Test Series Question Paper-09-04-2024

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 1

What began as a health crisis has soon turned into a devastating disrupter for trade and commerce wiping away millions of jobs due to varying degrees of lockdowns, which were announced in an attempt to control the spread of the virus. With the passage of time the trade-off between saving lives and saving livelihoods has grown starker. A milestone in the recent history of human civilization, the pandemic is here to stay and we have no other option but to equip our healthcare systems to fight this massive battle, and vaccinate as much as we can.

1. As per the above passage, which of the following assumption(s) can be made?

1. Economy of a country is closely connected with the health of its citizens.

2. Government has not invested enough in the health infrastructure in the past.

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Ans: (a)
Explanation:

In the first line, author highlights that health crisis became a disrupter of trade

and commerce and wiped millions of jobs. So, **statement 1** is an assumption.

Statement 2 cannot be the assumption from the information given in the passage. The passage highlights that investment in

the health care is required as we have to fight the problems posed by the pandemic. Hence, we can't assume that government didn't invest enough in the past on health infrastructure.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 2

The adoption of the market economy heralded a new era in which States came to occupy a strategic position in India's market led economy. The Centre has even gone to the extent of encouraging states to negotiate loans / FDI with overseas banks / institutions directly since the 1990s. With the Centre's grants in aid no longer being seen as the only source for financing their expenditure, States compete to attract

FDI. And positively so, the Centre is not being seen as an obstacle but as a facilitator. Still, approval for FDIs is centralized with the DPIIT being the nodal Ministry at the centre for FDI approvals. In many cases, the DPIIT has to transfer the proposal for FDI licensing to the other central Ministries in whose Rules of Business the subject matter of proposal may fall. In proposals where land border issues or security issues arise, the concurrence of other nodal ministries may also be sought.

2. As per the above passage, which of the following assumption(s) can be made?
1. Opportunities for states to attract the FDI in India are limited.
2. Opening up of financial opportunities for states has improved fiscal federalism in India.

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Ans: (d)
Explanation:
We have to identify the assumptions based on the passage. **Statement 1** cannot be assumed as there is no such inclination. In the passage, it has been highlighted that since 1990s government has been improving the opportunities for the states. However, there is no hint to assume that opportunities are limited. **Statement 2** is beyond the scope of the passage. As fiscal federalism is a situation in which equal opportunities prevail for the states and the union. So, **statement 2** is also not an assumption. Hence, option d is the best answer

3. Replace the incorrect term by the correct term in the given sequence.

1, 8, 27, 16, 125, 36

(a) 36

(b) 27

(c) 8

(d) 1

Ans: (c)

$1^3 = 1$

$2^2 = 4$

$3^3 = 27$

$4^2 = 16$

$5^3 = 125$

$6^2 = 36$

Hence, the correct answer is option (c)

4. Rashi and Sudha have some money. Product of the amounts of their money is Rs. 156060, and it's known that Sudha has less money than Rashi. If HCF of their money is Rs. 102, then how much money does Rashi has?

(a) Rs. 220

(b) Rs. 510

(c) Rs. 315

(d) Rs. 306

Ans: (b)

Let Rashi and Sudha have Rs. 102x and Rs. 102y amounts respectively.

102x × 102y= 156060

Or 102x × 102y = (102 × 5) × (102 × 3)

We know that, Sudha has less money than Rashi. So, x > y.

x = 5 and y = 3

Hence, Rashi has 102x = 102 × 5 = Rs. 510.

Hence, the correct answer is option (b)

5. If MOTIVATION is coded as 5 and ACHIEVEMENT as 5, what is the code number for DETERMINATION?

(a) 4

(b) 5

(c) 6

(d) 7

Ans: (c)
Number of vowels in the word corresponds to its code number.
So, code for DETERMINATION = 6

6. In a class of 80 students, where girls are thrice that of boys. Kamal who is a boy ranked twenty-first from the top. If there are 12 girls ahead of Kamal, how many boys are after him in rank?

(a) 15

(b) 12

(c) 10

(d) 8

Ans: (b)

Total number of girls = 60 and total number of boys = 20

19 students are ahead in which 12 students are girls so the number of boys = 7

So, number of boys after him = 20 -7- 1(Kamal) = 12

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 3

India is a land of literature. It has always been so since times immemorial. When one takes stock of the history of human societies and civilizations, this is one area where India will be on top by some distance over other civilizations and societies. One hallmark of Indian literature over the past 3000 years or so is diversity. One will be surprised to see the variety of works of literature that have been produced in the sub-continent. The key to this diversity is the linguistic density of the Indian sub-continent and the willingness to absorb all wonderful things from any language or culture that people came across.

7. Which of the following best reflects the critical idea of the passage?

(a) The literature legacy of India is much bigger and wider than any other country/civilization.

(b) The reason for vastness of literature in India is accommodative nature of the country.

(c) People of India have always been well educated and this has led to vastness in our literature.

(d) India's linguistic diversity is rooted in the influence it has received from all corners of the world.

Ans: (b)

Explanation:

The passage focusses on the linguistic diversity of India. **Option (a)** is incorrect as it compares with the literature of other countries with the literature of Indian sub-continent. **Option (b)** is the correct answer as it aptly identified the reason of India's linguistic richness. **Option (c)** is incorrect as it is beyond the scope of the passage.

Option (d) is incorrect as it does not highlight the central idea which is accommodative nature of Indian culture.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 4

When Vladimir Putin came to power in his first term as the President of Russia a leading political leader who opposed his policies died of mysterious illness in prison/captivity. Hardly any observers of the regime were surprised by this. A cartoonist very aptly depicted this situation by showing a policeman informing journalist, "We are trying figure out whether he committed suicide or died of illness."

8. Which of the conclusions can be drawn from the information given in the passage?

(a) The opposition leader did not get right medical facilities in the prison.

(b) The opposition leader committed suicide.

(c) The policeman is not clear about the reasons of the death of the opposition leader.

(d) Vladimir Putin's regime was responsible for the death of the opposition leader.

Ans: (d)
Explanation:
The question statement highlights two things first mysterious illness and second no one was surprised. This should make you think why a political adversary of Mr. Putin goes to jail and dies due to a mysterious disease. In this situation the cartoon shows that the police have eliminated the possibility of murder. They are trying to pass it as suicide or medical condition. This implies that the author wants to say that Putin's regime is responsible for the death. So, **option (d)** is the correct option.

9. Sana, Karan and Astha can do a work in 20 days, 30 days and 60 days respectively. Astha works alone but on every third day she took help of Sana and Karan. In how many days will the whole work be done?

(a) 8 days

(b) 22.5 days

(c) 12 days

(d) 10 days

Ans: (b)

Sana's 1 day work = 1/20

Karan's 1 day work = 1/30

Astha's 1 day work = 1/60

Then according to the question, total work done in four days = 3 × [1/60] + 1/30 + 1/20

= (3 + 2 + 3)/60 = 8/60 = 2/15

2/15 part of work is done in 3 days.

1 part of work will be done in (3 × 15)/2 = 22.5 days

Thus, whole work will be finished in 22.5 days.

Hence, the correct answer is option (b)

10. In an exam Harsh scored 85 marks out of 135 in Chemistry and 95 marks out of 110 in Economics. If he wants to score 80% marks in 3 subjects, find the minimum marks he should score in Hindi out of 100.

