

Answer & Explanation for CSAT Test-4 held on 22nd April 2018**Directions for the following 10 (ten) items:**

Read the following five passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

PASSAGE – 1

The International Solar Alliance has got off to a good start with impressive pledges of financial assistance by India (\$1.4 billion) and France (€700 million). The multi-country agreement, mooted by India and first presented as an idea to the world jointly by India and France at the global climate talks of Paris in 2015, is meant to benefit 121 countries that lie between the Tropics of Cancer and Capricorn. There will be collateral benefits flowing to India from all the activities planned by the ISA. For example, one of the programmes acquiring shape under the Alliance is bulk purchase of agricultural solar pumps — the idea is to aggregate demand and tender out for half a million pumps at one go, so that scale depresses prices. The tendering work is expected to be handled by the government-owned Energy Efficiency Services Ltd.

Clearly, India has grabbed the solar ball and is running with it. But having done so, it is now the country's responsibility to lead the ISA by example. First, India can now not afford to go slow on solar installations on its own soil. New solar projects are coming up faster than before but not at the required rate. This is especially true of rooftop solar which hopelessly depends upon States' willingness to fall in line. Even in large projects, there are ground reports of delays in setting up projects that were won on the promise of very low power prices, and that the performance of some projects already set up is nothing to write home about. Furthermore, initiatives which find an echo in the ISA, such as solar-powered agri pumps and mini grids, are moving at glacial speed in India. It would be silly if India does not get the work done within its borders but raises a blessing hand to the rest of the world. This is something policymakers need to keep in mind.

1. With reference to the passage, consider the following statements:

- (1) The ISA plans to expand solar power in nations that are resource-rich but energy-poor, by mobilising finance from wealthier countries, to facilitate universal energy access.
- (2) At grass-root levels, solar power is gaining popularity amongst ordinary Indian citizens.
- (3) India's efforts are not serious enough to enhance its national solar growth.

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)

Explanation: As per the passage, the ISA plans to work on solar-power related programs that benefit countries lying between two geographical milestones. There is no specific criterion of the recipient country being energy poor or any mention of seeking help from financially stronger countries. Hence, statement 1 is incorrect.

The popularity of solar power among common citizens is not discussed. On the contrary, the passage seems to indicate that solar power projects in India have not really been implemented or have been slow to pick up. None of this can be true if solar power is gaining popularity. In fact, the project delays and performance issues discussed above seem to indicate that India is not making serious enough efforts to enhance its national solar growth. Hence, statement 2 becomes incorrect and statement 3 is correct.

Hence, the correct answer is option c.

2. Which of the following can be concluded from the passage?
- (a) Lack of clear policies and regulations on rooftop solar installation delay solar projects in India.
 - (b) Although several states across India are adopting and experimenting with solar energy projects, there are regulation flaws that need to be addressed first.
 - (c) Both (a) and (b)
 - (d) Neither (a) nor (b)

Answer: (c)

Explanation: The passage clearly mentions that the growth in the field of rooftop solar has not been as fast as required due to the dependence on various States (i.e. state governments) to accept whatever policies and rules have been set for it. Since some certain states may or may not be willing to fall in line, it can be concluded that aspects of the policies and regulations have not been completely clarified between Central and State governments. This lack of clarity could be a valid reason for delay in installation of rooftop solar. This validates conclusion a. The same point is also generalised in statement b, by extrapolating it to all solar projects. This is also validated by the passage where it mentions that some projects which were won on the basis of low prices are now delayed. All these point to regulatory deficiencies. Hence, conclusion b is also validated.

Hence, the correct answer is option c.

PASSAGE –2

We believed that like any new technology, Aadhaar would be experimented with, first in urban areas where there was good connectivity and with a clientele that was somewhat used to electronic transactions, and once the flaws had been troubleshot, then it would be tried in other areas. We never imagined that a state like Jharkhand, with a large tribal population and weak connectivity, would have Aadhaar Assisted Biometric Authentication (AABA) imposed on it before the reliability of the technology had been established. Inevitably, there have been multiple reports of authentication failures affecting the most vulnerable segments of the population in the most vulnerable areas. Ironically, these are the people who have the greatest need for subsidised food. Technology thus deployed defeats the very purpose of the Food Security Act. The starvation deaths reported in these areas highlight the seriousness of the problem but they do not reveal its magnitude in terms of the number of people adversely affected.

3. The passage mainly focuses on
- (a) The sub-optimal deployment of Aadhaar
 - (b) The failure to achieve food security outcomes in rural areas
 - (c) The target group that would be most receptive to Aadhaar implementation
 - (d) Aadhaar's adverse effects on vulnerable segments of population

Answer: (a)

Explanation: The passage begins by stating what an ideal clientele for Aadhaar would be and then moves on to describe how its implementation in an ill-prepared social group causes adverse effects in that group. So, the overall focus of the passage is to describe how imperfect or sub-optimal implementation of Aadhaar affects its efficiency. Hence, option a is a likely answer.

