

## CSAT Test-3 Answers & Explanation

Paragraph: DIRECTIONS for Question 1 (1 item)- Read the passage given below and answer the questions that follow: PASSAGE 1- The Armed Forces (Special Powers) Act (AFSPA), which provides extraordinary powers of force to soldiers deployed in disturbed areas, has long been a bone of contention between human rights activists and those favouring a strong state response to terror and insurgency. The Supreme Court has now rightly drawn a line under this raging dispute by ruling that indefinite deployment of armed forces in 'disturbed areas' under AFSPA "mocks at our democratic process" and symbolises a failure of the state.

PQ1. Consider the following statements:

1. Keeping AFSPA indefinitely defeats the purpose of what is essentially an emergency provision.
2. The state is contemplating the need to repeal the AFSPA for the betterment of the people.
3. Active intervention of the courts is necessary as the human rights situation in the country is grim.

Which of the statements given above is/are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. None of the above

**Answer: D**

**Exp:** Statement 1 is correct, as is evident from the following line, "indefinite deployment mocks at our democratic symbolizes a failure of the state".

Statement 2 is wrong as the possibility of "repeal" is not supported by the passage; Statement 3 is wrong as the passage only talks about the human right situation in certain areas and not in the entire country.

Paragraph: DIRECTIONS for Question 2 (1 item)- Read the passage given below and answer the questions that follow: PASSAGE 2- In the year 2016, Indians deserve a modern and streamlined judicial system. Instead, what they are stuck with is a deficient structure groaning under a great pendency of cases. And the crisis only seems to be worsening, as a bench headed by Chief Justice T S Thakur has accused the government of bringing the judiciary to a standstill by stalling judges' appointments. This confrontation is part of a prolonged battle over the procedure to appoint judges. While the judicial collegium is criticised for opacity and favouritism, the National Judicial Appointments Commission, which envisaged a broader panel to choose judges and was passed by the

Parliament, was struck down by the apex court in October 2015. The longer government and the collegiums take to finalise a new memorandum of procedure to appoint HC and SC judges, the more citizens awaiting justice suffer. In practical terms, the High Courts are now operating with 44.3% vacancies; pendency has risen to four million cases.

PQ2. Which among the following is the most logical corollary to the above passage?

- A. Unless vacancies are filled at the earliest, justice delayed would mean justice denied.
- B. The government is at fault in the standoff between the government and judiciary.
- C. The Supreme Court has a lower proportion of vacancies than the High Courts.
- D. The people of India are to be blamed for suffering silently in the tussle between the government and judiciary.

**Answer: A**

**Exp:** The passage says that the government has been “accused” of delayed appointments of judges- but whether this accusation is true cannot be ascertained. So, option (b) cannot be said to be inferred.

There is no evidence to support option (c).

Option (d) is eliminated as the passage does not put the blame on Indian people.

The passage brings forth the suffering of people due to the government-judiciary tussle and the resultant pending cases and underlines the need for a solution. Option (a) reflects this urgency.

Paragraph: DIRECTIONS for Question 3 (1 item)- Read the passage given below and answer the questions that follow: PASSAGE 3- There is no substitute for dedicated effort in crafting successful public policy. Draconian laws and legislation promising utopia are best avoided; utopias have an uncanny tendency to turn into dystopia. The effort should be to transform the economy and society by aligning incentives in the direction of desired results. No political party can be singled out for blame. All of them use populism as a substitute for reforms. A young and vibrant country deserves much better.

PQ3. What is the most logical, rational, and crucial message that is implied in the above passage?

- A. Public policy should avoid populism and make dedicated effort towards realistic reforms.
- B. Painstaking efforts must be made to form a successful public policy.
- C. A young country should not dream of utopia.
- D. Dreams of utopia almost always turn into dystopia.

**Answer: A**

**Exp:** The passage is basically elaborating on the need for concentric efforts to draft a successful public policy with care taken to avoid populism. This message is captured best in option (a).

Option (b) is incomplete as it misses the key point of avoiding populism.

Option (c) is eliminated as it misses the issue of public policy framing which is an intrinsic part of the passage.

Option (d) is wrong because of the use of the word “always”.

Paragraph: DIRECTIONS for Question 4 (1 item)- Read the passage given below and answer the questions that follow: **PASSAGE 4-** As far as nomenclature is concerned, different organisations and individuals use different terminologies. While many continue to use the term “handicapped”, the world has moved on to accepting the expression “people/persons with disabilities”. Society is way past the medical and charity models of disability which put the onus on the individual and the “impairment”. The focus now is on rights and removing barriers. And that is why nomenclature becomes important. We possibly cannot be talking about dignity on the one hand while using labels on the other.

PQ4. With reference to the above passage, which of the following is the most valid assumption?

A. Nomenclature is the most important factor in building a healthy society.

B. Using different names is not going to help people with disability since society is not taking any positive action for them to be recognised as equal citizens.

C. Awareness and sensitivity of society on needs and rights of people with disabilities are increasing.

D. Nomenclature is a minor issue and the medical treatment of people with disabilities is more important.

**Answer: C**

**Exp:** Option (a) is eliminated as nomenclature is one of the important factors and not the most important factor.

Option (b) is eliminated as the passage says that the society is now focusing on rights and removing barrier between us and the disabled population.

Option (d) is eliminated as it contradicts the passage.

Awareness and sensitivity of society is on the rise is clearly assumed according to the statement, “We are way past the focus is now on removing barriers.” This clearly assumes that the ignorance and possible apathy is getting replaced with awareness and sensitivity. Thus, option (c) is a valid assumption.

Paragraph: DIRECTIONS for Questions 5 and 6 (2 item)- Read the passage given below and answer the questions that follow: PASSAGE 5- A review of more than a thousand studies has found solid evidence that being overweight or obese increases the risk for at least 13 types of cancer. An adult having a body mass index of 18.5 to 24.9 was considered to be having a normal weight for this review. Strong evidence was already available to link five cancers to being overweight. This new review links an additional eight cancers to excess fat. According to the World Health Organisation, these 13 cancers together account for 42 per cent of all new cancer diagnoses. "Only smoking comes close" as an environmental factor affecting cancer risk, as per the WHO. "And that's an important message for non-smokers. Obesity now goes to the top of the list of things to focus on."

Obesity is associated with significant metabolic and hormone abnormalities, and with chronic inflammation, factors that may help explain its link to cancer. For some cancers, WHO found that the fatter the person, the greater the risk. In endometrial cancer, for example, compared with a woman of normal weight, one with a BMI of 25 to 29.9 was at a 50 per cent higher relative risk. But her risk more than doubled at BMIs between 30 and 34.9 and more than quadrupled at BMIs of 35 to 39.9. WHO found only limited evidence as of now that obesity could be linked to three additional types of cancer: male breast cancer; prostate cancer; and diffuse large B-cell lymphoma, the most common form of non-Hodgkin's lymphoma.

PQ5. With reference to the above passage, consider the following statements:

1. The study of the causes of various types of cancers is an ongoing process and is far from complete.
2. Many cancers are caused by metabolic and hormonal abnormalities and chronic inflammation.

Which of the statements given above is/are valid?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

**Answer: C**

**Exp:** The passage states that obesity can now be linked to 8 additional types of cancers whereas it was earlier found to have links with only 5 types of cancers. Also the last line of the passage states that, as of now, only limited evidence is available to link obesity with 3 additional types of cancer. This is clearly assuming that the cause-finding process is ongoing and is far from complete. Thus, statement 1 is valid.

Statement 2 follows from the first sentence of the second paragraph.

PQ6. With reference to the above passage, which of the following is a valid inference?

1. If one reduces weight through exercise and avoids unhealthy habits like smoking, then the risk of contracting cancer is relatively reduced.
2. Smoking and tobacco are the only two factors leading to cancer.
3. There may be other factors beyond those discussed in the passage that could be leading to cancer.

Select the correct answer using the code given below:

- A. 1 only
- B. 2 only
- C. 1 and 3 only
- D. 2 and 3 only

**Answer: C**

**Exp:** Since the passage links obesity, along with smoking, with many types of cancers, it logically follows as a valid inference that if weight is reduced and smoking avoided, cancer risk would get minimized.

Statement 2 is incorrect as the word “only” used in it is extreme and may not be correct per the passage.

Statement 3 is valid since “atleast” 13 types of cancers could be linked with obesity and smoking—there may be others that have other causes.

Q7. Given below are two statements, followed by two conclusions:

Statements:

- I. Some people are happy.
- II. All people are good.

Conclusions:

- I. Some good are happy.
- II. No happy is good.

Select the correct answer using the code given below:

- A. Only II follows
- B. Both I and II follow
- C. Only I follows
- D. Neither I nor II follow

**Answer: C**

**Exp:** None

Paragraph: DIRECTIONS for Questions 8 to 9 (2 items): *Answer the following questions on the basis of the information provided.*

PQ8. Increasing automation makes economic growth possible and raises standards of living. It also frees up people's time and allows them to pursue more leisure activities. However, automation also results in a proliferation of low-skill jobs as ever more complex tasks become automated. Because a person's sense of satisfaction in his or her job is based on the level of skill needed for the job, increased automation would lead to which of the following?

