

1. Type A, 12 kg of rice worth Rs. 40/kg is mixed with Type B, rice worth Rs. 24/kg. What should be the quantity of Type B rice, if the mixture is sold at Rs. 45/kg with 25% profit added in it?

18 Kg              48 Kg              4 Kg              can't say

Answer : Option C.

C.P. of the mixture =  $45/1.25 = \text{Rs. } 36/\text{kg}$ .

So,  $(40-36)/(36-24) = (N)/(12) \Rightarrow N = 4 \text{ Kg}$

2. A person spends  $1/7$ th of his salary on travel,  $1/3$ rd of the remaining on food, he then spends  $1/4$ th of the remaining on rent. Finally he puts  $1/6$ th of the remaining as a monthly savings, after which he has 25000 left. What is his salary (in Rs.)?

70,000              14,000              84,000              26,000

Answer : Option A.

Let M be the total salary

Therefore, as per question,  $M \times (6/7) \times (2/3) \times (3/4) \times (5/6) = \text{Rs } 25000$

$M = \text{Rs } 70000$

3. Point C(x,y) divides the distance AB with point A(8,12) and point B(16, 18) in a ratio of 3:5, with AC being shorter than BC. What are the co-ordinates of C?

(12,15)              (14.5, 12.5)              (14.5, 12.5)              (11,14.25)

Answer : Option C.

x co-ordinate of C =  $[(5 \times 8) + (3 \times 16)] / (3+5) = 11$

y co-ordinate of C =  $[(5 \times 12) + (3 \times 18)] / (3+5) = 14.25$

Co-ordinates of C is ( 11, 14.25 )

4. How many terms of the sequence -12, -8, -4,...so on, to make a sum of 120?

11              12              10              13

Answer : Option B.

The series is in A.P. where  $a = -12$  and  $d = 4$ .

So  $120 = (n/2)[2 \times (-12) + (n-1) \times 4]$ .

On solving this, we get  $n = 12$

5. The value of a machine depreciates from Rs 32,768 to Rs 21,952 in three years. What is the rate % of depreciation?

11%              12.25%              12.5%              33%

Answer : Option C.

Let R be the rate of depreciation, therefore,  $21952 = 32768[1-(R/100)]^3$ . On solving this we get  $R = 12.5\%$

6. A TV set listed at Rs 3200 is sold to a retailer at a successive discount of 25% and 15%. The retailer desires a profit of 20%, after allowing a discount of 10% to the customer. At what price should he list the TV set (in Rs.)?

2720              2448              2040              2133



Answer : Option A.

The retailers C.P. =  $3200 \times 0.75 \times 0.85 = \text{Rs } 2040$ .

His expected S.P. =  $2040 \times 1.2 = \text{Rs } 2448$ .

But S.P. is 90% of the L.P., as there is a discount of 10%.

So L.P. =  $2448/0.9 = \text{Rs } 2720$

7. A student is to answer 10 out of 12 questions in an examination such that he must choose at least 4 from the first five questions. The number of choices available to him is
- 140                      280                      196                      346

Answer : Option A.

4 questions can be chosen from the first 5 in 5 ways. Remaining 6 questions can be selected from 8 questions in  ${}^8C_6$  ways. So required answer is  ${}^8C_6 \times 5 = 28 \times 5 = 140$ .

8. A rectangular playground with the dimension of 50m X 30 m is surrounded by a 5 m wide road all the sides. What is the area of the road?

600 sq. m.      500 sq. m.      450 sq. m.      900 sq. m.

Answer : Option D.

AREA OF ROAD = area of bigger rectangle - area of smaller rectangle  $\Rightarrow (60 \times 40) - (50 \times 30) \Rightarrow 2400 - 1500 = 900$ .

9. It takes 5 sec. for a clock to strike at 5'o clock. If the striking intervals are uniform how much time will it take to strike 9'o clock (in sec.)?

9                      10                      11                      12

Answer : Option B.

There are 4 intervals in 5 strokes.

Time taken to strike 1 stroke will be  $5/4$  sec.

At 9, there will be 9 strokes and 8 intervals between two strokes.