Option b cannot be considered a focus area as the failure to achieve food security goals is used **just as an example** to demonstrate imperfect implementation of Aadhaar. Hence, option b is rejected.

The same logic also eliminates option d as the passage contends that **incorrect implementation rather than Aadhaar itself** adversely impacts vulnerable segments of the population. Hence, option d is rejected.

The passage talks about a **target group that would more suited to rather than receptive to the use of new technology**. The failure in rural areas is attributed to technological constraints rather than resistance of target groups. Hence, this cannot be a focus and option c is rejected.

Hence, the correct answer is option a.

4. With reference to the passage, the following assumptions have been made:
- (1) The objectives of the Food Security Act cannot be met without appropriate implementation of Aadhaar.
 - (2) Failure of the Aadhaar system caused starvation deaths in rural areas.
- Which of the above is/are valid assumption/assumptions?
- (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2

Answer: (b)

Explanation: Aadhaar has been described in the passage as a technology that, if appropriately implemented, would help meet the objectives of the Food Security Act. Its incorrect implementation in less advanced areas has been used as a counterintuitive example to show how the tool required to serve a purpose is defeating that very purpose. However, nothing in the passage suggests that Aadhaar is a necessary condition for the objectives of the Act to be met. Hence, statement (1) cannot be considered a valid assumption.

The passage states that Aadhaar failures have badly affected vulnerable segments in vulnerable areas, thereby restricting the access of these segments of population to subsidised food that they need desperately. The next statement which talks of starvation deaths in those areas, thus relies on the assumption that these deaths are due to lack of access to subsidised food, which in turn, is due to technological failures of Aadhaar. Hence, statement (2) can be considered a valid assumption.

Hence, the correct answer is option b.

PASSAGE – 3

The experience of the 2008 financial and economic crisis suggests that deteriorating financial stability is a potential threat to growth and macroeconomic stability. Therefore, post-crisis, the world over, authorities have focused attention on financial stability through tightening regulatory reforms to address the structural issues associated with financial sector in general and banks in particular.

Indian authorities also contemporaneous with the global developments further strengthened the banking regulatory framework through a series of measures. However, on account of weakening of banking stability indicators and higher levels of impairment, the banking sector is expected to remain risk averse.

Also, due to the emphasis of the banking system on the cleaning up of the balance sheets, there is the likelihood that the capital position of the banks could be inadequate to support higher credit growth. This development could work as a cog in the wheel for effective transmission of monetary policy to the real sector via interest rate and credit channel.

5. With reference to the passage, consider the following statements:
- (1) Monetary policy can have important effects on financial stability risks, but, for the most part, it is not the right policy to address those risks.
 - (2) Sustainable growth, low inflation, steady employment growth, low levels of unemployment and effective regulatory mechanisms for financial stability can be listed as the main indicators of macroeconomic stability.
 - (3) A stable and effectively-functioning financial system will ensure balanced distribution of risks and decrease the susceptibility of the economy to shocks.
- Select which of the statements given above is/are correct using the codes given below:
- (a) 1 only
 - (b) 1 and 2 only
 - (c) 3 only
 - (d) 1, 2 and 3

Answer: (c)

Explanation: The passage talks about the connection between financial stability, growth and macroeconomic stability. So, monetary policy cannot be considered to have important effects on financial stability. Hence, statement (1) is not correct.

While the passage states that having effective regulations and its mechanisms help achieve financial stability; which in turn is an indicator of macroeconomic stability, the link of the remaining factors with macroeconomic stability is not established. Hence, statement (2) cannot be considered to be correct.

The whole passage revolves around the premise that a financially stable system will have fewer risks and will lead to greater macroeconomic stability. Thus, it supports the statement in statement (3) that a stable and effectively functioning financial system will not only even out risks but increase macroeconomic stability, thereby causing fewer shocks in the economy. Hence, statement (3) is correct.

Hence, the correct answer is option c.

6. With reference to the passage, the following assumptions have been made:
- (1) Globalisation ensures that the Indian economy and financial markets cannot stay insulated from any financial crisis in the developed economies.
 - (2) India's macroeconomic conditions broadly remain stable and resilient with considerable moderation in consumer price inflation.
- Which of the above is/are valid assumption(s)?
- (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2

Answer: (a)

Explanation: The passage mentions that the Indian authorities also **contemporaneous** with global developments strengthened their banking measures. If the Indian authorities did this simultaneously with global authorities, it shows that the Indian economy would also have been susceptible to the global financial risks and as such, could not have been aloof or insulated from a global financial crisis. Hence, assumption (1) is valid.

Assumption 2 becomes automatically invalid because it brings an entirely new concept by discussing "moderation in consumer price inflation".

Hence, the correct answer is option a.