(a) 90

(b) 96

(c) 85

(d) 86

Ans: (b)

Total maximum marks = 100 + 110 + 135 = 345.

Total marks in Chemistry and Economics = 85 + 95 = 180.

Total marks required by him to get 80% = 345 × 80% = 276.

So, she needs 276 – 180 = 96 marks to score 80%.

Hence, the correct answer is option (b)

11. What is the angle between the hour hand and minute hand at 4:20?

(a) 9

(b) 10

(c) 12

(d) 15

Ans: (b)

Angle between hour hand and minute hand = | (30 × H - (11/2) × M) |
Where:
H is the hour (4 in this case)
M is the minute (20 in this case)
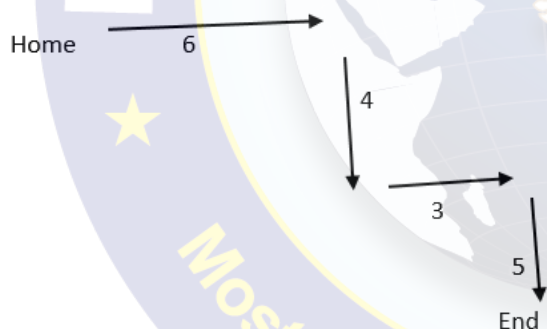Substituting the values:
Angle = | (30 × 4 - (11/2) × 20) | = | (120 - 110) | = |10| = 10 degrees

12. Raj starts walking towards the East from his house. After walking 6 km, he turns to his right and walks 4 km. Then, he turns left and walks 3 km. Finally, he turns right and walks 5 km. What is the direction of Raj's final position from his starting point?

(a) East

(b) West

(c) North-East

(d) South-East

Ans: (d)

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 5

One very interesting fact about the advertising industry is that it is seldom necessary to say anything of substance in an advertisement. In order to promote sales, one has to attract the target customer's attention. Memory of the target customer does the rest. For sales, it is actually more important that people know of a product than that they know something about it.

13. Which of the following is assumed by the argument?

(a) Impressing a potential customer's by tickling his memory is a simple matter.

(b) People can remember a product without knowing much about it.

(c) Advertisements function to boost people's memories in their own way as much as it boosts sales

(d) The advertising tells little of substance about the products it promotes for fear of overdose of information.

Ans: (b)
Explanation:
The passage says that all one usually needs to do is attract a potential customer's attention. It does not say how easy or difficult that is It discusses how advertising usually, need only draw people's attention to a product and need not provide any substance for people to remember the product. Thus, the passage implies that people can remember a product without having much information about it, and **option (b) is the correct answer.**

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 6

The Milky Way is the galaxy that contains our Solar System. The descriptive "milky" is derived from the appearance from Earth of the galaxy – a band of light seen in the night sky formed from stars that cannot be individually distinguished by the naked eye. The chance of having existence of extraterrestrial life is maximum on a planet in one of the other solar systems in the Milky Way galaxy. The Milky Way galaxy alone contains many other suns, many of which have planets similar enough to Earth to make them suitable for life to sustain.

14. Which of the following is an assumption made by the speaker of the above?

(a) Life on another planet probably has the same form and appearance as those on the Earth.

(b) Condition on other planets in our solar system is not suitable for the life to exist.

(c) It is likely that life on another planet would require conditions similar to those on Earth.

(d) Earth-like planets exist in more than one of the solar systems in the Milky Way galaxy.

Ans: (c)
Explanation:
In stating that planets may exist that are similar enough to Earth to make them suitable for supporting life, the author implicitly rules out planets dissimilar to Earth as likely to support life. The assumption underlying the statement is that life on another planet is likely to require conditions similar to those on

Earth. Therefore, **option(c)** is the correct answer. **Option (d)**, which close, is not correct as the argument is limited to existence of life in earth like planets in Milky way only. **option (d)** is out of scope.

15. In a stationery shop the cost price of a calculator and a pen together is Rs 840. If the pen costs 10% more than the calculator, then find the cost price of the pen.

(a) Rs 400

(b) Rs 440

(c) Rs 420

(d) Rs 480

Ans: (b)

Let the price of calculator be 100. Then pen will be 110% of 100 = 110

Therefore, according to question, 100 + 110 = 210 ≡ 840/-

1% ≡ 4/-

100% ≡ Rs.400

Price of pen = 110 x 4 ≡ Rs.440.

Hence, the correct answer is option (b)

16. A train takes 7 hours to reach from point J to point K. The train covers 1/4 th of the distance at 10 km/hour and the remaining distance at 12 km/hour. The distance, in kilometer, between point J and K is:

(a) 85 km

(b) 60 km

(c) 70 km

(d) 80 km

Ans: (d)

Let the distance between point J and K be x km then

(x/4)/ 10 + (3x/4)/ 12 = 7

x/40 + x/16 = 7

7x/80 = 7

x = 80 km

Hence, the correct answer is option (d)

17. If today is Sunday, then what will be the day after 354 days?

(a) Sunday

(b) Saturday

(c) Thursday

(d) None of these

Ans: (c)

Today is Sunday.
Each day gets repeated after 7 days.
so, on dividing 354 by 7, we get remainder = 4
So, the day will be Thursday

18. The salaries of employees Veeru, Raju, Geeta, Amit and Meena are compared concerning each other. Meena gets more salary than Amit and Geeta. Raju's salary is less than three persons. Veeru's salary is the lowest.
Who has the second minimum salary?

(a) Meena

(b) **Raju**

(c) Amit

(d) Geeta

Ans: (b)
Veeru < Raju < (some other person) < (some other person) < Meena

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 7

Cabinet finalizes 100% FDI in single brand retail via automatic route. Allowing foreign firms free play in India's retail sector has always been a political hot potato. The Government has therefore been opening up this sector to foreign players in baby steps. However, the Parliament has seen a lot of unruly incidents over FDI on retails. Only a member of a regional party would oppose the bill which has potential to attract lot of foreign investment and can generate millions of employments. Shruti, even though an MP of a regional party, supported the bill.

19. Which of the following statements can question the conclusion drawn above?

(a) Regionalist party members have organized to oppose industrial interests on several other issues.

(b) Regional interests need not oppose the protection of the domestic retail business.

(c) Past attempts to stall a bill on domestic retail business through have failed.

(d) It is very much possible that some regional party MPs may not oppose the bill on FDI in retail even though their party may do so.

Ans: (d)
Explanation:
The fact that only a member of the regional party would oppose the bill does not imply that all members of the regional party would oppose the bill. Based on the initial statement, Shruti may or may not be a member of the regional party if she supports the bill. Thus, the choice of **option(d)** makes the relevant logical point.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 8

There are thousands of treatments available to help stop smoking and overeating. It is found that treatment of those people who are unable to stop smoking or overeating rarely becomes successful. From these experiences, therapists have concluded that, success in treatment of those people is rare as such habits are not changeable. But later it is found that the group of people selected by the therapists for the survey did not include those who succeeded to break their habits after therapy.

20. Which of the following, if true, will provide support to the conclusion that the claims made by the therapist are not correct?

(a) There have been some successes in therapy, and those successes were counted in the surveys.

(b) It is easier to stop smoking than it is to stop overeating.