- A. It would result in more and more people being unsatisfied with their jobs.
- B. It would not increase people's average level of happiness.
- C. It would cause people to become unsatisfied with their leisure activities.
- D. It would eliminate most people's jobs.

**Answer: A**

**Exp:** If automation results in a proliferation of low-skill jobs and people's sense of satisfaction is based on the level of skill needed for the job, then choice A follows: as automation increases, more and more people will be unsatisfied with their jobs. Happiness is not the issue as choice B states. The argument doesn't say that people will be unsatisfied with their leisure activities, as choice C states. Choice D isn't necessarily true; the premises only say that highly skilled jobs will become more automated.

PQ9. In the past few years, there has been a significant decline in the public's consumption of trans-fat, a particularly unhealthy type of unsaturated fat. This decrease coincides with a public health campaign to encourage healthier eating habits. Therefore, the decline in consumption of trans-fat must be due to the effects of the health campaign. Which of the following, if true, most seriously weakens the conclusion reached above?

- A. The food producers who used the most trans-fat in their products recently switched to a different type of fat because it is cheaper.
- B. On average, people today consume less trans-fat than did people a few years ago.
- C. Most trans-fat consumed by the public is created by industry to give products a longer shelf life.
- D. People who consume large amounts of trans-fat have a higher risk of coronary heart disease.

**Answer: A**

**Exp:** Because the two events are correlated with each other, the argument has concluded that one caused the other. The major assumption is that there is no other cause. To weaken the argument, look for another cause. Choice A provides one by indicating that food producers, not the health campaign, caused the decline. None of the other choices present an alternative cause.

Paragraph: DIRECTIONS for Question 10 (1 item)- Read the passage given below and answer the questions that follow: PASSAGE 6- "Let every nation know, whether it wishes

us well or ill, that we shall pay any price, bear any burden, meet any hardship, support any friend, oppose any foe to assure the survival and the success of liberty in America.”

PQ10. Which one of the following expresses the view implied in the above statement?

- A. America values liberty and is willing to do everything possible to sustain it.
- B. America can eschew privations to uphold liberty.
- C. Liberty is one of the most valued ideas globally.
- D. Without liberty human soul cannot survive.

**Answer: A**

**Exp:** The core focus of the passage is America’s determination to sustain the success of liberty- Option (a) captures the view implied in the passage best by elaborating on the importance of liberty to America.

The other options are neither implied nor supported by the passage.

Q11. Abhishek’s monthly income is three times Avinash’s monthly income, Avinash’s monthly income is fifteen percent more than Ashish’s monthly income. Ashish’s monthly income is Rs. 32,000. What is Abhishek’s annual income?

- A. Rs. 1,10,400
- B. Rs. 13,24,800
- C. Rs. 36,800
- D. Rs. 52,200

**Answer: B**

**Exp:** Ashish’s monthly income = Rs. 32,000

Avinash’s monthly income = Rs. 32,000 + 15% of Rs. 32,000

= Rs. 32,000 + Rs. 4,800 = Rs. 36,800

Abhishek’s monthly income = 3 × Rs. 36,800 = Rs. 1,10,400

Abhishek’s annual income = 12 × Rs. 1,10,400 = Rs. 13,24,800

Q12. An IT Company employs 9600 persons, out of which 45 percent are females and 60 percent of the females are either 25 years or older. How many females are employed in that IT Company who are younger than 25 years?

- A. 5280
- B. 4320
- C. 2592
- D. 1728

**Answer: D**

**Exp:** Number of females = 45% of 9600 = 4320

Number of females 25 years or older = 60% of 4320 = 2592

Number of females younger than 25 years = 4320 – 2592 = 1728

Q13. Mahesh bought 20 pens, 8 registers, 6 calculators and 7 pencil boxes. The price of one pen is Rs. 7, one register is for Rs. 22, one calculator is for Rs. 175 and one pencil box costs Rs. 14 more than the combined price of one pen and one register. How much amount did Mahesh pay to the shopkeeper?

- A. Rs. 491
- B. Rs. 1725
- C. Rs. 1667
- D. Rs. 1527

**Answer: C**

**Exp:** Cost of 20 pens =  $20 \times \text{Rs. } 7 = \text{Rs. } 140$

Cost of 8 registers =  $8 \times \text{Rs. } 22 = \text{Rs. } 176$

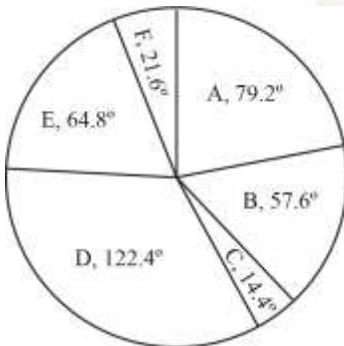
Cost of 6 calculators =  $6 \times \text{Rs. } 175 = \text{Rs. } 1050$

Cost of 1 pencil box =  $\text{Rs. } 14 + \text{Rs. } 7 + \text{Rs. } 22 = \text{Rs. } 43$

Cost of 7 pencil boxes =  $7 \times \text{Rs. } 43 = \text{Rs. } 301$

Total amount paid to the shopkeeper =  $\text{Rs. } (140 + 176 + 1050 + 301) = \text{Rs. } 1667$

Q14. Six – elevenths of a number is equal to twenty two percent of the second number. The second number is equal to one-fourth of the third number. The value of the third number is 2400. What is 45% of the first number?



- A. 109.8
- B. 111.7
- C. 117.6
- D. 108.9

**Answer: D**

**Exp:** Third number = 2400

Second number =  $\frac{1}{4} \times 2400 = 600$

Let the first number be  $x$ . Then,  $\frac{6}{11} x = 22\% \text{ of } 600 \Rightarrow x = 242$

45% of  $x = 45\% \text{ of } 242$

= 108.9

Paragraph: DIRECTIONS for Questions 15 to 17 (3 items)- Study the following pie-chart and answer the questions given below: Preference of students for six beverages A, B, C, D, E and F in terms of degrees of angle in the pie-chart. Total number of students = 6850.

PQ15. What is the difference between the total number of students who prefer beverage A and C together and the total number of students who prefer beverage D and F together?

- A. 959
- B. 955
- C. 952
- D. 954

**Answer: A**

**Exp:** Number of students who prefer beverage A and C =  $79.2^\circ + 14.4^\circ = 93.6^\circ$

Number of students who prefer beverage D and F =  $122.4^\circ + 21.6^\circ = 144^\circ$

Difference between A and C together and D and F together =  $144^\circ - 93.6^\circ = 50.4^\circ$

Difference in terms of number of students =  $50.4^\circ / 360^\circ \times 6850 = 959$

PQ16. What is the ratio of the number of students who prefer beverage F to the number of students who prefer beverage A?

- A. 3:11
- B. 3:13
- C. 6:11
- D. 5:11

**Answer: A**

**Exp:** Ratio of the number of students who prefer beverage F to the number of students who prefer beverage A =  $21.6^\circ : 79.2^\circ = 3 : 11$ .

PQ17. The number of students who prefer beverage E and F together is what percent of the total number of students?

- A. 18
- B. 14
- C. 26
- D. 24

**Answer: D**

**Exp:** Number of students who prefer beverage E and F together =  $64.8^\circ + 21.6^\circ = 86.4^\circ$ .

Percent of students who prefer beverage E and F together =  $86.4^\circ / 360^\circ \times 100\% = 24\%$ .

Q18. Image

$$[(5\sqrt{7} + \sqrt{7}) \times (4\sqrt{7} + 8\sqrt{7})] - (19)^2 = ?$$

- A. 143
- B.  $72\sqrt{7}$
- C. 134
- D.  $70\sqrt{7}$

**Answer: A**

**Exp:**

$$[(5\sqrt{7} + \sqrt{7}) \times (4\sqrt{7} + 8\sqrt{7})] = 140 + 280 + 28 + 56 = 504$$

$$[(5\sqrt{7} + \sqrt{7}) \times (4\sqrt{7} + 8\sqrt{7})] - (19)^2 = 504 - 361 = 143$$

Paragraph: DIRECTIONS for Questions 19 to 21 (3 items)- Study the following information carefully and answer the questions which follow: Five plays A, B, C, D and E were organised in a week from Monday to Saturday with one play each day and no play was organised on any one of these days. Play D was organised before Thursday but after Monday. Play E was organised on Saturday. Play C was not organised on the first day. Play B was organised on the next day on which play C was organised. Play A was organised on Tuesday.

PQ19. On which day was play B organised?

- A. Thursday
- B. Wednesday
- C. Friday
- D. Can't say

**Answer: C**

**Exp:**

| Day       | Play    |
|-----------|---------|
| Monday    | No Play |
| Tuesday   | A       |
| Wednesday | D       |
| Thursday  | C       |
| Friday    | B       |
| Saturday  | E       |

PQ20. On which day was no play organised?