Thus time required =  $5/4 \times 8 = 10$  sec

10. From the top of the Tower which is 240m high, if the angle of depression of a point on the ground is  $30^\circ$ , then the distance of the point from the foot of the Tower is

$40\sqrt{3}$                        $80\sqrt{3}$                        $120\sqrt{3}$                        $240\sqrt{3}$

Answer : Option D.

11. DIRECTIONS for the questions 1-2: Complete the series by choosing the appropriate option.

E, F, G, H, J, K, L, N, O, \_?\_

P                      Q                      R                      S

Answer: Option B.

After consecutive 4 alphabets one is skipped and then after 3, next miss would happen after 2 alphabets, i.e. p will be missed and so next letter would be Q.

12. A, I, B, C, I, D, E, ?, F



E                      F                      G                      I

Answer: Option D.

From the series after every c 2 consecutive letters and I comes up, so answer is 4th option.

DIRECTIONS for the questions 3-6: Complete the series by choosing the appropriate option.

Tara has decided to- tutor biology for the summer and is trying to plan her schedule. She can meet with up to two students a day, Monday 'through Friday, and has three students, Anu, Bhupesh, and Chirag. She needs to arrange her schedule according to the following constraints:

- I. Each student meets with Tara twice a week.
- II. No student meets with Tara twice in the same day.
- III. Anu refuses to meet with Tara on Fridays.
- IV. Chirag will never meet with Tara the day after Bhupesh has a lesson.
- V. Anu and Chirag meet with Tara on the same day exactly once a week.
- VI. If Anu meets with Tara on Monday, so does Bhupesh.

13. If Bhupesh is allowed to meet with Tara three times one week, on what days could he meet with her?

Monday, Wednesday, Friday  
Monday, Tuesday, Wednesday  
Tuesday, Wednesday, Thursday  
Wednesday, Thursday, Friday

Answer: Option D.

If Bhupesh Comes on Wednesday, Thursday, Friday, then Chirag can not come on Thursday Friday but can come with Anu on Tuesdays and alone on Monday an Anu can come anywhere in between Wednesday and Thursday. Hence 4th is the correct Option.

14. If Tara adds Dana, a fourth student, what is the maximum number of times Dana could meet with her each week?

Four                      Three                      Two                      One

Answer: Option A.

15. If Anu cannot meet with Tara on Tuesday or Wednesday, on what day must Chirag meet with her?

Monday                      Tuesday                      Wednesday                      Thursday

Answer: Option D.

Out of the four options, since Anu cannot come on Tuesdays and Wednesday so Chirag also can't, also if Anu comes on Monday, Bhupesh has to come and there cannot be three students with Tara on the same day, so Thursday is the correct answer, i.e. 4th option

16. If Bhupesh meets with Tara on Tuesday and Friday, on what day must Chirag meet with her?

Monday                      Tuesday                      Wednesday                      Thursday

Answer: Option D.

From the case above Chirag must come on Thursday in each case, hence 4th option.



DIRECTIONS for the questions 7-10: Read the information given below and answer the question that follows.

A, B, C, D, E, G, and I are seven friends who study in three different standards namely 5th, 6th and 7th such that not less than two friends study in the same standard. Each friend also has a different favourite subject namely History, Civics, English, Marathi, Hindi, Maths and Economics but not necessarily in the same order.

A likes Maths and studies in the 5th standard with only one other friend who likes Marathi. I studies with two other friends. Both the friends who study with I like languages (Here languages include only Hindi, Marathi and English). D Studies in the 6th standard with only one person and does not like civics. E studies with only one friend. The one who likes history does not study in 5th or 6th standard. E does not like languages. C does not like English, Hindi or Civics.

17. Which combination represents E's favourite subject and the standard in which he studies?

Civics and 7th

Economics and 5th

Civics and 6th

History and 7th

Answer: Option C.

Name	Class	Subject
------	-------	---------

A	5th	Maths
---	-----	-------

B	7th	Hindi/English
---	-----	---------------

C	5th	Marathi
---	-----	---------

D	6th	Economics
---	-----	-----------

E	6th	Civics
---	-----	--------

G	7th	Hindi/English
---	-----	---------------

I	7th	History
---	-----	---------

So from table, E's favourite subject is Civics and he studies in 6th class.