PASSAGE – 4

No statement on global workforce, economic growth drivers, and world economy analysis is complete without mentioning India and technology in the same breath. Thanks to the efforts of successive governments, India has cemented its status as a global technological powerhouse. The Government's determined push on expanding the penetration and use of technology through a slew of policy and executive actions hopes to ensure that technology becomes an integral part of the growth story.

Successive leaders could have better capitalised on and acknowledged the salience of technology in job creation. Leaders such as Atal Bihari Vajpayee, Rajiv Gandhi and Chandrababu Naidu did take the pain to pioneer policies, import computers and court global technological giants to create tech-driven jobs in India. Many believe the agglomeration of tech giants in Hyderabad and Bengaluru, and India's solid foundations on digital literacy, is an outcome of such efforts.

On the other hand, a few instances pithily summarise the lack of confidence amongst some sections of our leadership, with some even claiming that a ban on computers would help create more jobs. Even though it would be too harsh to single out this instance, it exemplifies the deep-rooted distrust, and, to a large extent, the broader policy paralysis around promoting technology at a greater pace. Unfortunately, the overwhelming perception amongst some sections of stakeholders and policymakers is that greater induction of technology will only lead to job losses.

7. With reference to the passage, consider the following statements:

- (1) Technology tends to unsettle some Indian leaders when it comes to job losses.
- (2) India can benefit from job creation on the back of greater technological penetration.
- (3) India needs to focus on broadening and/or enhancing existing skill development and/or re-skilling programmes.

Select which of the statements given above is/are correct using the codes given below:

- (a) 1 only
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Answer: (b)

Explanation: The passage quotes claims of leaders who feel that banning computers would create jobs and also mentions that there is a perception among policymakers (implying leaders) that greater use of technology would lead to job losses. Hence, statement 1 is correct.

The passage clearly states that successive leaders could have acknowledged the salience of technology in job creation and also mentions efforts of leaders to create policies that led to the creation of tech-based jobs. Thus, it is clear that job creation on the basis of technological advances is in India's favour. Hence, statement 2 is correct.

The passage does not mention skill development or re-skilling at all. Hence, statement 3 is incorrect w.r.t the passage.

Hence, the correct answer is option b.

8. Which of the following can be concluded?

- (a) India stands out as the country with likely the largest talent pool surplus.
- (b) India is a global growth leader and a leading centre when it comes to startup ecosystems.
- (c) Both (a) and (b)
- (d) Neither (a) nor (b)

Answer: (d)

Explanation: The talent pool of India in any sector is not mentioned in the passage. Hence, statement (a) cannot be concluded.

The passage mentions that India is a global growth leader in the field of technology and not necessarily, in startup ecosystems. Hence, statement (b) cannot be concluded.

Hence, the correct answer is option (d).

PASSAGE – 5

Regulating school fees is one of the most significant legal and political challenges policymakers in India face. The issue of fee regulation finds itself at the intersection of constitutionally protected freedoms enjoyed by private schools and the need for making quality education affordable and accessible. Over the years, the issue of skyrocketing tuition fees has confronted parents. Adding to their burden is the annual and steep hike in tuition fees along with additional costs such as fees for transport, extra-curricular activities and sports. Every academic year sees the media reporting instances of unhappy parents expressing their anger against what they perceive to be unjust hikes. The managements of such schools claim that these hikes are reasonable and justified as the costs of maintaining a fully functional private school with quality teaching and world-class infrastructure are quite steep. In this context, balancing the autonomy of private schools and their public welfare function becomes a contentious issue.

9. The passage argues about:

- (a) lack of clarity on fee hikes charged by private schools.
- (b) misuse of funds by the private schools.
- (c) the substandard quality of education offered by private schools.
- (d) None of the above

Answer: (a)

Explanation: Options b and c are beyond the scope of the passage. The passage does not even discuss the usage of funds by private schools or the quality of the education.

The passage claims that annual fee hikes by schools are considered unjust by parents and completely fair by school managements (in order to run high quality schools). Thus, because there are two contradicting schools of thought, without a logical conclusion, the passage can be said to argue on no clarity on fee hikes.

Hence, the correct answer is option a.

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

- (1) Private schools are completely justified in charging high fees.
- (2) The government should focus on improving government schools rather than regulating the fees of private schools.

Which of the statements given above can be critically inferred?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer: (b)

Explanation: Statement 1 is exactly what private schools claim using maintenance expenses as a reason to justify higher fees. However, there is no data or information to substantiate this. Hence, statement 1 cannot be inferred.

According to the passage, there is an intersection point of freedoms of private schools and accessibility of quality education. This implies an assumption that there exists a deficiency of

quality education in government schools, which is being satisfied by private schools. The passage also mentions that private schools justify their higher fees to compensate for quality teaching and infrastructure. This again is based on the assumption that government schools do not have the same. Hence, it can be logically inferred that the government should divert its attention to improvement of public schools rather than the regulation of private schools. Hence, statement 2 can be inferred.

Hence, the correct answer is option 2.