- A. Monday
- B. Wednesday

- C. Thursday
- D. Can't say

**Answer: A**

**Exp: None**

PQ21. Which play was organised on Wednesday?

- A. A
- B. C
- C. D
- D. Can't say

**Answer: C**

**Exp: None**

Paragraph: DIRECTIONS for Questions 22 to 24 (3 items)- Study the following information and answer the questions that follow: The premises of a bank are to be renovated. The renovation is in terms of flooring. Certain areas are to be floored either with marble or wood. All rooms/halls and pantry are rectangular. The area to be renovated comprises of a hall for customer transaction measuring 23m by 29m, branch manager's room measuring 13m by 17m, a pantry measuring 14m by 13m, a record keeping cum server room measuring 21m by 13m and locker area measuring 29m by 21m. The total area of the bank is 2000 square meters. The cost of wooden flooring is Rs. 170/- per square meter and the cost of marble flooring is Rs. 190/- per square meter. The locker area, record keeping cum server room and pantry are to be floored with marble. The branch manager's room and the hall for customer transaction are to be floored with wood. No other area is to be renovated in terms of flooring.

PQ22. What is the respective ratio of the total cost of wooden flooring to the total cost of marble flooring?

- A. 1879 : 2527
- B. 1887 : 2386
- C. 1887 : 2527
- D. 1829 : 2527

**Answer: C**

**Exp:** Cost of wooden flooring of hall and branch manager's room = Rs.  $170 \times (23 \times 29 + 13 \times 17) = \text{Rs. } 170 \times 888$

Cost of marble flooring of locker area, record room and pantry = Rs.  $190 \times (14 \times 13 + 21 \times 13 + 29 \times 21) = \text{Rs. } 190 \times 1064$

Ratio of total cost of wooden flooring to the total cost of marble flooring = Rs.  $170 \times 888 : \text{Rs. } 190 \times 1064 = 1887 : 2527$

PQ23. If the four walls and ceiling of the branch managers room (The height of the room is 12 metres) are to be painted at the cost of Rs. 190/- per square meter, how much will be the total cost of renovation of the branch manager's room including the cost of flooring?

- A. Rs. 1,36,800
- B. Rs. 2,16,360
- C. Rs. 1,78,790
- D. Rs. 1,74,370

**Answer: B**

**Exp:** Cost of painting the 4 walls = Rs.  $190 \times (2 \times 13 \times 12 + 2 \times 17 \times 12) = \text{Rs. } 1,36,800$

Cost of wooden flooring of room = Rs.  $170 \times 13 \times 17 = \text{Rs. } 37,570$

Cost of painting the ceiling = Rs.  $190 \times 13 \times 17 = \text{Rs. } 41,990$

Total cost = Rs.  $1,36,800 + \text{Rs. } 37,570 + \text{Rs. } 41,990 = \text{Rs. } 2,16,360$

PQ24. If the remaining area of the bank is to be carpeted at the rate of Rs. 110/- per square meter, how much will be the increment in the total cost of renovation of bank premises?

- A. Rs. 5,820
- B. Rs. 4,848
- C. Rs. 3,689
- D. None of the above

**Answer: D**

**Exp:** Remaining area of bank =  $2000 - (23 \times 29 + 13 \times 17 + 14 \times 13 + 21 \times 13 + 29 \times 21)$   
 $\text{m}^2 = 2000 - 1952 \text{ m}^2 = 48 \text{ m}^2$

Increment in cost = Rs.  $110 \times 48 = \text{Rs. } 5280$

Q25. What is the percentage area of the bank that is not to be renovated?

- A. 2.2
- B. 2.4
- C. 4.2
- D. 4.4

**Answer: B**

**Exp:** Remaining area of bank =  $48 \text{ m}^2$

Percent area of bank not to be renovated =  $48/2000 \times 100\% = 2.4\%$

Paragraph: DIRECTIONS for Question 26 (1 item)- PASSAGE 7- As India steps into its 70th year of independence, it is time to take stock. How well has India been faring, and where do we go from here? Before independence, the Indian economy was stagnant

during the first half of the 20th century, with zero or negative per capita GDP growth and near universal poverty. GDP growth rate inched up during the Nehruvian years of Soviet style planning and the licence raj, but India's population exploded too and living standards remained dismal. It's only the post-liberalisation years that saw a significant rise in prosperity and big dents in poverty. Today Indians own a billion cell phones and two-thirds have a TV set. This connectedness has sparked not only greater awareness among electorates but also a revolution of rising expectations.

PQ26. Which among the following is the most critical inference that can be made from the above passage?

- A. The Soviet-style planning model proved to be a failure in India.
- B. The absolute GDP growth rate is the best indicator of a nation's living standards.
- C. India lags behind many of its Asian counterparts in terms of economic development.
- D. The Indian growth story over the last 70 years continues, slowly but surely.

**Answer: D**

**Exp:** As per the passage, India's growth rate, which was zero or negative earlier, slowly improved during years of Soviet-style planning and thus that model cannot be termed as a failure and thus option (a) is eliminated.

The passage states that increased population negated the benefits of GDP growth and living standards remained dismal in India earlier. Thus, option (b) is an incorrect inference as growth rate alone cannot reflect the living standards.

Option (c) is eliminated as the data about other Asian countries is not available in the passage.

According to the passage, India has moved from negative growth to slow growth to significant growth post liberalization in the last 70 years and thus has maintained its growth trajectory. Thus, option (d) is a valid inference.

Paragraph: DIRECTIONS for Question 27 (1 item)- PASSAGE 8- It is underwhelming that India's trade with Africa stands at just \$72 billion when China-Africa trade has already surpassed \$200 billion. True, India and China have very different strengths and approaches. China's Africa push is powered by state-owned enterprises while India's outreach is driven by private sector companies. India has the advantage of a sizeable diaspora in Africa which serves as a bridge between the two sides. In fact, a people-centric approach focussed on services will put India-Africa ties on a firmer footing. Towards this end, India's Exim Bank is looking to disburse close to Rs 10,000 crore in Africa over the next three years with an eye on services export. Meanwhile, India needs Africa's natural resources to power its next phase of industrial growth.

PQ27. Which one of the following statements, if true, is least essential as a part of the argument in the above passage?

- A. Indian investment in Africa will be of huge help to Indian diaspora in Africa indirectly.
- B. If India maintains steady trade relations with Africa, it could soon surpass China.
- C. The rate of growth of millionaires in Africa is faster than the global average by a factor of four.
- D. Service sector has been India's biggest strength post liberalization.

**Answer: C**

**Exp:** The passage talks about India-Africa trade in comparison to China, and India's efforts to increase it through people-centric approach which uses the strength of Indian diaspora in Africa. Options (a), (b), and (d) elaborate on certain parts of the discussion in the passage and thus are essential parts of the argument in the passage.

Option (c) deviates from the topic of the passage by talking about the millionaires in Africa and thus is not an essential part of the argument in the passage.

Paragraph: DIRECTIONS for Question 28 (1 item)- PASSAGE 9- The Maharashtra State Road Development Corporation will invite tenders to build a bypass on the Mumbai-Pune Expressway to reduce traffic congestion in the ghat section and reduce travel time to Pune. The 12-kilometre bypass, which is estimated to cost around Rs 5,000 crore, will include a 9.9 kilometre underground tunnel which is expected to reduce traffic congestion near the ghat section and also bring down the travel time from Mumbai to Pune by 30 minutes. On average, it takes around 3.5 hours to travel from Mumbai to Pune.

PQ28. Which one of the following statements best sums up the above passage?

- A. Traffic congestion has become routine on the Mumbai-Pune Expressway and urgent solution to this problem is needed.
- B. Travel time from Mumbai to Pune is a bit too much and urgent efforts are required to connect the two metro cities in a faster way.
- C. The tender invitation process has started to build a bypass on the Mumbai-Pune Expressway to reduce traffic congestion.
- D. Traffic congestion near the ghat section on the Mumbai-Pune Expressway will be tackled by building a 12-km bypass and travel time from Mumbai to Pune would be improved upon.

**Answer: D**

**Exp:** Option (d) sums up the passage correctly by highlighting that it is the traffic congestion in the ghat section that is to be tackled by the bypass.

Option (a) is incorrect as it fails to take cognizance of the actual solution in the form of a bypass that is discussed in the passage and just vaguely expresses a wish for a possible solution.

Option (b) is incorrect as it incorrectly tries to indicate that the travel time between Mumbai-Pune in general is the core problem whereas per the passage, it is the traffic in the ghat section that is the core problem that is getting addressed.

Option (c) only focuses on the tenders, which is only an incidental singular fact from the passage that does not capture the core problem of traffic specifically near the ghat section and hence option 'c' is eliminated.

Paragraph: DIRECTIONS for Question 29 (1 item)- PASSAGE 10- "A mind all logic is like a knife all blade. It makes the hand bleed that uses it." – Rabindranath Tagore

PQ29. Which of the following is a valid assumption in the above statement?