(c) It is easy to break the habits of smoking and overeating by exercising willpower.

(d) Surveys show that millions of people have quit the habit of smoking, and many people have successfully managed a substantial weight loss.

Ans: (d)
Explanation:
Choice (d) provides proof that such habits can be changed and disprove the therapists

claim that these habits are intractable. These very people who would lead the therapists to view such habits as more tractable. **Choice (d)** clearly contradicts the therapists claim with the results. Therefore, this choice is the correct answer.

21. A tree increases annually by 3/8 th of its height. By how much will it increase after 2 years, if it stands today 64cm high?

(a) 100 cm

(b) 121 cm

(c) 153 cm

(d) 125 cm

Ans: (b)

We know that, final height = original height × (1+rate) ^{time}

Rate = 3/8, time = 2

Height after 2 years = 64 x (1+3/8)^2

= 64 x 11/8 x 11/8 = 121 cm

Hence, the correct answer is option (b)

22. The average number of visitors to a church on every Monday is 80, whereas it is 134 on other days of the month. What will be the average number of visitors for the entire month if it has 30 days and begins on Monday?

(a) 140

(b) 120

(c) 125

(d) 130

Ans: (c)

The month begins on a Monday, so there will be 5 Mondays.

The average = [(5 x 80) + (25 x 134)]/ 30

(400 + 3350) / 30 = 125

Hence, the correct answer is option (c)

23. What is X in the sequence?

120, 115, 108, 99, 88, 75, X?

(a) 59

(b) 61

(c) 62

(d) 64

Ans: (c)
In this sequence, each number is decreasing by a certain amount:
120 - 115 = 5
115 - 108 = 7
108 - 99 = 9
99 - 88 = 11
88 - 75 = 13
We can observe that the differences between consecutive terms are increasing by 2 each time.
So, to find X: 75 - 13 = 62
Therefore, X = 62.

24. In a family of six members, Mukesh is the father of Reema. Seema is the sister of Seema. Yash is the husband of Seema. Dilip is the son of Yash. Who is Dilip to Mukesh?

(a) Nephew

(b) Grandson

(c) Son

(d) Brother

Ans: (b)
Dilip is the grandson of Mukesh.

Mukesh (father)
|
Reema ——— Seema ——— Yash
|
Dilip

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 9

As per Registrar General of India & Census report 1980the total farmers or cultivators' population of India is 118.7 million (1980) & 144.3 million agricultural workers / laborers which consists 31.55 of total rural population. The grim picture is the total numbers of farmers because we always see in percentage. The proportion of farmers in the general population increased from 28 percent in 1950 to 31.55 percent in 1980 while overall population also grew.

25. Which of the following statements directly follows from the information presented above?

(a) The number of farmers in the general population increased faster in the thirty years between 1950 and 1980 than any other segments in the general population.

(b) The rate of growth of India labor force and the rate of growth of the general population didn't rise simultaneously in the thirty years between 1950 and 1980

(c) In India between 1950 and 1980, the number of farmers continued to increase, at a rate higher than that of the general population.

(d) The proportion of farmers in India labor force decreased from 34 percent in1950 to 29 percent in 1980.

Ans: (c)
Explanation:
The passage indicates that the proportion of farmers in the general population increased from 1950 and 1980. This is possible only if the rate of growth in farmer population is faster than that of general population. The answer **choice (c)** says exactly the same. Therefore, it is supported by the passage and is the correct response.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 10

Factory owners can guarantee their workers lifetime jobs in India and also pay them on the basis of productivity, profits, and a minimum wage rate for a particular job by introducing labor-saving machineries. Paradoxically, these guarantees would not discourage factory workers from feeling insecure. Such innovations are to the advantage of both factory owners and workers.

26. Which of the following, if true, would help to explain why introduction of labor-saving machinery is also advantageous to the factory workers?

(a) Before a factory worker is hired, record of his or her previous productivity is ascertained thoroughly.

(b) Labor-saving machinery increases productivity of workers yielding profits

(c) to the owner that finally go to the workers also as bonus in addition to the wage.

(d) The new labor-saving machinery reduce the final cost of the goods produced that finally go to the workers also as bonus in addition to the wage.

(e) It is in favor of factory workers to change the procedure in the routine tasks they perform.

Ans: (b)
Explanation:
If the second answer choice is true, introducing labor-saving machinery will result in additional profits and will also require the retraining of workers. Hence, this answer choice demonstrates the advantages to the factory owners as well as workers of labor-saving machinery. Thus, **option (b)** is the correct answer.

27. In 12 hours, a boat can travel 360 km downstream. What is the speed of the boat in still water if it takes 30 hours to cover double distance in upstream?

(a) 20 kmph

(b) 27 kmph

(c) 24 kmph

(d) 26 kmph

Ans: (b)

The downstream speed 360/12 = 30 km/h, and the upstream speed = 720/30 = 24 km/h

Speed of boat in still water = 1/2 (D+U) = 1/2(30 + 24) = 54/2 = 27 km/hr

Hence, the correct answer is option (b)

28. 5 years ago, the ratio of the ages of A and B is 8: 7 and A's age after 5 years is 50 years. Present age of C is 8 years more than one – fifth of B's present age. Find the ratio of present age of B and C?

(a) 3:2

(b) 2:1

(c) 5: 2

(d) 1:3

Ans: (c)

5 years ago, the ratio of the ages of A and B = 8: 7 (8x, 7x)

Present ages of A and B = 8x + 5, 7x + 5

According to the question, A 's age after 5 years is 50

8x + 5 + 5 = 50

8x = 40

x = 5

A's present age = 8 x 5 + 5 = 45 years

B's present age = 7 x 5 + 5 = 40 years

Present age of C = (1/5) *B's present age + 8

C's present age = (1/5) *40 + 8 = 16

Required ratio = B: C = 40: 16 = 5: 2

Hence, the correct answer is option (c)

29. Select the option in which the numbers are related in the same way as are the numbers of the following set.

(7, 12, 14)

(a) (5, 9, 20)

(b) (4, 9, 11)

(c) (7, 12, 18)

(d) (6, 11, 12)

Ans: (d)
(7, 12, 14)
=> 7 + 12 = 19 – 5 =14
Same as,
(6, 11, 12) => 6 + 11 = 17 – 5 = 12

30. If '#' means '+', '@' means '×', '&' means '/'
And '$' means '−'
Then 400 & 8 @ 2 $ 50 # 30 =?

(a) 100

(b) 80

(c) 60

(d) 40

Ans: (b)
400/8 × 2 − 50 + 30
100 -20 = 80

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 11
The overall input costs of many small factories are reduced when they eliminate expensive procurement process of raw materials directly from source in favor of local suppliers and building their own storehouse for storing raw materials for longer duration. Therefore, owners of large factories should also adopt the same measures. They will then realize even greater total savings than do the small factories.

31. Which of the following is an assumption behind the argument?

(a) It is more cost-effective for small factories to procure the raw materials from local suppliers.
(b) A sufficient number of raw materials will be available with the local suppliers to meet the requirement of large factories.
(c) Large factories would not realize similar cost benefits by procuring raw materials from the source.
(d) Large factories generally look to small factories for innovative ways of increasing profits or reducing costs.