18. Which of the following is I's favourite subject?

History

Civics

Marathi

Either English or Marathi

Answer: Option A

Name	Class	Subject
------	-------	---------

A	5th	Maths
---	-----	-------

B	7th	Hindi/English
---	-----	---------------

C	5th	Marathi
---	-----	---------

D	6th	Economics
---	-----	-----------

E	6th	Civics
---	-----	--------

G	7th	Hindi/English
---	-----	---------------

I	7th	History
---	-----	---------

I's favourite subject is History. So, the correct answer is option A.

19. Who amongst the following studies in the 7th standard?



G                      C                      E                      D

Answer: Option A.

Name	Class	Subject
------	-------	---------

A	5th	Maths
B	7th	Hindi/English
C	5th	Marathi
D	6th	Economics
E	6th	Civics
G	7th	Hindi/English
I	7th	History

G studies in 7th class. So, the correct answer is option A.

20. Which of the following combinations is definitely correct?

I and Hindi

G and English

C and Marathi

B and Hindi

Answer: Option C.

Name	Class	Subject
------	-------	---------

A	5th	Maths
B	7th	Hindi/English
C	5th	Marathi
D	6th	Economics
E	6th	Civics
G	7th	Hindi/English
I	7th	History

C likes Marathi. So, option C is the correct option.

21. One who is unable to pay one's debt

Insolvent

Borrower

Bankrupt

Payee

Answer: Option A.

One word for this is – Insolvent.

22. A cure for all diseases

Panacea

Antidote

Antiseptic

Fatal

Answer: Option A.

One word for this is - Panacea.



DIRECTIONS for the question 3: Fill in the blank.

23. Beauty is to ugliness as adversity is to \_\_\_\_\_.

happiness

Prosperity

Cowardice

Misery

Answer: Option B.

Beauty is the opposite of ugly; similarly adversity is the opposite of prosperity.

DIRECTIONS for the question :

24. A word has been written in four different ways out of which only one is correctly spelt.

Choose the correctly spelt word.

1. Collaboration

2. Collaberation

3. Colaboration

4. Coleberation

1

2

3

4

Answer: Option A.

The correct spellings are – “Collaboration”.

25. 1. Etiquete 2. Ettiquete 3. Etiquette 4. Ettiquette

1

2

3

4

Answer: Option C.

The correct spellings are – “Etiquette”.

DIRECTIONS for the question 6 to 10: Read the following passage carefully and choose the most appropriate option from the choices given.

(1) When the thriller writer Robert Ludlum died in March 2001, several of his obituarists tellingly recalled the reaction of a Washington Post reviewer to one of the author's many, phenomenally popular novels: 'It's a lousy book. So I stayed up until 3am to finish it.' This anecdotal, tongue-in-cheek confession neatly captures the ambivalence associated with a hugely successful mode of crime writing, a guilty sense that its lack of literary merit has always somehow been inseparable from the compulsiveness with which its narrative pleasures are greedily gobbled up, relegating the thriller to the most undeserving of genres. To describe a thriller as 'deeply satisfying and sophisticated' (to pluck a blurb at random from the bookshelves) is already to beg the insidious question: how satisfying and sophisticated can it be?

(2) It might be thought that this kind of skeptical response is likely to be encouraged by any type of popular literature that could be considered formulaic, or that relies upon stock characters or highly conventionalised narrative structures, or whose enjoyment comes from the repetition of certain well-



worn themes or devices. But the thriller is unusual in its reliance upon, or subordination to, the single-minded drive to deliver a starkly intense literary effect. Thus, in the words of The New York Times Book Review's suitably lurid verdict on the novel that famously first unleashed Dr Hannibal Lecter upon an unsuspecting public, Thomas Hani's Red Dragon (1981) 'is an engine designed for one purpose – to make the pulse pound, the heart palpitate, the fear glands secrete'. Judgments like these, carefully filleted and recycled as paperback blurbs, make a virtual contract with potential purchasers, offering an irresistible reading experience that will stretch them to the limit. To be reckoned 'as good as the crime thriller gets', to quote from the cover of Lawrence Block's A Walk Among The Tombstones (1992), 'the suspense' will be 'relentless'; indeed it 'will hold readers gaga with suspense'.