- A. The mind is like a knife, one has to keep it razor-sharp to produce optimum results.
- B. Applying only logic in the matters concerning the mind can prove to be counterproductive.
- C. Reasoning is the process of deriving a conclusion.
- D. Emotions often outweigh our logic.

**Answer: B**

**Exp:** The passage simply says that use of too much logic by the mind can produce adverse consequences which is captured best in option (b).

Option (a) is contrary to the information provided in the passage.

Option (c) simply gives the definition of reasoning which is not an assumption. Thus, option c is eliminated.

There is no mention of "emotions" in the passage. So, eliminate option (d).

Paragraph: DIRECTIONS for Question 30 (1 item)- PASSAGE 11- In 2013-14, the Total Healthcare Expenditure (THE) of India was Rs. 4.5 lakh crores, which amounts to 4 per cent of the Gross Domestic Product (GDP). The Draft National Health Policy 2015 recognises this to be a problem. It says: "Global evidence on health spending shows that unless a country spends at least 5-6 per cent of its GDP on health and the major part of it is from government expenditure, basic health care needs are seldom met."

Of the total amount of Rs. 4.5 lakh crores, Current Health Expenditure (CHE) constituted Rs. 4.2 lakh crores (93 per cent). Rs. 31.9 thousand crore (7 per cent) went to Capital Expenditure. Households continue to be the dominant contributors (73 per cent of CHE) to health finance in India. The bulk of the total money circulating in Indian healthcare – around 69 per cent – comes from Out Of Pocket (OOP) payment by households. OOP is the money which individuals pay out of their own finances. "I cannot think of any other country, except Myanmar, where OOP is this huge. This is a huge concern," said Dr Sakthi Selvaraj, a member of the expert group that had put together the NHA estimates.

High OOP spending is a result of abysmally low government spending on health, constituting just 1.15 per cent of GDP and 30 per cent of CHE – the lowest among the BRICS nations. It has long been argued that government spending on health should increase to 2.5 per cent of GDP, a figure also envisaged by the Draft National Health Policy 2015. But there are challenges. The NITI Aayog affirms that there is not much point in saying that government expenditure on health should be increased to 2.5 per cent of GDP, unless we also determine whether the extra resources for healthcare would come from the removal of tax exemptions, increasing the tax base or by switching expenditure from other development heads to health. Out of the total 4.5 lakh crores, a third of all money-Rs. 1.5 lakh crores (35.7 per cent) was spent in pharmacies. Rs. 88.5 thousand crores (21 per cent) was spent in private hospitals, more than double compared to that of government hospitals which consume 41.7 thousand crores (9.9 per cent).

PQ30. According to the passage, which of the following is/are correct?

1. Expenditure on medicines is a readily identifiable element of health service costs in India.
2. Current health expenditure in India is lower than capital expenditure.
3. Government spending on healthcare in India is inadequate.

Select the correct answer using the code given below:

- A. 1 only
- B. 1 and 2 only
- C. 1 and 3 only
- D. 1, 2 and 3

**Answer: C**

**Exp:** Statement 1 is true as the passage states that more than 35% of total health expenditure was spent in pharmacies.

Statement 2 is incorrect as, per the passage, current health expenditure constitutes 93% of total expenditure whereas capital expenditure constitutes only 7%.

Statement 3 is correct as the passage states that government spending on health constitutes just 1.15 per cent of GDP whereas a spending of at least 5-6 per cent of GDP is required to take care of basic healthcare needs.

Thus, statements 1 and 3 are correct.

Q31. According to the passage, if government spending on health is to be increased to 2.5% of GDP, which one of the following may not be a valid way of generating the extra resources?

- A. Removal of tax exemptions.
- B. Switching expenditure from other development heads to health.
- C. Increasing the tax base.

D. Following the resource generation model of countries which spend more than 6% of GDP on healthcare.

**Answer: D**

**Exp:** Options (a), (b), and (c) are valid ways of generating the extra resources, as referred to in the third paragraph, "extra resources for healthcare other development heads to health."

Option (d) is not mentioned in the passage as a mode of resource generation and thus is not a valid way per the passage.

Hence, the correct answer is option d.

Q32. From the tone of the passage, it can be inferred that out of pocket expenditure on healthcare in India is high because of:

1. Indians being affluent.
2. No door-step availability of health services.
3. Due to the lack of government support and government spending on healthcare.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. 1 and 3 only
- D. 3 only

**Answer: D**

**Exp:** The affluence of Indians or door-step availability of healthcare services are out of the scope of the passage and hence, statements 1 and 2 are not correct.

Statement 3 is true from the following line in the passage, "High OOP spending ..... low government spending on health."

Q33. Given below are two statements, followed by three conclusions:

Statements:

- I. Some plants are trees.
- II. All flowers are plants.

Conclusions:

- I. Some trees are flowers.
- II. All flowers are trees.
- III. Some plants are flowers.

Which of the conclusions given above follow?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. None of the above

**Answer: D**

**Exp: None**

Paragraph: DIRECTIONS for Questions 34 to 35 (2 items)- Each of the following two items consists of four statements. Of these four statements, two cannot both be true, but both can be false. Study the statements carefully and identify the two that satisfy the above condition.

PQ34. Examine the following statements:

1. No rocks are stones.
2. Some rocks are stones.
3. All rocks are stones.
4. Some rocks are not stones.

Select the correct answer using the code given below:

- A. 1 and 4 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. Both A and B only

**Answer: C**

**Exp: None**

PQ35. Examine the following statements:

1. All policies are programs.
2. Some policies are programs.
3. Some policies are not programs.
4. No policies are programs.

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 1 and 4 only
- C. 3 and 4 only
- D. Both A and C only

**Answer: B**

**Exp: None**

Paragraph: DIRECTIONS for Question 36 (1 item)- PASSAGE 12- India is in the midst of an unacknowledged biodiversity crisis. Therefore, it is ironic that the Biological Diversity Act is still the most neglected of India's environmental laws, and one of the least implemented. There is very limited judicial pronouncement and interpretation, action by civil society is virtually absent, and the government's approach has been one of extreme

apathy. Many State biodiversity boards have Indian Forest Service officers, many of whom are waiting to be posted in a more “mainstream” post as biodiversity is perceived to be a dead subject.

PQ36. Which among the following is the most logical and rational inference that can be made from the above passage?

- A. Indian Forest Service officers are inefficient.
- B. India is a poor country and when a quarter of the population is starving, environmental issues are bound to be ignored.
- C. Lax implementation of Biological Diversity Act follows from the culture of ineffective implementation of legislations in India.
- D. The importance of biodiversity is not adequately understood by the Indian citizenry, judiciary, and government.

**Answer: D**

**Exp:** Option (a) is incorrect because the passage talks about the mindset of the officers, but does not talk about their efficiency.

Option (b) is incorrect as there is no mention in the passage about India being poor and it having a starving population.

Option (c) is incorrect as the passage does not state that legislations are ineffectively implemented in India .

Option (d) clearly can be inferred from the following line in the passage, “There is very limited ..... of extreme apathy.”

Paragraph: DIRECTIONS for Question 37 (1 item)- PASSAGE 13- According to a research, cervical cancer has the possibility of elimination and can be eradicated from many countries in the world in four to five decades. Cervical cancer incidence is falling globally by about 1 to 3 per cent per annum and screening as well as vaccination are effective interventions to tackle the malady. WHO’s guidance note on cervical cancer puts vaccination against the Human Papilloma Virus (HPV) of girls in the 9 to 13 age group as primary prevention and screening of women aged over 30 as secondary prevention. Around 34 low- and-middle income countries have HPV vaccine in their national immunisation programmes, but India (which recorded 67,400 deaths due to cervical cancer in 2015) was lagging behind.

PQ37. Which among the following is the most logical and rational inference that can be made from the above passage?

- A. Humankind will conquer all types of cancers in the next 10-15 years.
- B. HPV infection is the primary cause of cervical cancer.
- C. There is limited awareness on the effectiveness and need of HPV vaccine.

D. High-income countries report low incidence of cervical cancer.

**Answer: B**

**Exp:** As the passage specifically talks about cervical cancer, option (a) with “all types of cancer” would be farfetched and hence is eliminated.

Option (c) is eliminated as the passage indicates that a significant number of countries have included HPV vaccine in their immunization program indicating that awareness is reasonably high and not low.

Option (d) is not corroborated by the passage as data about high-income countries is not available.

The passage states that WHO considers HPV vaccination as primary prevention of cervical cancer and thus it can be inferred that it must be HPV that is the primary cause of cervical cancer. Thus, option (b) is a valid inference.

Paragraph: DIRECTIONS for Question 38 (1 item)- PASSAGE 14- The common thread running through countries which have transformed themselves since World War II and attained prosperity is that the journey was backed by painstaking effort and rigorously thinking through issues including all possible fallouts of adopting certain policies, not just the intended outcomes. Strategies for success may have varied but there were no short cuts to the top. In this context, if India underperforms, a big part of the blame rests on a tendency to look for quick fixes. Instant noodles seldom provide the best kind of nutrition.