Ans: (b)

Explanation:

Option (b) is the correct answer choice. It would be impossible to argue reasonably

that large factories should procure raw materials from local suppliers and they

would realize as much benefit as the small factories without also assuming that there

is a sufficient amount of raw materials available for them with local suppliers.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 12

Unlike our current broken industrial agriculture model, eco-farming answers these questions as a food system, with people and farmers at its heart. Eco-farming combines modern science and innovation with respect for nature and biodiversity. It ensures healthy farming and healthy food. It protects the soil, the water and the climate. It does not contaminate the environment with chemical inputs or use genetically engineered crops. And it places people and farmers—consumers and producers, rather than the corporations who control our food now—at its very heart. It is a vision of sustainability and food sovereignty in which food is grown with health and safety first and where control over food and farming rests with local communities, rather than transnational corporations.

32. What is the most logical conclusion that can be drawn from the passage above?

(a) Farmers are going to engage mostly in eco-farming in the future

(b) International corporations and industrial farming will eliminate the small farmers if left unchecked

(c) Eco-farming is a sustainable solution that pays heed to environmental concerns

(d) Food sovereignty is of vital importance for small farmers to survive.

Ans: (c)

Explanation:

The passage states that eco-farming respects nature and biodiversity and 'It does not

contaminate the environment with chemical inputs or use genetically engineered crops.

33. Sravan and Varun earned a profit of 18,000 on a business together. Sravan started that business with an investment of Rs. 35,000 and after 6 months Varun joined him with a capital of Rs. 20,000. What is Sravan's share in the profit?

(a) Rs. 16000

(b) Rs. 17000

(c) Rs. 12000

(d) Rs. 14000

Ans: (d)

Ratio of the equivalent capitals of Sravan and Varun for 1 year

= 35000 * 12: 20000 * 6

= 7: 2

Total profit = Rs. 18,000

Sravan's share = Rs. (7/9) * 18000 = Rs.14000

Hence, the correct answer is option (d)

34. A round table conference is to be held between delegates of 15 companies. In how many ways can they be seated if delegates from two MNCs may wish to sit together?

(a) 13! × 2!

(b) 16! × 2!

(c) 18!

(d) 17!

Ans: (a)
Since two persons are two be taken as 1 entity.

Subtract 15−2=13

So, 13 and 1 entity

Total 14, which is arranged in (14−1)! =13!

Rest 2 can be arranged in 2! ways

Total =13! × 2!

Hence the correct answer is option (a)

Directions (Q. 35 to 36): Read the following information carefully and answer the questions given below it.

1. There are five friends.

2. They are standing in a row facing south.

3. Yogesh is the immediate right of Ravi.

4. Vinod is between Bheem and Sudhir.

5. Sudhir is between Yogesh and Vinod.

35. Who is at the extreme left end?

(a) Ravi

(b) Bheem

(c) Sudhir

(d) Data inadequate

Ans: (a)

Because they are facing south so right answer is Ravi

Bheem   Vinod   Sudhir   Yogesh   Ravi

36. Who is in the middle?

(a) Bheem

(b) Yogesh

(c) Vinod

(d) Sudhir

Ans: (d)
From the below figure, it is clear that Sudhir is in the middle

Bheem   Vinod   Sudhir   Yogesh   Ravi

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage 13 (2 Questions)

Soil is the earth's fragile skin that anchors all life on Earth. It is comprised of countless species that create a dynamic and complex ecosystem and is among the most precious resources to humans. Increased demand for agriculture commodities generates incentives to convert forests and grasslands to farm fields and pastures. The transition to agriculture from natural vegetation often cannot hold onto

the soil and many of these plants, such as coffee, cotton, palm oil, soybean and wheat, can actually increase soil erosion beyond the soil's ability to maintain itself.

37. Which of the following assumptions are implied in the passage above?

I. The soil on Earth cannot withstand excessive exploitation.

II. Soil erosion is directly proportional to crop diversity.

(a) Only I

(b) Only II

(c) Both I & II

(d) Neither I nor II

Ans: (a)

Explanation:

The author uses the term 'fragile' to describe soil and states that 'many of these plants,

such as coffee, cotton, palm oil, soybean and wheat, can actually increase soil erosion

beyond the soil's ability to maintain itself'. So, **option (a)** is correct.

38. What is the central theme of the passage above?

(a) Agricultural activities may exacerbate soil erosion

(b) Soil is the most precious resource for human beings

(c) Most ecosystems in the world are complex

(d) It is a painstaking but worthwhile initiative to convert forests into farmland

Ans: (a)

Explanation:

The author concludes that many crops, such as coffee, cotton, palm oil, soybean and wheat, 'can actually increase soil erosion beyond the soil's ability to maintain itself'. So, **option (a)** is correct.

39. If there are 25 marbles in a jar wherein there are 20 pink marbles and 5 brown marbles, then in how many ways can two marbles be selected at random so that at least one of the marbles is pink?

(a) 290

(b) 275

(c) 180

(d) 120

Ans: (a)

Only one pink marble and other one is brown = $^{20}C_1 * {}^5C_1 = 20 \times 5 = 100$

Both of the marbles are pink = $^{20}C_2 = 190$

So, at least one pink marble = 100 + 190 = 290

Hence, the correct answer is option (a)

40. For a Formula 1 race, Ferrari mixes 74% purity jet fuel with 78% purity jet fuel in order to get a mixture of 77% purity jet fuel for their race car. In what ratio did they mix the 74% and 78% jet fuels?

(a) 3: 1

(b) 1: 3

(c) 2: 5

(d) 4: 1

Ans: (b)

$0.74p + 0.78q = 0.77 (p + q)$

$0.74p + 0.78q = 0.77p + 0.77q$

$0.1q = 0.3p$

$q = 3p$

$p/q = 1/3$

Hence, the correct answer is option (b).

41. By interchanging which two numbers the equation will be correct?

15 − 5 + 75 ÷ 30 × 1 = 0

(a) 5, 30

(b) 30, 15

(c) 1, 5

(d) 5, 15

Ans: (a)
On interchanging the numbers 30 and 5 in the
equation 15 − 30 + 75 ÷ 15 × 1
⇨ - 15 + 15 × 1
⇨ 0

42. If PQ and RS are both 2-digit numbers such that P, Q, R and S are non-zero digits such that PQ + RS = 198, then what is the value of P + Q + R + S?

(a) 28

(b) 29

(c) 36

(d) 31

Ans: (c)

This is only possible if all P, Q, R and S are equal and equal to 9.

So, the sum of P, Q, R and S = 36

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage - 14

The union government has now formed a three member Commission of Inquiry headed by former Chief Justice of India, Justice K.G.Balakrishnan, to examine whether the Scheduled Caste (SC) status can be accorded to Dalits who have over the years converted to religions other than Sikhism or Buddhism.

43. Based on the above passage following assumptions have been made.

I. Religion as a criterion to accord Schedule Caste status to Dalits may be removed.

II. Inclusion of Dalit Christians and Muslims as Schedule Caste may be considered.

Which of the above assumptions are/is valid.

