the 1500m race [ St 3 ]. ∴ UK does not win a medal.

*We get:*

Germany	-	110m hurdles	-	no medal
UK	-	1500m	-	no medal
USA	-	∴ 200m	-	Gold
India × ∴ France-	-	5 km marathon	-	Silver
∴ India	-	100m	-	Bronze

The athlete from France wins the Silver. Hence [2]

2. UK wins no medal. Hence [4]

3. USA wins the Gold in the 200 m race.  
Hence [3]

4. France wins silver in the 5 km marathon.  
Hence [4]

5. Germany is represented in the 110m hurdles.  
Hence [ 1 ]

6. Only conclusion III follows.  
The math equivalent of the given statement and the conclusions is as follows:  
Statement :  $A > B, C < A, B > C$

Conclusion I	:	$C \geq B$
Conclusion II	:	$B \geq A$
Conclusion III	:	$A > C$

We get the order as

A
B
C

Hence [ 3 ]

*For Questions 6 to 9 refer to the following:*

The question below consists of a Statement followed by three Conclusions.

Mark [1] if only conclusion I follows.

Mark [2] if only conclusion II follows.

Mark [3] if only conclusion III follows.

Mark [4] if more than one conclusion follows.

Mark [5] if none of the conclusions follow.

The symbol % means 'greater than', # means 'less than', & means 'greater than or equal to', @ means 'less than or equal to', \ means 'equal to'.

Q -6. Statement      A % B, C # A, B % C

Conclusion I      C & B

Conclusion II      B & A

Conclusion III     A % C

Q - 7. Statement      B @ C, A & C

Conclusion I      A % C

Conclusion II      A & B

Conclusion III     B # C

Q - 8. Statement      X # Y, M % N, Y # N

Conclusion I      N % X

Conclusion II      N % Y

Conclusion III     X % N

Q - 9. Statement      P / Q, H # K, K % P

Conclusion I      H % P

Conclusion II      H % Q

Conclusion III     Q / H