PQ38. Which among the following is the most logical inference from the above passage?

A. India actively participated in World War II.

B. Indian tendency to look for quick fixes has to change if it wants to transform itself.

C. The countries that transformed themselves since World War II achieved it through some common strategies, and India was kept out of the loop deliberately.

D. India is growing relatively rapidly compared to other developing countries.

**Answer: B**

**Exp:** Option (a) is eliminated as India’s active or passive participation in World War II is not discussed in the passage.

Option (c) is eliminated as the passage directly talks about strategies for success possibly being varied for different countries. Also, India was kept out deliberately is not following per the passage.

Option (d) is eliminated as it is not corroborated by the passage as the passage hints at India’s underperformance.

The passage states that a country can transform itself only through sustained efforts and rigorous thinking and blames India’s tendency for resorting to quick fixes for its underperformance. Thus, option (b) is a valid inference.

Q39. Consider the following statements:

1. No cubes are squares and all squares are rectangles. Therefore, no cube is a rectangle.
  2. Only spheres are circles and all balls are circles. Therefore, all balls are spheres.
- Which of these statements is/are logically consistent?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

**Answer: B**

**Exp:** None

Q40. Consider the following statements:

1. All cars are jeeps and all jeeps are trucks. Therefore, all trucks are cars.
  2. No cars are jeeps and no jeeps are trucks. Therefore, no trucks are cars.
- Which of these statements is/are logically consistent?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

**Answer: D**

**Exp:** None

Q41. Three men A, B and C start a business together. They invest Rs. 30000, Rs. 24000 and Rs. 42000 respectively in the beginning. After 4 months, B took out Rs. 6000 and C took out Rs. 10000. They get a profit of Rs. 9,21,600 at the end of the year. B's share in the profit is

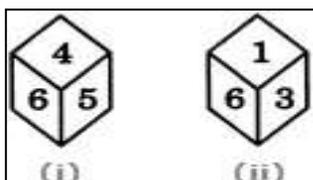
- A. Rs. 1,84,000
- B. Rs. 2,16,000
- C. Rs. 4,32,000
- D. Rs. 9,21,600

**Answer: B**

**Exp:** A, B and C will share the profit among them in the ratio of  $(30000 \times 12 : 24000 \times 4 + 18000 \times 8 : 42000 \times 4 + 32000 \times 8) = 45 : 30 : 53$

B's share in the profit =  $\frac{30}{128} \times 921600 = \text{Rs. } 2,16,000$

Q42. What number is opposite 4 in the figure shown below? The given two positions are of the same dice whose each surface bears a number among 1, 2, 3, 4, 5 & 6.



- A. 1
- B. 2
- C. 5
- D. 6

**Answer: A**

**Exp:** None

Q43. A number series is given with one term missing. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series 15, 16, 19, 25, 35, 50, ?

- A. 71
- B. 68
- C. 66
- D. 51

**Answer: A**

**Exp:**  $15 + 1 = 16$

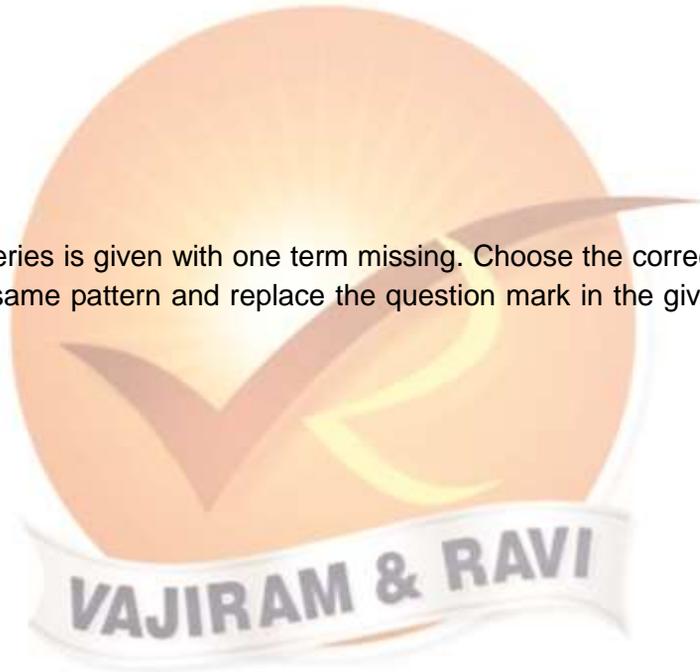
$16 + 1 + 2 = 19$

$19 + 1 + 2 + 3 = 25$

$25 + 1 + 2 + 3 + 4 = 35$

$35 + 1 + 2 + 3 + 4 + 5 = 50$

$50 + 1 + 2 + 3 + 4 + 5 + 6 = 71$



Q44. Consider the diagram given below in which the numbers bear certain relationship among themselves. Which one of the following numbers is the missing number indicated below by ?

|    |   |    |
|----|---|----|
| 6  | 3 | 45 |
| 4  | 4 | 32 |
| 8  | 5 | 89 |
| 11 | 6 | ?  |

- A. 135
- B. 166
- C. 155
- D. 157

**Answer: D**

**Exp:** In the first Row,  $6^2 + 3^2 = 45$

In the second column,  $4^2 + 4^2 = 32$

In the third column,  $8^2 + 5^2 = 89$

In the fourth column, missing number  $11^2 + 6^2 = 157$

Q45. A bell rings after every 8 minutes. A second bell rings after every 18 minutes. A third bell rings after every 15 minutes. If all the three bells ring at the same time at 7 o'clock in the morning, at what other time will they all ring together?

- A. 12:40 hrs
- B. 12:48 hrs
- C. 12:56 hrs
- D. 13:00 hrs

**Answer: D**

**Exp:** Taking LCM of 8, 15 and 18 we get 360 i.e. 6 hrs. So other time they will ring together will be 13:00 hrs

Q46. The cost price of 10 Mobiles is equal to the selling price of 12 Mobiles. Find the profit/loss percentage.

- A. 09.09% profit
- B. 09.09% loss
- C. 16.66% profit
- D. 16.66% loss

**Answer: D**

**Exp:**

$$\frac{C.P.Articles - S.P.Articles}{S.P.Articles} \times 100\% =$$

$$\frac{10 - 12}{12} \times 100\% = 16.66\% \text{ Loss}$$

Q47. In a certain code CONSTITUTION is written as BMMQSGSSGNL. How would POLITY be written in that code?

- A. NMJGWR
- B. OMIGRW
- C. OMKGSW
- D. NMJGRW

**Answer: C**

**Exp:** C 3<sup>rd</sup> alphabet coded as B 2<sup>nd</sup> alphabet

O 15<sup>th</sup> alphabet coded as M 13<sup>th</sup> alphabet

N 14<sup>th</sup> alphabet coded as M 13<sup>th</sup> alphabet

S 19<sup>th</sup> alphabet coded as Q 17<sup>th</sup> alphabet

Similarly, from the ranking of alphabet alternatively 1 and 2 is subtracted.

Q48. One pipe can fill a tank two times as fast as another pipe. If together the two pipes can fill the tank in 15 minutes, then the slower pipe alone will be able to fill the tank in:

- A. 45 min
- B. 5 min
- C. 60 min
- D. 24 min

**Answer: A**

**Exp:** In term of efficiency Fast Pipe = 2 (Slow Pipes)

Fast Pipe + Slow pipe can fill a tank in 15 minutes

Replace fast pipe with 2 slow pipes

2 slow Pipes + 1 slow Pipe → 15 mins

3 Slow Pipes → 15 minutes

1 Slow Pipe → 45 minutes

Q49. There are four numbers A, B, C and D. A and B are respectively 50 % and 20% less than C. And C is 40% less than D. What percentage is A of D?

- A. 160%
- B. 80%
- C. 62.5%
- D. 30%

**Answer: D**

**Exp:** Let D is 100

Then C is 40% less than 100 so  $100 - 40 = 60$

A and B are respectively 50 % and 20% less than C

Then A and B number will be 30 and 48 respectively

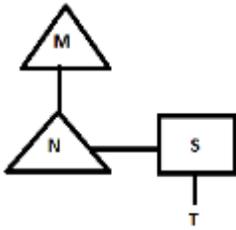
$$\frac{30}{100} \times 100\% = 30\%$$

Q50. If A + B means A is the father of B; A - B means A is the brother B; A % B means A is the wife of B and A x B means A is the mother of B, which of the following show/s that M is the maternal grandmother of T?

- A.  $M \times N \% S + T$
- B.  $M \times N - S \% T$
- C.  $M \times S - N \% T$
- D.  $M \times N + S \% T$

**Answer: A**

**Exp:** Image



Paragraph: DIRECTIONS for Questions 51 to 54 (4 items)- PASSAGE 15- Higher internet speed spurs productivity and is a basic element in a country's competitiveness. To that extent, the IT Ministry's proposal to raise the minimum broadband speed in the country four-fold to 2 mbps is a belated recognition of reality in a country that aspires to be a knowledge and services superpower but has in practice among the slowest internet speeds in the world. Today's apps will malfunction below a certain speed threshold, and faster speeds are essential for the delivery of consumer services online.