(a) I only

(b) II only

(c) Both I and II

(d) Neither I nor II

Ans: (c)

Both the conclusions can be derived from the passage and hence are valid.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage - 15 (2 Questions)

It is always advisable to surrender a child rather than abandon him if the conditions to retain the child are beyond the control of parents or guardian. Abandonment endangers the child's life. Surrender before the Child Welfare Committee (CWC) is a guarantee that the child will be taken care of till he or she attains majority or is adopted by a fit and willing parent. As most of the reasons for child abandonment are an unwanted pregnancy, breakdown of a relationship, lower socio-economic status, either or both parents being drug addicts or alcoholics, a child can be considered eligible for surrender and declared so after the prescribed process of inquiry and counseling. Further, the disclosure of the identity of such children is prohibited and all reports related to the child are to be treated confidential by the CWC. Hence, there is nothing the parents need to fear about. Also, the surrender of a child does not entail any criminal action.

44. What is the most, rational and critical inference that can be made from the above passage?

(a) Women should be encouraged to abort unwanted pregnancies.

(b) Awareness needs to be increased at all levels regarding the ease and importance of surrendering a child to CWC than abandonment.

(c) Prohibit completely abortion / surrender / abandonment of unwanted pregnancies/children.

(d) Mothers should be penalized heavily for abandoning a child.

Ans:(b)

Focuses on increasing the awareness regarding the benefits of surrendering over abandonment, which is the thrust of the passage.

45. With reference to the above passage the following assumptions have been made:

I. Mothers abandon their unwanted children rather than surrender as they presume it is easier and has no adverse criminal consequences.

II. The state desires to give a helping hand to mothers in distress who do not know what to do with unwanted babies.

Which of the above assumptions are/is valid.

(a) Both I and II

(b) I only

(c) II only

(d) Neither I nor II

Ans:(a)

Both assumptions flow from the passage.

46. Raman buys goods worth Rs. 15,000 and puts a certain mark up on them. What was the marked price of the goods if he made a 10% profit after giving 20% discount to his customers?

(a) Rs. 18,000

(b) Rs. 20,625

(c) Rs. 22,000

(d) Rs. 24,000

Ans: (b)

SP = (110/100) * 15000 = Rs. 16,500

MP * 80/100 = SP

MP = 16500 * 100/80 = Rs. 20625

Hence, the correct answer is option (b)

47. John invests Rs. 10,000 with Union Bank at 20% compound interest per annum compounded half-yearly. How much interest will he earn in two years? (in Rupees)

(a) 2984

(b) 4641

(c) 3782

(d) 2320

Ans: (b)

Compounded half-yearly means, Rate = 20/2 = 10%

And time = 2 x 2 = 4 years

C.I = P [(1+ r/100)-1] = 10000 * $(110/100)^4$ − 10000 = 14641 − 10000 = 4641

Interest = Rs. 4641

Hence, the correct answer is option (b)

48. What is the meaning of 'come' in a coded language?

Statements.

1. The meaning of 'pit na ja' is 'come and go' in that coded language.

2. The meaning of 'na dik sa' is 'you may go' in that coded language.

(a) Statement 1 is sufficient to answer the question.

(b) Statement 2 is sufficient to answer the question.

(c) Both Statements 1 and 2 are not sufficient to answer the question.

(d) If both Statements I and II are necessary to answer the question.

Ans: (c)

From Statements 1 and 2, 'na' => go
From 1, come => Either 'pit' or 'ja'

49. If the signs '÷' and '×' are interchanged, then which of the following equations can be correctly balanced?

(a) $54 ÷ 8 − 22 × 3 + 20 = 117$

(b) $56 × 7 ÷ 8 + 16 - 48 = 96$

(c) $56 + 34 × 38 ÷ 17 − 42 = 112$

(d) $119 ÷ 67 − 6 + 24 × 94 = 77$

Ans: (b)

$56 ÷ 7 × 8 + 16 − 48$

⇨ $64 + 32$

⇨ 96

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage - 16

Chinese inroads into the neighborhood have been a cause of worry for India. China has been actively pursuing bilateral ties with Bangladesh. Bangladesh had successfully approached China for a mega project to enhance Teesta River water flow. Bangladesh also requires China's support in resolving the Rohingya refugee crisis. Bangladesh is the second biggest arms market for China after Pakistan. Bangladesh has also been warming up to Pakistan. The two shared frosty ties for decades after Pakistani politicians made unwarranted comments on the International Crimes Tribunal set up by Bangladesh. Although memories of 1971 remain, Bangladesh has expressed its interest in establishing peaceful relations with Pakistan.

50. What is the most important message the author is conveying through this passage?

(a) India should be worried about China making inroads into her neighborhood.

(b) India should talk about the misdeeds of China and Pakistan in international forum.

(c) Make efforts to keep Bangladesh and Pakistan hostile to each other.

(d) India should work close with Bangladesh and resolve pending issues and build upon the goodwill earned by the liberation war of 1971.

Ans: (d)

Options (a), (b), and (c) are not mentioned in the passage. Option(d) is mentioned in the last line of the passage.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage - 17

Unlike other endangered endemic bird species in the Nilgiris such as the Nilgiri Laughing Thrush (Montecincla cachinnans), which seems to have a degree of adaptability and tolerance for anthropogenic changes to its environment, the Sholakili (Nilgiri Blue Robin) seems to be highly restricted to only Shola Forest habitats, making it more susceptible to changes in its environment, said an independent researcher and wildlife biologist. He said the habitats of the Sholakili were shrinking due to expanding plantations, settlements and other construction activities.

51. Which of the following is the most crucial and logical inference that can be made from the above passage?

(a) Restrict all tourist visits to the Nilgiris.

(b) Study how Nilgiri Laughing Thrust is more tolerant to anthropogenic changes and apply lessons learnt for Sholakili.

(c) Support research of Sholakili on priority so that policies can be formulated to ensure their survival.

(d) Cease forthwith further expansion of plantations, settlements and other construction activities.

Ans:(c)

Option (c) is the most crucial and logical inference which can be derived from the passage.

52. A number when divided successively by 10 and 8 leaves the remainder 4 and 6 respectively.

When it is divided by 3 and 5 respectively, what are the remainders?

(a) 0, 4

(b) 4, 1

(c) 3, 2

(d) None of these

Ans: (a)

Let the number be N.

When N is divided by 10, the remainder is 4.

So, N = 10M + 4 ... (1)

Further, when M is divided by 8, the remainder is 6.

So, M = 8Q + 6 ... (2)

Let Q = 1. Then, M = 14

So, N = 144.

Now, if 144 is divided by 3 and 5 respectively, the remainders would be 0 and 4.

Hence, the correct answer is option (a)

53. How many five-digit numbers can be formed with the numbers 1, 7, 3, 4, 9 and 2 which are divisible by 4 if repetition is allowed?

(a) 1600

(b) 2500

(c) 1296

(d) None of these

Ans: (c)

A number is divisible by 4 if its last two digits are divisible by 4.

Since the divisibility of 4 depends upon only the last two number, the first three numbers can be anything.

So, the combination of first three numbers can be 6 x 6 x 6=216

Two-word combinations which are divisible by 4 are – 12, 72, 32, 92, 24, 44.

So, the last 2 digits can be of 6 combinations.

Total numbers that can be formed are 216 x 6 = 1296

Hence, the correct answer is option (c)

54. Among the six friends P, Q, R, S, T and U who got the maximum marks?

Statements:

1. Q got fewer marks than P and U but not fewer than R, S and T.

2. U did not get more marks than Q but not as P.

(a) If only statement 1 is sufficient to answer the question.