Directions for questions 11 to 15:

Study the following information carefully and answer the questions given below:

A, B, C, D, E, F and G are seven persons who travel to office everyday by a particular train which stops at five stations I, II, III, IV and V respectively after it leaves base station.

- (1) Three among them get in the train at the base station.
- (2) D gets down at the next station at which F gets down.
- (3) B does not get down either with A or E.
- (4) G alone gets in at station III and gets down with C after having passed one station.
- (5) A travels between only two stations and gets down at station V.
- (6) None of them gets in at Station II.
- (7) C gets in with F but does not get in with either B or D.
- (8) E gets in with two others and gets down alone after D.
- (9) B and D work in the same office and they get down together at station III.
- (10) None of them gets down at station I.

11. At which station does E get down?

- (a) V
- (b) II
- (c) IV
- (d) Data inadequate

Answer: (c)

12. At which station do C and F get in?

- (a) Base station
- (b) I
- (c) Data inadequate
- (d) IV

Answer: (b)

13. After how many stations does C get down?

- (a) Two
- (b) One
- (c) Three
- (d) Data inadequate

Answer: (c)

14. E gets down after how many stations at which F gets down?

- (a) Next station
- (b) One
- (c) Two

(d) Data inadequate

Answer: (b)

15. At which stations do B and D get in?

- (a) I
- (b) Base Station
- (c) III
- (d) Data inadequate

Answer: (b)

Explanation:

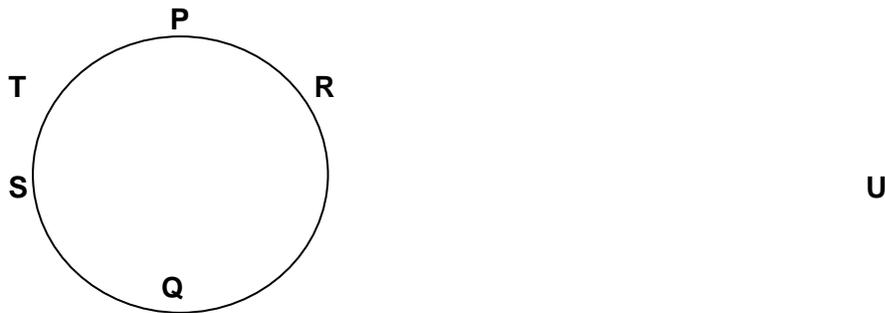
Stations	Base	I	II	III	IV	V
Get in	B, D, E	C, F	X	G	A	
Gets down	X	X	F	B, D	E,	G, C, A

16. Six friends P, Q, R, S, T and U are sitting around a circular table facing the centre. The angle made at the centre of the circle by the straight lines from P and Q is 180° . T is not sitting on the immediate left of R while R is not on the immediate right of P. On the basis of the above information which of the following statement is definitely correct?

- (a) R is sitting between P and S.
- (b) T is sitting between P and U.
- (c) Q is sitting between S and U.
- (d) T and R are sitting opposite to each other.

Answer: (c)

Explanation:



17. After 4 p.m. on a sunny day when Ramesh was returning from his school, he saw his uncle coming from the opposite direction. His uncle talked to him for some time. Ramesh saw that the shadow of his uncle was to his right side. Which direction was his uncle facing during their task?

- (a) North
- (b) South
- (c) East
- (d) West

Answer: (b)

18. A car starts running at the speed of 50 km per hour. The speed of car increases by 2 km at the end of every one hour. What will be the distance covered at the end of ten hours from the start of the journey?
- (a) 600 km
 (b) 580 km
 (c) 590 km
 (d) 620 km

Answer: (c)

Explanation: Total distance – 50 + 52 + 54 + upto 10 terms

$$\text{Required distance} = \frac{10}{2} [2a + (n - 1)d]$$

where n = number of terms

a = first term

d = common difference

19. The interior angles of a Hexagon are X° , $(X+20)^\circ$, $(X+40)^\circ$, $(X+50)^\circ$, $(x+90)^\circ$, $(X+100)^\circ$. Value of the largest angle of Hexagon is:
- (a) 100°
 (b) 102°
 (c) 192°
 (d) None of these

Answer: (d)

Explanation:

Sum of interior angle of n sided polygon

$$(2n-4) \times 90^\circ$$

$$\therefore \text{sum of interior} = (2 \times 6 - 4) \times 90^\circ$$

$$(\because n = 6 \text{ in a Hexagon})$$

$$= 8 \times 90^\circ = 720^\circ$$

$$\text{Now, } X + X+20 + X+40 + X+50 + X+90 + X+100 = 720^\circ$$

$$6X + 300 = 720$$

$$6X = 720 - 300 = 420$$

$$X = 70$$

$$\text{Largest angle is } 70 + 100 = 170^\circ$$

20. A rectangular sheet of card board is 12 cm x 7 cm. If a circle of greatest possible area is cut from it, then the area of remaining portion is
- (a) $49 \frac{1}{2} \text{ cm}^2$
 (b) $51 \frac{1}{2} \text{ cm}^2$
 (c) $45 \frac{1}{2} \text{ cm}^2$
 (d) None of these