The slow speed of Indian broadband is a major deterrent to its spread as limited bandwidth reduces the quality of services and also severely limits the scope for using high end services. What is even worse is that for most broadband users, actual download speed is very often far below what is advertised. If regulators ensure quality services, even a basic doubling of speed will push up GDP growth by 0.3%.

However, raising broadband speed will require government and industry to act in concert. While the government has to ensure the availability of adequate spectrum cheaply, service providers must pump up investments in networks, especially in fibre optic networks which offer the maximum bandwidth capabilities, as well as 4G wireless technologies. However, optic fibre networks have been seriously limited by excessive right of way charges levied by different states, which may even go up to more than 10 times the value of the fibre laid. Faster broadband will boost startups, e-retailing, distance education and also e-governance and healthcare services. There is no more excuse for delay and dithering.

PQ51. According to the passage, which of the following is/are the probable obstacles in raising broadband speeds in India?

1. The political interference in the business proposals of telecom companies.
2. Excessive right of way charges levied by states.
3. Low GDP of India.

Select the correct answer using the code given below:

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. None of the above

**Answer: D**

**Exp:** Political interference per se is not discussed in the passage and hence statement 1 is not correct.

Statement 2 is valid as fibre optic networks are essential for improvement in broadband speeds per the passage and excessive right of way charges is directly mentioned in the passage as a hindrance in laying of fibre optic networks.

The passage only mentions that improved broadband speed would improve GDP but that does not mean that broadband speed is low because of low GDP. Thus, statement 3 is incorrect.

PQ52. Which of the following is essentially discussed in the passage?

- A. The problems faced by India due to low internet penetration.
- B. The inability of Indian businesses to thrive because of low broadband speeds.
- C. Faster internet speeds contributing in nation's growth and India's position in this regard.
- D. India's position with respect to the developed world specifically in relation to internet speeds.

**Answer: C**

**Exp:** The situation in the developed world is out of scope of the passage and hence option (d) is eliminated.

The passage is talking about low broadband speeds in India and not about low internet penetration per se and hence option (a) is eliminated.

Though the passage probably hints that business would improve with improved broadband speed, it is not entirely a discussion on failure of businesses due to low speed and thus option (b) is eliminated.

The passage elaborates on improved broadband speed improving productivity and Indian position in this regard, which is captured best in option (c).

PQ53. With regard to India, it can be inferred from the passage that improved broadband speed is likely to increase its

- 1. GDP.
- 2. Actual physical trade

Select the correct answer using the code given below:

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

**Answer: A**

**Exp:** The fact that GDP will be positively affected directly follows from the following sentence, “even a basic doubling up GDP growth by 0.3%” in the passage.

Physical trade improving or getting affected in any way does not necessarily follow from the passage. Thus, statement 2 is not implied.

PQ54. In this passage, the author puts the responsibility for increasing broadband speed in India on

1. Government only, as policy decisions have to come from the government.
2. Private sector only, as huge investments are required which can come only from the private sector.
3. Both the government and the private sector as they have to work together and complement each other in development of this sector.

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 2 only
- C. 3 only
- D. 1, 2 and 3

**Answer: C**

**Exp:** The first sentence of the third paragraph states that “Raising broadband speed... government and industry to act in concert.” Hence, only statement 3 is correct.

Paragraph: DIRECTIONS for Question 55 (1 item)- PASSAGE 16- A new study suggests that emotions play a natural regulatory role in our ability to sacrifice immediate pleasure for long-term benefit. Interestingly, it was found in the study that when participants were feeling good, they tackled less pleasurable, but necessary, activities like cleaning or paying bills. When feeling blue, they chose something more enjoyable like reading a novel. Simply put, people tend to use their good mood as a resource, allowing them to work on challenges, thus delaying short-term gratification for long-term benefits. Examples of such benefits include regular sleep, stable employment and a clean, well-organized personal environment – all of which are linked to good mental and physical health, the researchers noted.

PQ55. Which among the following is the most logical corollary to the above passage?

- A. Those who achieve a healthy balance between the pleasurable and unpleasant are more likely to lead happier lives.
- B. One cannot do mundane tasks when in a reasonably good mood.
- C. Important tasks at hand should not be influenced by one’s mood.
- D. Emotional vulnerability is counterproductive to success.

**Answer: A**

**Exp:** The passage suggests that if one manages emotions effectively to one's advantage, both challenging and mundane tasks can be tackled effectively.

According to the passage, good moods give one opportunity to attack challenging tasks but that does not imply that mundane activities cannot be done in a good mood. Thus, option (b) is incorrect.

Option (c) is not corroborated by the passage and is out of the scope of the passage.

The passage does not mention emotional vulnerability and thus option (d) is incorrect.

Option (a) is logical as the passage calls for a balance between pleasant and unpleasant activities to achieve a stable life.

Paragraph: DIRECTIONS for Question 56 (1 item)- PASSAGE 17- Let us be clear about the fact that an alternative to the United Nations is bleak. It wasn't created to take us to heaven but it may stop us from going to hell. It is in fact a major achievement to get a 193-member body to agree on 169 targets for humanity which was earlier considered impossible. On the human rights side, I think we are doing pretty well. We haven't been able to stop each and every war but when you see what the UN has done in terms of peacekeeping, what could have happened without the UN is far worse.

PQ56. Which is the critical inference that can be made from the above passage?

- A. It is impossible to find an alternative to the United Nations.
- B. The UN has possibly played a role in prevention of at least a few wars.
- C. The UN's achievements on the human rights side are fewer than its achievements on the political side.
- D. The UN has failed in tackling the issues of terrorism and climate change.

**Answer: B**

**Exp:** Though the passage says the prospects of alternatives to UN are bleak, to infer that it is impossible to find an alternative would be far-fetched. Thus, option (a) is eliminated for being extreme.

Option (c) is incorrect as it contradicts the passage that is actually lauding UN's human rights achievements. Moreover, no such comparison between human rights and political issues is mentioned.

Option (d) eliminated as it is out of scope of the passage.

Option (b) can be inferred as the passage states that the UN has not been able to stop each and every war which indirectly indicates that it has managed to stop a few possibly.

Q57. Brinjal is tastier than lemon; cucumber is tastier than brinjal; lemon is not as tasty as garlic.

Which of the following statements is definitely true?

- A. Garlic is as tasty as brinjal.

- B. Lemon is the least tasty of the four.
- C. Garlic is as tasty as cucumber.
- D. Lemon is tastier than cucumber.

**Answer: B**

**Exp:** Brinjal > lemon and cucumber > brinjal i.e. cucumber > brinjal > lemon.

Also, lemon < garlic i.e. garlic > lemon

Hence, lemon is the least tasty of the four. Hence, statement (b) is definitely true.

Q58. Given below are three statements followed by two conclusions. Which of these conclusion(s) follows from the statements?

Statements:

- I. No historian is an economist.
- II. All managers are economists.
- III. Some MBAs are managers.

Which of the following is not a valid conclusion?

- A. No manager is a historian.
- B. Some economists are MBAs.
- C. No historian is an MBA.
- D. All the conclusions are valid.

**Answer: C**

**Exp:** None

Paragraph: DIRECTIONS for Questions 59 to 60 (2 items)- PASSAGE 18- It is welcome that the Indian government has adopted a model law to remove the restrictions on shops and establishments in the country functioning as per the requirements of a globalised economy. In the states that adopt the model law or its refined versions, the government will no longer decide when a workplace other than a factory should open and close and women will escape the protective discrimination imposed by the state to safeguard them from the depredations deemed to accompany night work. Law enforcement should offer them security instead.

The model law also includes stipulations on the maximum working hours per day for a worker, other than those engaged in high-tech areas such as information technology and biotechnology (where they are free to slave away, presumably) and on providing women workers with transport and other requirements. All of this is welcome.

However, it is not just employees whose safety and security the state has to worry about, when it permits a 24x7 economy. The patrons of all night bars/malls/restaurants also need security. This means that states will have to step up their policing activities, probably hiring more personnel and deploying more vehicles and communications equipment. Be ready, in other words, to shell out more money to enable and safeguard

your bit of the globalised economy. It is ridiculous on the part of the unions to oppose the model law. Their focus should be on statutory protection of workers' rights in the 24x7 economy and enforcement of those rights. India will continue to globalise and work will continue to be outsourced from countries in different time zones. Opposing the 24x7 economy or changing work norms to facilitate that economy would be mindless obstructionism, placing the unions against the current of history.

PQ59. With reference to the above passage, consider the following statements:

1. The earlier provisions prohibiting employment of women in night work in the name of protecting them actually hurt the interests of women.
2. The 24x7 economy is here to stay in India and the efforts to drive it away are not in sync with changing times.