(3) Of course, such overblown appeals to a hyperventilated state of pleasurable anxious unknowing can easily be dismissed as little more than a sign of the extent to which popular criticism has been debased by the inflated currency of contemporary marketing. But they do offer some important clues to the thriller's provenance and distinctiveness.

26. Which of the following conclusions can be drawn from the first paragraph?

1. Robert Ludlum wrote short stories
2. Literary merit and popularity always go together
3. Literary merit and popularity often do not go together
4. None of the above

Answer: Option C.

Refer line 3, para 1. "It's a lousy book. So I stayed up until 3am to finish it.' This anecdotal, tongue-in-cheek confession neatly captures the ambivalence associated with a hugely successful mode of crime writing, a guilty sense that its lack of literary merit has always somehow been inseparable from the compulsiveness with which its narrative pleasures are greedily gobbled up, relegating the thriller to the most undeserving of genres.". This line means that even though the thriller has no literal sense it still captures it's the reader. And thus the answer is option 3.

27. Dr. Hannibal Lecter is a character created by

- Lawrence Block
- Robert Ludlum
- Thomas Hani
- Anthony Hopkins

Answer: Option C.

Refer line 5, para 2. "Thus, in the words of The New York Times Book Review's suitably lurid verdict on the novel that famously first unleashed Dr Hannibal Lecter upon an unsuspecting public, Thomas Hani's Red Dragon (1981) 'is an engine designed for one purpose – to make the pulse pound, the heart palpitate, the fear glands secrete'." From this line it is clear that this character was introduced in Thomas Hani's book red dragon.

28. What expression or word from the passage means "with ironic or flippant intent"?

- Well-worn
- Gaga



Debased

Tongue-in-cheek

Answer: Option D

Tongue-in-cheek is related to humour and saying something in a humorous manner, hence this is the answer, as irony is also related to humour. Also it is also present in the passage. Refer the 3rd line, para 1, "This anecdotal, tongue-in-cheek confession neatly captures the ambivalence associated with a hugely successful mode of crime writing, a guilty sense that its lack of literary merit has always somehow been inseparable from the compulsiveness with which its narrative pleasures are greedily gobbled up, relegating the thriller to the most undeserving of genres."

29. What expression or word from the passage also means "origin" or "source"?

Anecdotal

Blurb

Hyperventilated

Provenance

Answer: Option D.

Provenance is the only word among the options that means source or origin. Also it can be found in the line last, para 3 – "But they do offer some important clues to the thriller's provenance and distinctiveness."

30. What expression or word from the passage also means "resolute"?

Reliance

Single-minded

Tongue-in-cheek

Provenance

Answer: Option B.

The word resolute means determined hence the answer is single minded. Also it can be found in line 4, para 2 – "But the thriller is unusual in its reliance upon, or subordination to, the single-minded drive to deliver a starkly intense literary effect."

31. Reference is\_\_\_\_\_

alias of an object

used to rename an object

a special operator

a pointer to virtual function

Answer: Option A.

32. If the two networks having different protocols then the device used to communicate between these systems is

Bridge

Repeater

Hub





Gateway

Answer: Option D.

33. Merge sort algorithm uses\_\_\_\_\_technique

Brute force

Dynamic programming

Greedy

Divide and conquer

Answer: Option D.

34. What is the asymptotic worst case complexity of the given pseudo code

```
for(i=0;i {  
  for(j=0;j {  
    c[i][j]=0;  
    for(k=0;k {  
      c[i][j]=c[i][j]+a[i][k]*b[k][j];  
    }  
  }  
}
```

O(n)

O(1)

O(n^2)

O(n^3)

Answer: Option D.

35. The least frequently used (LFU) page replacement algorithm requires\_\_\_\_\_

the page with the smallest count to be replaced.

the page with the longest count to be replaced.

the page with the smallest count was brought in, yet to be used.

the page with the longest count was brought in, yet to be used.

Answer: Option A.

36. Choose the valid statement

All variables are initialized to 0 after declaration

Only local and static variables have junk values

Static and global variables are automatically initialized to zero at the time of declaration

All automatic variables are initialized to zero

Answer: Option C