Answer: (c)

Explanation: $\left(12 \times 7 - \pi \times \left(\frac{7}{2}\right)^2\right) \text{ cm}^2$

$$= \left(84 - \frac{22}{7} \times \frac{7}{2} \times \frac{7}{2}\right) \text{ cm}^2$$

$$= \left(84 - \frac{77}{2}\right) \text{ cm}^2$$

$$= \left(\frac{168-77}{2}\right) \text{ cm}^2$$

$$= \left(\frac{91}{2}\right) cm^2 \cdot 4$$

$$= 45 \frac{1}{2} cm^2.$$

21. The ratio of the radii of the taps T_1 and T_2 is 2:1. Water is flowing through them with same velocity. What is the ratio of the time required to completely fill two identical drums kept under T_1 and T_2 ?
- (a) 2 : 1
 (b) 1 : 2
 (c) 4 : 1
 (d) 1 : 4

Answer: (d)

Explanation: given $\frac{r_1}{r_2} = \frac{2}{1}$

$$\therefore \frac{\text{Area of 1st drum}}{\text{Area of 2nd drum}}$$

$$= \frac{r_1^2}{r_2^2} = \frac{4}{1}$$

But the time taken will be inversely proportional to the area, therefore, required ration is 1:4.

22. In a Refugee Camp, ration is available for 100 people for 10 days. If after 2 days 60 people more joined the camp, how many more days will the remaining ration last?
- (a) 7 days
 (b) 6 days
 (c) 5 days
 (d) 4 days

Answer: (c)

Explanation:

Camp inmates	Days
100	8
160	x

$$= \frac{160}{100} = \frac{8}{x} = x = \frac{8 \times 100}{160} = 5 \text{ days}$$

23. Rohan has thrice as many sisters as he has brothers. Babita, Rohan's sister has as many sisters as she has brothers. If Rohan's and Babita are the children of Natwar, how many children Natwar has?
- (a) 5
 (b) 10
 (c) 7
 (d) 9

Answer: (a)

Explanation:

Babita has as many sisters as brothers.

Conclusion 1 - This means if Babita has 1 brother, she has 1 sister.

Rohan has thrice as many sisters as brothers.

Conclusion 2 - the minimum number of sisters is 3 -

From the above two conclusions, Rohan has 1 brother and 3 sisters. (5 siblings)

Babita has two sisters and two brothers including Rohan. (5 siblings)

Thus, Natwar has 5 children.

Thus Answer is (a).

24. The principal wants to arrange 7 students on the platform such that the girl "VAGISHA" occupies the first position and the girl "GITA" is always adjacent to the girl "NITA". How many such arrangements are possible?
- (a) 720
 - (b) 120
 - (c) 240
 - (d) None of these

Answer: (c)

Explanation: $1P_1 \times {}_L 5 \times {}_L 2$
 $= 1 \times 120 \times 2 = 240$

25. Akash purchased a certain number of grapes. He makes a bunch of 51 grapes but finds that 19 grapes are still left. He again makes a bunch of 17 grapes, but still finds some number of grapes left. What is the number of grapes left?
- (a) 0
 - (b) 3
 - (c) 2
 - (d) None of the above

Answer: (c)

Explanation: Divide 19 by 17, we get remainder as 2. Thus required answer is 2. This is possible since 51 is completely divisible by 17.

Directions for the following 12 (twelve) items:

Read the following four passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

PASSAGE – 1

Since the industrial revolution humans have been burning sequestered CO₂ in the form of coal, oil, and natural gas which has the result of releasing energy but also releases CO₂ back into the atmosphere. This increase of atmospheric CO₂ and other gases has the effect of changing the global climate back towards the point when they were originally sequestered. This climate was characterised by higher average global temperatures and higher sea levels. Furthermore, the rapidity of the change is having additional impacts. This period of time is extremely short in context of the global climate and is not much more than a single generation for some long lived species leaving them very little time to adapt. The changing climate is expected to have extremely grave consequences, leading to an increased number of "extreme" weather events, potential rises in sea level, and possible extinction of plant and animal species due to habitat loss.

26. The passage says that:
- (a) There is a need for improved energy efficiency targets.
 - (b) Increase in atmospheric CO₂ and other gases has alarmed policy makers.
 - (c) Extinction of all living beings due to climate change is an unavoidable circumstance.
 - (d) None of these.

Answer: (d)

Explanation: The passage talks about the effect of increase of CO₂ and other gases in the environment on various species as well as on climate. The entire discussion is in a very general matter-of-fact. There is no mention of energy efficiency or policy making in the entire passage. Hence, options a and b are both incorrect.