(b) If only Statement 2 is sufficient to answer the question.

(c) If either 1 or 2 alone is sufficient to answer the question.

(d) If both Statements I and II are necessary to answer the question.

Ans: (d)

From Statement 1,
P & U > Q > R, S and T
From Statement 2,
P > U > Q
From both the Statements 1 and 2
P > Q > R, S and T
Hence, it is clear from both statements that P got maximum marks.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage - 18

The fall in fertility around the globe has been a result of decades of demographic process, and hence needs scientific and sustainable policies for mitigation. Even though there is looming pessimism about a lower fertility rate, there are ways to get the most out of it and diminish its negative effects. The advancement in healthcare and better nutrition around the world have increased the life expectancy and productivity of older citizens. Reforms in the labour market to induce more flexibility in the labour market would encourage working women to have more children and non-working mothers to enter the labour market.

55. What is the most logical and rational inference of the above passage?

(a) Nothing can be done to mitigate the negative effects of fall in fertility rate.

(b) More women should start working to stem the shortfall of the labour market.

(c) India is unlikely to be impacted by the falling fertility rate.

(d) Labour reforms are needed to retain elderly and to incentivize mothers/would be mothers to contribute in the labour markets.

Ans: (d)

Option (d) is the most logical and rational inference, derived from the passage.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage - 19 (2 Questions)

Twentieth century capitalism does not have solutions: in fact, it is the problem. The time has come to reform economics. Principles of equity and ethics, and fair sharing of power and resources, must constrain unbridled drives for efficiency and productivity to increase the size of the economy that have become the thrusts of economic policies globally. New models of cooperative governance are required to realize the promise of humanity's shared commons. With his concepts of perestroika and glasnost, Gorbachev wanted to save common citizens from being oppressed by powerful people. His successors, ill-advised by economists, handed over the Russian economy to unbridled capitalism. Oppression by the state was replaced by exploitation by capitalists. Ten million Russian men died prematurely. And Russians lost pride in their identity and history. More men are now losing their lives on the battlefront in Ukraine in Putin's bid to protect Russia and recover Russian pride. Concepts of free trade, financial freedom, and privatization, promoted by macroeconomists, are not good solutions for India's billion citizens struggling for resilience in their lives. India's policymakers seem obsessed with increasing the size of the economy. The shape of an economy matters more than its size for human well-being.

56. What is the most crucial message the author is conveying through the above passage?

(a) Reforming economics through new concepts of cooperative governance is imperative.

(b) Efficiency and productivity to increase the size of the economy should be the focus of the Indian Government.

(c) Twentieth century capitalism has no solutions.

(d) Free trade and privatization are key to faster growth of Indian economy.

Ans: (a)

Option (a) is the message which can be derived from the passage. Rest options are not mentioned in the passage.

57. "Twentieth century capitalism does not have solutions: in fact, it is the problem". Why?

I. Focuses mainly on increasing the size of an economy.

II. Encourages ethics and equity

III. Replaces oppression by state as a seductive alternate.

IV. Controls economic growth through priorities of fairness and contentment.

Selects the correct answer using the code given below.

(a) All of the above

(b) II and IV only

(c) I, III and IV

(d) I and III only

Ans: (d)

From the passage I and III are the attributes of twentieth century capitalism.

58. In how many ways 6 different pens can be distributed among 10 people, if any person can receive any number of pens?

(a) 10000

(b) 125

(c) 6^{10}

(d) 10^6

Ans: (d)

There are 6 types of pens, 10 persons can be given the pen in 6 ways.

1st pen in 10 ways, 2nd pen in 10 ways so on...

So, total ways = 10^6

Hence, the correct answer is option (d)

59. Which conclusion can be drawn?

Statement 1: No reptiles are birds.

Statement 2: Some eagles are birds.

Conclusion 1: some eagles are not reptiles.

Conclusion 2: all eagles are reptiles.

(a) Conclusion 1 only

(b) Conclusion 2 only

(c) Both Conclusion 1 and Conclusion 2

(d) Neither Conclusion 1 nor Conclusion 2

Ans: (a)

Conclusion 1 logically follows. However, Conclusion 2 is not valid because it establishes that no reptiles are birds, not that all birds are reptiles.

Direction— (Q. 60): In each of the following given questions there is a question followed by two statements 1 and 2 are given. You have to find out whether the information given in the statements is sufficient to answer or not.

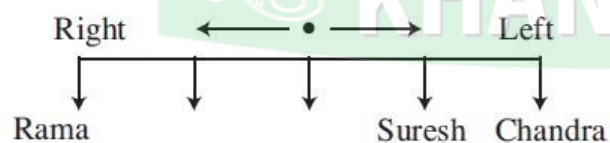**60. Facing towards the South, who is just left to Rama in a row of the boys?**

Statements

1. Suresh is just right of Chandra and he is fourth to the left of Rama.

2. Suresh is third to the left of Rama and Naresh is second to the left of Suresh.

(a) If only statement 1 is sufficient to answer the question.

(b) If only Statement 2 is sufficient to answer the question.

(c) If either 1 or 2 alone is sufficient to answer the question.

(d) If both Statements 1 and 2 are sufficient to answer the question.
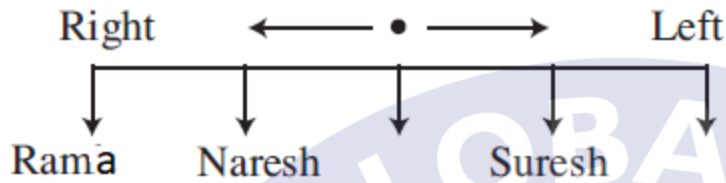
Ans: (b)

From Statement 1

(Facing towards South)

Hence, we cannot determine who is right of Rama.

From Statement 2,

Hence, Naresh is sitting left of Rama.

61. Which conclusion can be logically inferred from the following?

Statement 1: All lions are carnivores.

Statement 2: all carnivores are predators.

Conclusion 1: Some lions are predators.

Conclusion 2: All lions are predators.

(a) Conclusion 1 only

(b) Conclusion 2 only

(c) Both Conclusion 1 and Conclusion 2

(d) Neither Conclusion 1 nor Conclusion 2

Ans: (b)

Conclusion 1 follows logically

However; Conclusion 1 is not valid because it does not establish that all carnivores are predators.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage - 20 (2 Questions)

The Bay of Bengal has long been a major commerce hub for the Indian Ocean. It created a conduit between the East and the West in terms for trade and culture. An Indo-Pacific orientation and the realignment of global economic and military power towards Asia have had a considerable impact on the Bay region. The key sea lanes of communication in this area are lifelines for global economic security

and are crucial to the energy security that powers the economies of many countries in the region. Further, non-traditional dangers including terrorism and climate change have become more prevalent. The Bay also provides an opportunity for greater regional cooperation in the environmentally friendly exploration of marine and energy resources. The Bay has a biodiverse marine environment. It receives water from some of the world's largest rivers. It is a partially enclosed sea that has given rise to several geological characteristics. It is home to many rare and endangered marine species and mangroves, which are essential to the survival of the ecology and the fishing sector.

62. On the basis of the above passage following assumptions have been made:

I. Littoral governments working together is important, due to the shared nautical concerns and the complexity of the marine environment in the Bay of Bengal.