Which of the statements given above is/are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

**Answer: C**

**Exp:** Statement 1 is correct as the passage clearly states that women will escape the protective discrimination of the earlier provisions indicating that the provisions were hurting interests of women.

Statement 2 also is correct as is evident from the second-last sentence of the last paragraph, "India will continue to globalize against the current of history."

PQ60. What is the crucial message conveyed in the passage?

- A. The governments and unions should act as enablers of globalisation and not as obstructers.
- B. India should not get carried away by the benefits of globalisation and be aware of its negative aspects.
- C. Security is not a major issue as far as night work is concerned.
- D. Trade unionism has no place in the 24x7 economy.

**Answer: A**

**Exp:** The passage does not delve upon the negative side of globalisation and thus option (b) is eliminated.

Option (c) contradicts the passage which is elaborating on increasing policing activities in night for security of workers and thus is eliminated.

Option (d) is not correct as the passage only states that unions have to be in sync with the times and act responsibly and not that they have no place in the 24x7 economy.

The passage is trying to convey that globalization is a reality in India and governments and unions should act as facilitators of it instead of opposing it. This message is captured best in option (a).

Q61. If MIRROR is written like RIMROR and LOTION is written like TOLNOI then how will be MOBILE written?

- A. BOMELI
- B. ELIMOB
- C. BOMILE
- D. BILEMO

**Answer: A**

**Exp:** The first three letters of the word are written in reverse order and the last three letters are written in reverse order.

MIRROR – RIMROR

LOTION – TOLNOI

So, MOBILE – BOMELI

Paragraph: DIRECTIONS for Question 62 (1 item)- Consider a group comprising of 4 students – Raj, Belal, Mahesh and Naren, who stand in a row. Raj and Belal stand at 3<sup>rd</sup> and 4<sup>th</sup> positions respectively from the right. Mahesh and Naren stand in 5<sup>th</sup> and 6<sup>th</sup> positions respectively from the left. When Belal and Mahesh exchange their positions, then Belal will be fourteenth from the right.

PQ62. Originally, Naren's position from the right is

- A. 12th
- B. 13th
- C. 14th
- D. 6th

**Answer: B**

**Exp:** Clearly, Belal is 14<sup>th</sup> from the right and 5<sup>th</sup> from the left.

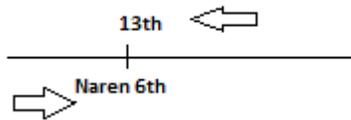
So, number of students in the row =  $(13 + 1$

$+ 4) = 18.$

Number

= 12

Therefore



of students to the right of Naren =  $(18 - 6)$

Naren's position is 13<sup>th</sup> from the right.

Q63. The calendar for the year 2003 will be the same for the year:

- A. 2014
- B. 2016

C. 2017

D. 2018

**Answer: A**

**Exp: STEP 1**

We shall go by options

So, first go till 2014 from 2003

2003 → 1

2004 → 2 (Leap year)

2005 → 1

2006 → 1

2007 → 1

2008 → 2 (Leap year)

2009 → 1

2010 → 1

2011 → 1

2012 → 2 (Leap year)

2013 → 1

Total = 14

**STEP 2**

$\frac{14}{7} = 0$  (remainder)



Hence calendar for the year 2003 will be the same for the year 2014.

Paragraph: DIRECTIONS for Question 64 (1 item)- A total of five girls and boys went to a picnic and sat on a bench for taking a photo as following:

Reema is to the left of Raina and to the right of Hindu, Cherry is to the right of Raina.

Reeta is between Raina & Cherry.

PQ64. Who is sitting to right of Reeta?

A. Hindu

B. Raina

C. Cherry

D. Reema

**Answer: C**

**Exp:** From question Reema is left of Raina and to the right of Hindu

We have

Also, given Hindu Reema Raina  
between

Cherry is to the right of Raina, Reeta is Raina & Cherry. Hence we have following

final arrangement

Hindu Reema Raina

Reeta

Cherry

Cherry sitting to right of Reeta  
Hence, answer is option c.

Q65. A candidate scores 25% and fails by 30 marks, while another candidate who scores 50% marks, get 20 marks more than the minimum required marks to pass the examination. Find the maximum marks for the examination?

- A. 200
- B. 160
- C. 150
- D. 100

**Answer: A**

**Exp:** Difference in their marks in term of percentage is 25%

Difference of their scores= 30+20. Because the first candidate gets 30 less than the required pass marks, while the second candidate gets 20 more than the required pass marks.

25% = 50 so maximum marks 100% = 200.

Q66. *Suresh:* PV Sindhu won a silver medal at Olympics because she kept away her mobile phone in the last 3 months of her preparation.

*Naresh:* Mobile phone actually helps one connect with the family and can provide a few relaxing moments which may inspire an athlete to go a notch higher on his/her already rigorous regime.

Naresh's statement reflects his belief that

- A. PV Sindhu could have won a gold medal if she had controlled the use of mobile in the last months of her preparation.
- B. There are other athletes who have won gold medals despite unrestricted use of mobile phones in the last few months of preparation.
- C. Training for an Olympic medal requires a focussed regime that may keep one away from the family for considerable time interval.
- D. PV Sindhu's preparation could not reach its zenith because of her decision to stay away from the mobile phone.

**Answer: C**

**Exp:** Naresh is contradicting Suresh's claim by saying that using mobile would have helped Sindhu to relax by getting in touch with her family and this clearly underlines his belief that Olympic medal preparation requires people to stay away from their family for durations which could prove to be stressful. This is captured correctly in option (c).

That she could have won a gold and she did not reach the zenith of her preparation are invalid assumptions. Thus, options (a) and (d) are eliminated.

Other athletes winning gold despite not restricting mobile use could at best be termed as a supporting data to his belief and not his belief in itself, and in any case, it is not directly reflected in the given statements also. Thus, option (b) is eliminated.

Paragraph: DIRECTIONS for Question 67 (1 item)- PASSAGE 19- An earthquake's destructive force depends not only on its strength, but also on location, distance from the epicentre and depth. Quakes can strike near the surface or deep within the Earth. Most quakes occur at shallow depths. Shallow quakes generally tend to be more damaging than deeper quakes. Seismic waves from deep quakes have to travel farther to the surface, losing energy along the way. Shaking is more intense from quakes that hit close to the surface like setting off a bomb directly under a city.

PQ67. Which among the following is the most rational inference that can be made from the above passage?

- A. A strong earthquake deep within the Earth is destructive.
- B. A weak earthquake close to the Earth's surface is destructive.
- C. A strong earthquake close to the Earth's surface is destructive.
- D. A weak earthquake deep beneath Earth's surface is destructive.

**Answer: C**

**Exp:** According to the passage, more strength and less distance from earth's surface is likely to increase the destructiveness of earthquakes. Hence option C.

Paragraph: DIRECTIONS for Question 68 (1 item)- PASSAGE 20- The right to life is a moral principle based on the belief that a human being has the right to live and, in particular, should not be killed by another human being. In human history, there has not been a general acceptance of the concept of a right to life that is innate to individuals rather than granted as a privilege by those holding social and political power; and the development of organized civilization often took place in environments of frequent mass murder, with slaveholding societies often granting masters the ability to destroy the lives of their captives.

PQ68. In the light of the argument in the above passage, which one of the following statements is the most convincing explanation?

- A. The right to life of an individual is absolute and well supported by the evolution of the human society.
- B. The idea of a society demands that the right to life of each person has to be reconciled with the overall norms decided by the society at any given time.
- C. The right to life of an individual infringes on laws governing the society and creates lawlessness at times.

D. The right to life is a utopian scenario from a human rights perspective and is breached more than it is followed.

**Answer: B**

**Exp:** The passage states that right to life has not been accepted by the society as an individual right but more as a privilege to be granted by social or political powers of the day. This is captured best in option (b).

Option (a) contradicts the passage and thus is eliminated.

Option (c) is vague and does not support the argument in the passage as the passage is talking about lawlessness infringing the right to life and not the other way round.

Option (d) is slightly extreme as though the passage calls right to life a moral principle, it does not necessarily make it utopian. Also it cannot be said that right to life is breached more than it is followed.

Q69. Consider the following statement and the two statements that follow from it:

Statement:

Only a reversal of global warming can save the polar bears.

Conclusions:

1. Global warming has been reversed and so, the polar bears are safe.

2. Global warming has not been reversed and so, the polar bears are not safe.

Which of the statements given above follow from the main statement?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

**Answer: B**

**Exp:** None

Paragraph: DIRECTIONS for Question 70 (1 item)- PASSAGE 21- The brain connects sensory information from the environment to our subjective experiences, resulting in our perceptions, emotions, and memories. However, our brains need to disconnect — i.e. sleep — from the noisy sensory world that we're steeped in. Sleep helps us maintain brain health, makes our memories stronger, and aids in problem solving. Earlier, it was assumed that memory was a product of behavior. However, neuroscientists have now known for decades that quality of memory is enhanced when an animal is not behaving at all — that is, when the animal is asleep.

PQ70. Which among the following is the most valid assumption in the above passage?