The passage talks about possible extinction of certain plant and animal species, whereas option c extrapolates it to all living beings. Hence, option c is incorrect.

Hence, the correct answer is option d.

27. Which of the following can be critically inferred from the passage?

- (a) The dependence of industries on coal, oil and natural gas has led to increase in burning of sequestered CO₂
- (b) Indiscriminate release of CO₂ into atmosphere has led to increase in the amount of air pollutants that affect health and well-being
- (c) Both (a) and (b)
- (d) Neither (a) nor (b)

Answer: (a)

Explanation: According to the passage, humans have been burning sequestered CO₂ in the form of coal, oil, and natural gas since the industrial revolution. Thus, the dependence on these fuel types has led to the burning of sequestered CO₂ which has also increased its quantity in the environment. Hence, statement a is a valid inference.

The passage talks about the ill effects of increase quantities of sequestered CO₂ which lead to climate change effects and possible extinction of certain plant and animal species. So, while their health might be affected, the overall health and well-being is beyond the scope of discussion. Hence, statement b is not a valid inference.

Hence, the correct answer is option a.

PASSAGE – 2

The sheer buzz and the resulting visibility that Make in India has generated makes every MSME (micro and small enterprises) sit up and ask: is there anything in it for me too? The billions of dollars in investment that have been pledged in by domestic as well as foreign investors have added massive substance to the style. While it used to take long time for budding entrepreneurs to understand the nuances of earlier SME schemes and programs, Make in India has transformed the way information is disseminated for other schemes as well. The more people know about the programs, the better they are positioned to take entrepreneurial decisions.

With a flurry of big-ticket investments announced under the Make in India program, large-scale manufacturing plants are being planned across various sectors, including but not limited to IT and electronics. Focus sectors include automobiles, industrial equipment, pharmaceuticals, textiles, food processing and chemicals, among others. Since the success and competitiveness of large manufacturing businesses relies on a locally vibrant supply-chain, the investments spell good news for the long-term development and growth of ancillary units in the MSME sector.

Make in India program has given a significant boost to the MSE Cluster Development program, given that a local ecosystem of material and part suppliers is essential to India's long-term success as a manufacturing hub and global destination.

As the result of an ongoing policy-level guideline, all central government departments and PSUs are mandated to accomplish at least 20 percent of their procurements from MSMEs. This is already understood to be having a positive impact on the growth of MSMEs, as it gives them anchor customers in the form of government. This serves not only as a crucial leverage for the enterprises in scaling up but also provides a vital cushion to fall back in instance of rough business weathers.

While sporadic service-sector related deals have been signed under Make in India as well, the coming up of new manufacturing enterprises is alone creating fresh demands across various service streams, including IT, logistics, catering and healthcare.

28. Which of the following sentences justifies the statement – “good news for the long-term development and growth of ancillary units in the MSME sector”?

- (1) The primary objective of Make in India initiative is to attract investments from across the globe in order to strengthen India’s manufacturing sector.
- (2) Make in India focuses on policies in the area of foreign direct investment, national manufacturing and new initiatives.
- (3) The Make in India program is very important for the economic growth of India as it aims at utilizing the existing Indian talent base in small businesses.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 1, 2 and 3
- (c) 1 and 2 only
- (d) 2 and 3 only

Answer: (b)

Explanation: According to the passage, the Make in India program is leading to a lot of large-scale manufacturing projects being planned across the country and sectors. The passage also mentions the presence of a stable supply-chain as a necessary condition for the success of such manufacturing projects. In this context, it is mentioned that this is “good news” for ancillary units in the MSME sector. So, if the objective of the Make in India program is to strengthen the manufacturing sector through foreign investments, it implies more business for ancillary units and thereby justifies the statement that it is good news for them over a longer term. Hence, statement (1) is justified.

Statement (2) mentions multiple focus areas, of which national manufacturing is also a part. As shown earlier, any policy that benefits manufacturing also ends up helping ancillary units in the MSME sector. Hence, statement (2) also justifies the given statement.

The passage states that the policy-level guideline of the Make in India program mentions that all central government departments have to source atleast 20 percent of their procurements from MSMEs. It also goes on to say that this step provides an economic cushion to the MSME during tough economic times. Thus, the focus of the program in utilizing skills present in small business justifies the premise that there is good news from a long term perspective for the MSME sector. Hence, sentence (3) also justifies the given statement. Hence, the correct answer is option b.

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

- (1) The service sector is not only the dominant sector in India’s GDP, but has also contributed significantly to exports as well as provided large-scale employment.
- (2) The Government of India recognizes the importance of promoting growth in the service sector and is trying to do so using the Make in India program.
- (3) The growth in the services sector is governed by both domestic and global factors.