II. For a better knowledge of challenges and strategies of and for the Bay of Bengal there is a need for suitable study centers.

Which of the above assumptions is/are valid? Select your answer using the code below:

(a) I only

(b) II only

(c) Both I and II

(d) Neither I nor II

Ans: (c)

Both are valid assumptions.

63. With which of the following statements the author will not agree:

(a) Bay of Bengal is a major commerce hub for the Indian Ocean.

(b) Nontraditional dangers are now highly prevalent in the Bay

(c) Key sea lanes in the Bay are important for global economic security.

(d) The Bay has biodiverse aquatic habitats.

Ans:(b)

Non-traditional dangers have become more prevalent not highly prevalent.

64. Two statements S1 and S2 are given below followed by a question.

S1: P is a multiple of 5.

S2: Z is a multiple of 8.

Question: M is 50% of P, and P is 75% of Z. P and Z are positive integers. M is a positive integer or not?

(a) Both statements together are insufficient to answer the question.

(b) Either statement alone is sufficient to answer the question.

(c) Statement 1 alone is sufficient to answer the question, but Statement 2 alone is not sufficient to answer the question.

(d) Both statements together are sufficient to answer the question, but neither statement alone is sufficient to answer the question.

Ans: (a)

P is 75% of Z

So, P = (3/4) Z --- (i)

M is 50% of P

So, M = (1/2) P --- (ii)

From (i) & (ii)

M = (1/2) (3/4) Z = (3/8) Z

Statement 1: P is a multiple of 5, and M = (1/2) P. It means that M may or may not be an integer, positive or negative.

Statement 2: Z is a multiple of 8, and M = (3/8) Z. It means that M must be an integer, positive or negative.

Using both statements together:

M must be an integer, positive or negative. So, we cannot tell for sure whether M is a positive integer or not.

Hence, the correct answer is option (a)

65. Consider the following statements:

If a sum of money is lent at simple interest, then the

1. Money gets doubled in 4 years if the rate of interest is 25%.

2. Money gets doubled in 3 years if the rate of interest is 20%.

Which of the above is/are correct?

(a) Only 1 and 2 are correct

(b) Only 2 is correct

(c) Only 1 is correct

(d) Neither 1 nor 2 is correct

Ans: (c)

From Statement 1:

Let the sum be Rs. P.

Time = 4 years, Rate = 25%

Simple Interest = [P × 25 × 4]/100 = P

Amount = P + P = 2P

Thus, money get doubled in 4 years if the rate of interest is 25%.

Hence, Statement 1 is correct.

From Statement 2:

Let the sum be Rs. P.

Time = 3 years, Rate = 20%

Simple Interest = [P × 20× 3]/100 = 3P/5

Amount = P + 3P/5 = 8P/5

Thus, money does not get doubled in 3 years if the rate of interest is 20%.

Hence, Statement 2 is incorrect.

Hence, the correct answer is option (c)

66. What is the next term in the following alphanumeric series?

1A3, 4B6, 7C9, 10D12,?

(a) 13F15

(b) 13E15

(c) 11E13

(d) 13E14

Ans: (b)

Numerical component: Each number increments by 3: 1, 4, 7, 10, ...
Alphabetical component: Each letter corresponds to its position in the alphabet and increases by 1: A, B, C, D, ...
Combining these patterns:
1A3 -> 4B6 (A+2=3, B+2=6)
4B6 -> 7C9 (B+2=6, C+2=9)
7C9 -> 10D12 (C+2=9, D+2=12)
For the next term, D+2=12,
So, the next letter would be E and the next number would be 13.
Therefore, the next term is "13E15".

67. Complete the analogy: Book is to read as fork is to _____.

(a) Food

(b) Eat

(c) Write

(d) Spoon

Ans: (b)
In the given analogy, "book" is an object used for "reading". Similarly, "fork" is an object used for "eating".

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage - 21

As one might expect, depression is strongly correlated with poverty and poor health, but also with loneliness. Among the elderly living alone, in the Tamil Nadu sample, 74% had symptoms that would classify them as likely to be mildly depressed or worse on the short-from Geriatric Depression Scale.

Large majority of elderly person living alone are women mainly widows. The hardships of old age are not related to poverty alone, but some cash often helps.

68. Which among the following could be the most logical and rational inference that can be made from the passage:

(a) Old age causes depression.

(b) In joint families the old will not be depressed.

(c) Wholistic support systems are needed to take care of elders.

(d) Providing old age pension is the key to handling depression.

Ans :(c)

Depression among elders is high and support systems to cater to their financial, social

and heath aspects are needed, not just one single aspect.

Directions: Read the following passage and answer the question asked. Your answer to the question should be based on the passage only.

Passage - 22

After the Civil War, an industrial revolution remade the nation at unimaginable speed. In a generation, America became a place more recognizable today than it would have been to people who came of age when Lincoln did. Wall Street figured centrally in that great transformation. Its titanic financiers dominated the economic and political landscape, especially the railroads which were the cornerstone of the new economy and which depended on a supportive and pliant government for their creation. The men who choreographed their construction and lived lavishly off their proceeds were revered by some as master builders and Napoleonic conquerors. Writers marveled at their Darwinian ferocity. But they were reviled by others as robber barons and rogues and sinners against the moral order. For the first time Wall Street became a spectacle, an object of mass fascination. It seduced and repelled people sometimes the same people at once.

69. With which of the following statements will the author agree?

(a) Railroad was the key to the industrial revolution in America.

(b) Everyone was fond of Wall Street.

(c) Wall Street financiers with government support played a big role in the transformation of America.

(d) Robber barons and rouges were the master builders of Railroads.

Ans: (c)

Based on the article, apart from statement in option (c), rest of the statements are wrong.

70. Consider the two statements and the question:

Statement 1: The average age of P, Q and S is 30 years

Statement 2: The average age of R and S is 20 years.

Questions: The total of the present ages of P, Q, R and S is 106 years. What is Q's present age?

Which of the following is correct with respect to statements and question?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Ans: (d)

From 1: P+Q+S = 90

From 2: R+S = 40

Given: P+Q+R+S = 106

We can calculate the age of R by statement-1

R = 106 – (30×3) = 16 .... (i)

We can calculate the age of S using statements 2 and eqn.(i).

S = 40 – 16 = 24 .... (2)

But there is no information to find the age of Q. So, the question cannot be answered using statements 1 and 2.

Hence, the correct answer is option (d).

71. A student appeared in his board examination and his marks in the five papers are in ratio of 4: 6: 7: 9: 9. If he has scored 60% average marks in all the papers then in how many papers, he has scored less than 60 percent?

(a) 5

(b) 2

(c) 3

(d) Cannot be determined.

Ans: (b)

Ratio of score for each question is 4: 6: 7: 9: 9.

Let the total marks are 4x: 6x: 7x: 9x: 9x = 35x.

So, the average score is 35x/5 = 7x (this is equal to 60%)

So, there are 2 papers where the score is less than 7x.

Hence, the correct answer is option (b).