A. The brain is not essentially cut off from the sensory world even while asleep and keeps on gathering neurosensory information.

- B. Sensory information from the noisy sensory world is not at all required in memory formation.
- C. Information processed during sleep is more important than information gathered when awake in memory formation.
- D. A sleep-deprived person will struggle with learning and memorizing things.

**Answer: D**

**Exp:** Option (a) contradicts the passage as the passage clearly states that “our brains need to disconnect...” and thus option (a) is eliminated.

The passage basically asserts that neurosensory information is needed by the brain. So, eliminate option (b).

Information processing during sleep cannot be inferred from the passage. So, eliminate option (c).

Paragraph: DIRECTIONS for Questions 71 to 72 (2 items)- In these questions relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer.

PQ71. Statement:

$$E < C = U \geq T; B \geq C \geq A$$

Conclusion:

1.  $A < E$
2.  $T < B$

Select the correct answer from the code given below:

- A. Only (2) is correct
- B. Only (1) is correct
- C. Either (1) or (2) is correct
- D. Neither (1) nor (2) is correct.

**Answer: D**

**Exp:** By given condition;

$$C > E \text{ x } C \geq A$$

$$B \geq C = U \geq T$$

∴ Relation between E & A cannot be confirmed

∴  $B > T$  or  $B = T$

∴  $B > T$  cannot be confirmed.

VAJIRAM & RAVI

PQ72. Statement:

$$N > L \leq Z; P > L; Q \geq Z$$

Conclusion

1.

$$Q \geq L$$

2.

$$Z \geq N$$

Select the correct answer from the code given below:

- A. Both (1) and (2) are correct
- B. Only (1) is correct
- C. Only (2) is correct
- D. Either (1) or (2) is correct

**Answer: B**

**Exp:** By given condition;

$$N > L$$

$$P > L$$

$$Q \geq Z \geq L$$

$$\therefore Q \geq L$$

So Conclusion (1) is correct.

$Z \geq N$  cannot be confirmed as from above mentioned condition relationship between Z and N cannot be established.

Paragraph: DIRECTIONS for Questions 73 to 74 (2 items)- Study the given information carefully and answer the questions that follow: A Committee of five members is to be formed out of 3 trainees, 4 professors and 6 research associates.

PQ73. In how many different ways can this be done if the Committee has all 4 professors and 1 research associate or all 3 trainees and 2 professors?

- A. 15
- B. 10
- C. 12
- D. 25

**Answer: C**

**Exp:** Number of combinations =

$${}^4C_4 \times {}^6C_1 + {}^3C_3 \times {}^4C_2 = 1 \times 6 + 1 \times 6 = 12$$

PQ74. In how many different ways can this be done if the Committee has 2 trainees and 3 research associates?

- A. 55
- B. 60
- C. 35
- D. 45

**Answer: B**

**Exp:**  $\Rightarrow 3C_2 \times 6C_3 = 60$

Q75. In the question given below, which one of the five answer figures on the right should come after the problem figures on the left, if the sequence were continued?

Problem figures

|       |       |       |       |       |
|-------|-------|-------|-------|-------|
| PLANE | LPNAE | PLEAN | LPENA | EPLAN |
|-------|-------|-------|-------|-------|

- A. ELPNA
- B. PELNA
- C. ELPAN
- D. PEALN

**Answer: A**

**Exp:** In each step elements interchange positions in pairs while one remains static. The position of static element shifts from right to left in each subsequent steps.

Q76. A problem in CSAT is given to four students A, B, C and D.

Their chances of solving it are  $\frac{1}{3}, \frac{1}{4}, \frac{1}{5}$  and  $\frac{1}{6}$  respectively. What is the probability that the problem will be solved?

- A. 1/3
- B. 2/3
- C. 4/5
- D. None of these

**Answer: B**

**Exp:** Probability that all the four students failed to solve the problem is

$$= \left(1 - \frac{1}{3}\right) \times \left(1 - \frac{1}{4}\right) \times \left(1 - \frac{1}{5}\right) \times \left(1 - \frac{1}{6}\right) = \frac{1}{3}$$

$\therefore$  Probability that problem will be solved by  $1 - \frac{1}{3} = \frac{2}{3}$

Q77. Three different containers contain different quantities of mixture of milk and water, whose measurements are 403 kg, 434 kg and 465 kg. What biggest measure must be there to measure all the different quantities exactly?

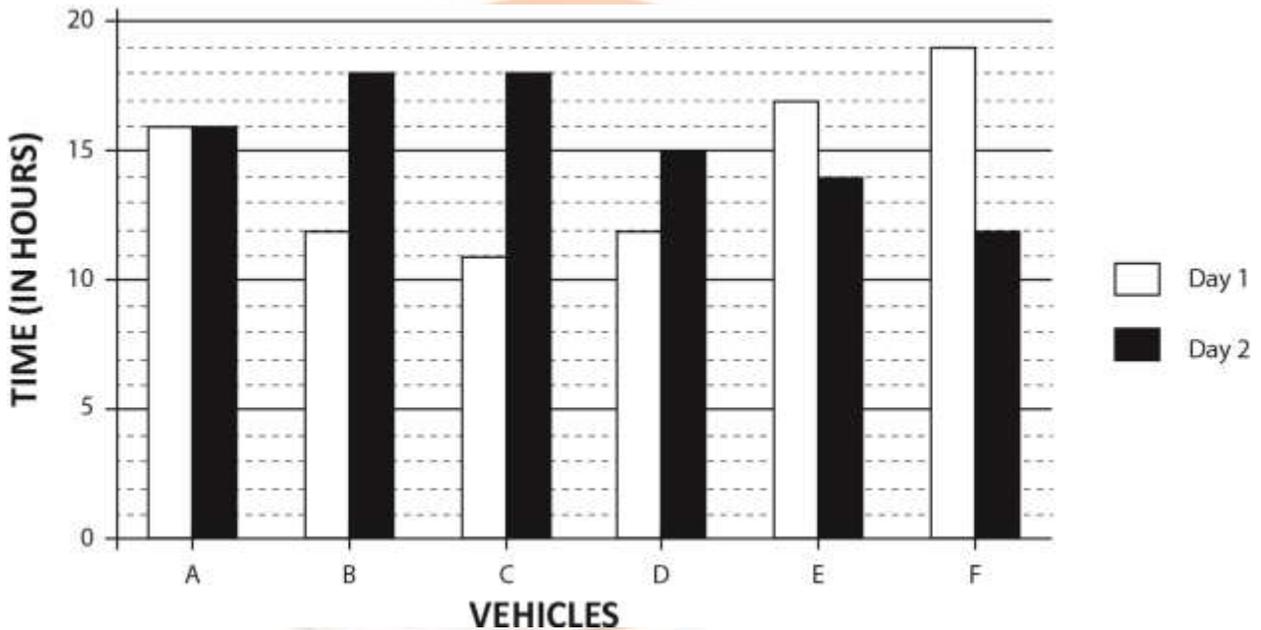
- A. 21 kg
- B. 17 kg
- C. 31 kg
- D. 41 kg

**Answer: C**

**Exp:** Required answer is

HCF of (403, 434 and 464) = 31 kg.

Paragraph: DIRECTIONS for Questions 78 to 80 (3 items)- Study the following graph and table carefully and answer the questions given below: Time Taken to Travel (in hours) by six vehicles on two different days



Distance covered (in kms) by 6 vehicles on each day

| Vehicle | Day 1 | Day 2 |
|---------|-------|-------|
| A       | 832   | 864   |
| B       | 516   | 774   |
| C       | 693   | 810   |
| D       | 552   | 765   |
| E       | 935   | 546   |
| F       | 703   | 636   |

PQ78. Which of the following vehicles travelled at the same speed on both the days?

- A. Vehicle A
- B. Vehicle C
- C. Vehicle F

D. Vehicle B

**Answer: D**

**Exp:**

Speed of vehicle A on two days,  $832/16 \neq 864/16$

Speed of vehicle C on two days,  $693/11 \neq 810/18$

Speed of vehicle F on two days,  $703/19 \neq 636/12$

Speed of vehicle B on two days,  $516/12 = 774/18 = 43$

PQ79. What was the difference between the speed of vehicle A on day 1 and the speed of vehicle C on the same day?

A. 7 km/hr

B. 12 km/hr

C. 11 km/hr

D. 8 km/hr

**Answer: C**

**Exp:** Speed of vehicle A on Day 1 =  $832/16 = 52$  km/hr

Speed of vehicle C on Day 1 =  $693/11 = 63$  km/hr

Difference in speed =  $63 - 52$  km/hr = 11 km/hr

PQ80. What was the speed of vehicle C on day 2 in terms of meters per second?

A. 15.3

B. 12.8

C. 11.5

D. 12.5

**Answer: D**

**Exp:** Speed of vehicle C on Day 2 =  $810/18 = 45$  km/hr

Speed of vehicle C on Day 2 in m/s =  $45 \times 5/18$  m/s = 12.5 m/s