Which of the statement(s) given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 3 only

Answer: (b)

Explanation: The passage partially touches upon the importance of the service sector by mentioning that a few deals have been signed in this sector under the Make in India program. The whole crux of the passage is to demonstrate its impact on the overall manufacturing sector and various MSME industries connected to it. As such, there is no data to conclude that the service sector dominates India's GDP and contributes significantly to exports and employment. Hence, statement (1) is incorrect.

says "While sporadic service-sector related deals have been signed under Make in India as well, the coming up of new manufacturing enterprises is alone creating fresh demands across various service streams, including IT, logistics, catering and healthcare."

The earlier fact about sporadic service sector deals point to the fact that the government does recognise that this sector also needs to grow. An indirect step in this direction is seen through the statement that the coming up of fresh manufacturing enterprises is creating demand in a number of service sector industries. So, the government can be seen to be taking steps in that direction through manufacturing deals. Hence, statement (2) can be considered to be true.

There is no data in the passage to support or refute the impact of domestic and global factors on the service sector. In fact, the service sector is just touched upon as an additional beneficiary of the Make in India program. Hence, statement (3) cannot be considered to be correct.

Hence, the correct answer is option b.

- 30.** Which of the following can be critically inferred from the passage?
- (a) Financial stability is an enabling factor in the promotion and development of MSMEs.
 - (b) With the opening up of the economy, MSMEs have to catch up with global standards of excellence in order to remain competitive and profitable.
 - (c) Both (a) and (b)
 - (d) Neither (a) nor (b)

Answer: (a)

Explanation: The passage mentions that all central government departments have to ensure that at least 20% of their procurements come through MSMEs. The passage also mentions that one of the benefits of this policy is to ensure that the MSME has a safe customer base even in times of adverse economic conditions, thereby ensuring financial stability. Thus, the policy seems to believe that financial stability enables an MSME to develop. Also, having a government department as a client allows the MSME to target other clients. Thus, it also aids in promotion. Hence, statement (a) can be critically inferred.

The Make in India program does not deal with the opening up of the economy. Also, there is no comparison of the MSMEs w.r.t. Global standards of excellence. Hence, statement (b) cannot be inferred.

Hence, the correct answer is option a.

- 31.** Which of the following is true about the Make in India program?
- (a) It aims to tap the unexploited potential of MSMEs.
 - (b) It aims to attract foreign MNCs to bring in their investment in order to explore the inherent depth of the MSME sector.
 - (c) It aims to educate budding entrepreneurs about the nuances of SME schemes and programs
 - (d) All of the above

Answer: (a)

Explanation: The passage revolves generally around how the Make in India program would benefit MSMEs and shows specific examples of policies (such as 20% procurement in

government departments) which are designed to provide conducive business opportunities to the MSME sector. The passage also states that the growth in the overall manufacturing sector in the country would directly and indirectly benefit ancillary as well as other MSMEs all across the supply chain. Thus, it can be said that the program aims to tap the potential of MSMEs.

While the Make in India does aim to get in foreign investments, the objective is to promote manufacturing on the whole, which is expected to help grow MSMEs. Foreign investments are not being brought in to specifically help MSMEs.

The passage states that the Make in India program has been designed in such a way that information about various schemes is disseminated in a systematic way to entrepreneurs. However, this is not the stated aim of the program, but an additional benefit.

Hence, the correct answer is option a.

PASSAGE – 3

High demand and low supply has further created an inflationary pressure on organic food products. This supply-demand mismatch can be eased fundamentally by making organic production mainstream with location-specific hybrid production strategies. Specialised farmer training costs, higher processing and inventory holding costs, and increased packaging, logistics and distribution costs add to the price of end products. Nevertheless, investments in achieving operations excellence by companies will facilitate lowering the cost of organic food products.

The absence of organic food products across all segments in the market is a concern. Consumers find little value buying limited organic products at a premium when rest of the foodstuff they consume is non-organic. Prospects are immense on the supply side as currently organically cultivated crop areas represent only a small fraction of the total acreage of these crops. The good news is that the number of organic food categories has grown to more than 200, including tea, spices, flour, cereals, fruits, vegetables, milk, and honey. In order to sustain consumer trust, maintaining an accurate audit stream, and preventing cross-contamination with conventional goods would be crucial.

There has been a contentious debate on the sustainability of organic farming. Though there is lower yield, these farms are more profitable and environmentally friendly, provide several ecosystem services, numerous social benefits and deliver nutritious foods with relatively less pesticide residues compared to conventional farming. Organically managed soils release less carbon dioxide per hectare per year than conventionally managed soils. New studies indicate that using the best management practices in organic systems over a long period of time can produce equal yields, or even outdo those of conventional systems.

- 32.** Which of the following observations emerges from the above passage?
- (a) Conventional farming has adverse impact on environment and health.
 - (b) There is low awareness at the producer level on the difference between conventional farming and organic farming.
 - (c) There is a demand and supply mismatch, due to supply side deficits, for organic food products.
 - (d) All of the above

Answer: (c)

Explanation: The passage states that organic farming provides nutritious food with less pesticide residues and less carbon dioxide expulsion compared to conventional farming. However, this is a relative comparison between organic and conventional farming. There is no data to support that conventional farming is harmful to either health and environment; just that organic farming is better on these fronts. Hence, observation (a) is not valid.