72. How many such numerals are there in the number '32644189' which will remain at the same position when arranged in ascending order from right to left?
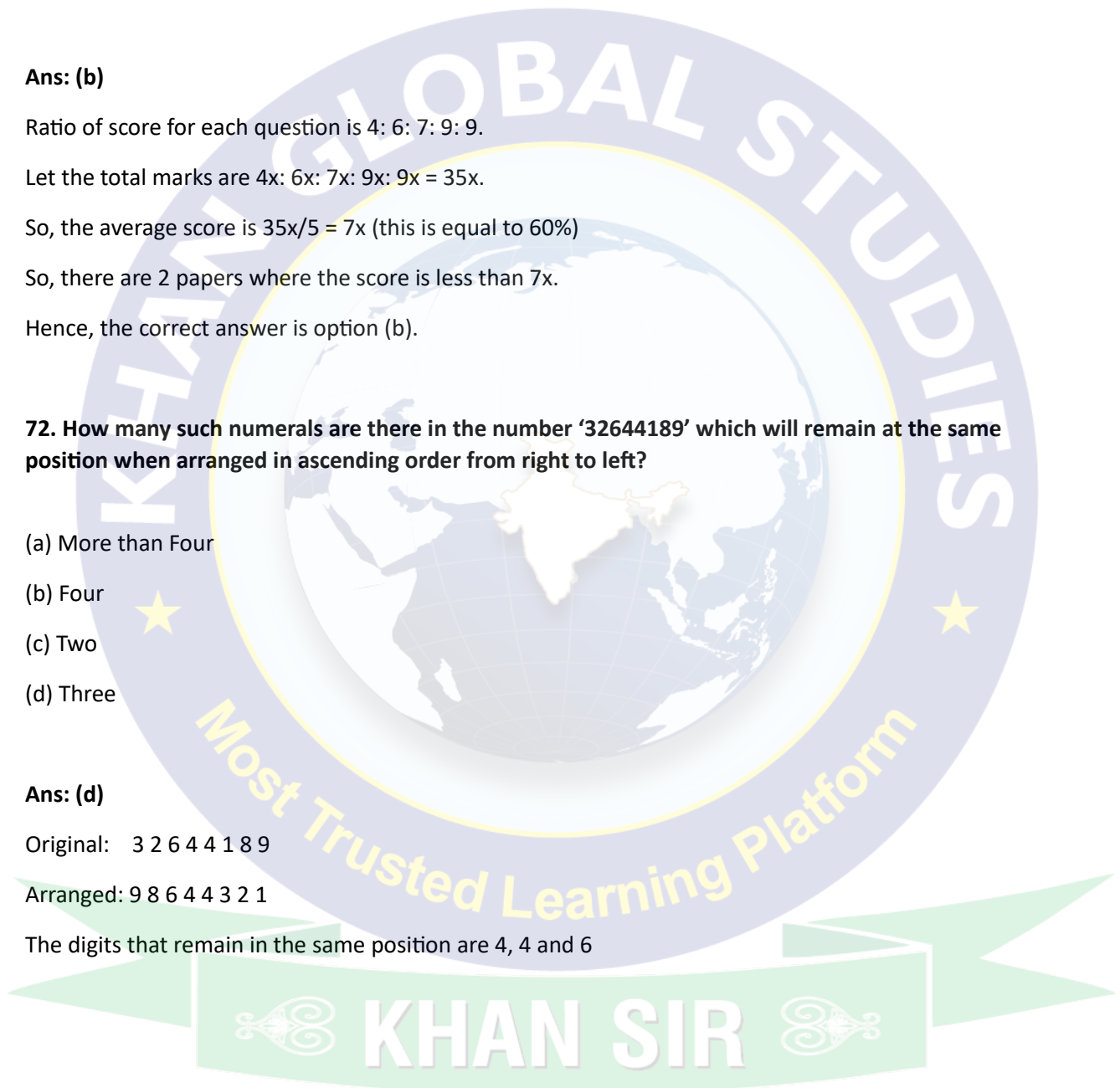
(a) More than Four

(b) Four

(c) Two

(d) Three

Ans: (d)

Original: 3 2 6 4 4 1 8 9

Arranged: 9 8 6 4 4 3 2 1

The digits that remain in the same position are 4, 4 and 6

73. Find the missing term

81/68: 18/79:: 63/ 72: _?_

(a) 83/25

(b) 38/54

(c) 38/74

(d) 36/83

Ans: (d)

Relation between 81/ 68 :: 18/ 79

The value of the numerator gets reversed and, in the denominator, adds 11.

So, 63/ 72: 36/ 83

74. Integers are listed from 100 to 200. In how many integers is the sum of digits is 4?

(a) 2

(b) 3

(c) 5

(d) 4

Ans: (d)

For making the digit sum to be 4 following combinations can be made

103, 130, 112, 121

Hence, the correct answer is option (d)

75. A snail climbs a slippery pole 14 m high. It rises 1 meter in every one minute and slips 1/2 meter in every next minute.

Find how soon it will reach the top?

(a) 52 min

(b) 54 min

(c) 56 min

(d) 58 min

Ans: (a)

Let's first find the time taken by the snail to climb 13 m. In 2 minutes, the snail climbs 0.5 m.

So, for 13 m, snail needs. (13/0.5) × 2 = 52 Minutes.

In the next one minute, the snail will reach the top and hence, we will not calculate the time to slip again.

Hence, the correct answer is option (a).

76. In a party of 30 persons, every person shakes hands with every other person. What is the total number of handshakes?

(a) 300

(b) 420

(c) 435

(d) 355

Ans: (c)

Total number of handshakes = selection of 2 persons out of 30 = $^{30}C_2$ = 435

Hence, the correct answer is option (c).

77. M and N working together can finish a job in k days. If M works alone and completes the job, he will take k + 5 days. If N works alone and completes the same job, he will take k + 45 days. What is the value of k?

(a) 25

(b) 60

(c) 15

(d) None of these

Ans: (c)

M's one day's work = 1/ (k + 5)

N's one day's work = 1/ (k + 15)

(M + N)'s combined one day's work = 1/k

1/ (k + 5) + 1/ (k + 15) = 1/k

$2k^2 + 50k = k^2 + 45k + 5k + 225$

$K^2 = 225$

k = 15 days

Hence, the correct answer is option (c).

78. What is the next term in the following alphanumeric series?

K3, M7, O12, Q18,?

(a) X25

(b) S25

(c) Y24

(d) Z28

Ans: (b)

Alphabetical component: K, M, O, Q. Each letter increases by 2 in alphabetical order.

Numerical component: 3, 7, 12, 18.

The differences between consecutive numerical terms are increasing by one each time.

Combining the patterns: Starting from K3, the next letter is S and the next number should be 18 + 7 = 25.

Therefore, the next term is "S25".

So, the answer is option (b)

79. In a certain code language, "CAT" is coded as "3#%". Using the same logic, what will "DOG" be coded as?

(a) 9*&

(b) 4@!

(c) 4$%

(d) 9! @

Ans: (b)
Each letter in the word is assigned a symbol based on its position in the English alphabet. So, "D" (4th letter) becomes "4", "O" (15th letter) becomes "@", and "G" (7th letter) becomes "!". Therefore, "DOG" is coded as "4@!".

80. In a certain code language, "RED" is coded as "UHG". What will "CAT" be coded as?

(a) FDW

(b) FFV

(c) EDU

(d) EFD

Ans: (a)
Each letter in the word is shifted 2 places forward in the English alphabet.