The preference for conventional over organic farming is mainly discussed in the passage from a cost perspective rather than awareness perspective. So, it cannot be presumed that there is low

awareness at producer level on the difference between these two types of farming. Hence, observation (b) is not valid.

The passage clearly states that there is a demand-supply gap in organic farming and that the demand is high while the supply is low. So, observation (c) is valid.

Hence, the correct answer is option c.

33. With reference to the passage, the following assumptions have been made:

- (1) Many farmers are apprehensive about adopting organic farming due to the high production cost.
- (2) At the consumer level there is limited understanding of the health benefits of organic food products.
- (3) The consumers could be deceived with respect to the authenticity of organic food products.

Which of the above is/are correct assumptions?

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

Answer: (b)

Explanation: The passage states that there is low supply of organic farming and mentions that the costs in nearly all aspects of organic farming are high. Hence, it is a valid assumption that the low supply is because many farmers do not want to adopt organic farming due to high production costs. Hence, assumption (1) is correct.

The constraints mentioned at the consumer side are the high cost of organic products and the non-availability of these products in all food segments. At no point in the passage is it indicated that the consumer hesitates to buy organic products due to lack of awareness. Hence, assumption (2) is incorrect.

The passage mentions that consumer trust needs to be maintained through various measures that act against cross-contamination with conventional products. This is based on the assumption that there are ways in which the consumer could be deceived w.r.t. The authenticity of organic food products. Hence, assumption (3) is correct.

Hence, the correct answer is option b.

34. Which of the following can be concluded from the above passage?

- (a) It is incorrect to say that organic farming is economically unviable.
- (b) Organic farming is environmentally sustainable.
- (c) Both a and b
- (d) Neither a nor b

Answer: (b)

Explanation: The environmental sustainability and advantages of organic farming in environmental terms are clearly spelt out in the passage. So statement (b) can be definitely concluded.

The passage seems to indicate that currently, organic farming is not economically sustainable for the farmer or consumer due to high costs. Hence, statement (a) cannot be concluded. Statement (a) makes the point that organic farming is economically viable, which cannot be proven or refuted on the basis of the given data.

Hence, the correct answer is option b.

PASSAGE – 4

India became the top remittance-receiving country surpassing China, according to a UN report. The 'One Family at a Time' study by the UN International Fund for Agricultural Development (IFAD) said about 200 million migrants globally sent more than \$445 million in 2017 as remittances to their families, helping to lift millions out of poverty. The study said Asia is the highest originating region with 77 million migrants. The dramatic increase in the amount of money that migrants send home to their families in developing countries is helping to lift millions out of poverty and in attaining the Sustainable Development Goals (SDG), the study said. The money is spent on food, health care, better educational opportunities and improved housing and sanitation.

Taken together, these individual remittances account for more than three times the combined official development assistance (ODA) from all sources, and more than the total foreign direct investment to almost every low and middle-income country. The report makes several recommendations for improving public policies and outlines proposals for partnerships with the private sector to reduce costs and create opportunities for migrants and their families to use their money more productively. The small amounts of \$200 or \$300 that each migrant sends home make up about 60 percent of the family's household income, and this makes an enormous difference in their lives and the communities in which they live.

- 35.** Which of the following statements is correct in terms of what is stated in the passage?
- (1) For low and middle-income countries, the remittance exceeds the combined ODA and FDI.
 - (2) Sustainable Development Goals strive to end poverty, which is a global challenge.
- 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: (b)

Explanation: The passage mentions that individual remittances are more than three times the ODA and more than the total FDI. However, when the total ODA and FDI are combined, it is likely that they are more than or equal to or less than the individual remittances. Hence, the first statement is inconclusive, and thereby cannot be considered correct.

According to the passage, since lifting people of poverty helps attain Sustainable Development Goals, it can be correctly claimed that Sustainable Development Goals do strive to end poverty. Hence, statement (2) can be considered correct.

Hence, the correct answer is b.

- 36.** The passage emphasizes on:
- (a) The efforts of the UN to achieve the Sustainable Development Goals.
 - (b) The disparities between different income groups in different countries.
 - (c) The importance of the remittances to the economic growth of India.
 - (d) The importance of channelizing the remittances for the betterment of people.

Answer: (d)

Explanation: The passage mentions Sustainable Development Goals in the context of how remittances are helping in achieving them. Hence, these Goals, by themselves, are not the emphasis of the passage. Hence, option (a) is eliminated.

Disparities between different income groups in different countries is totally out of context of this passage. Hence, option (b) is eliminated.

The passage mentions how remittances help India, or for that matter, any low or middle income country. However, the importance of remittances to India is definitely the area of emphasis. Hence, option (c) is eliminated.

The main objective of the passage is to highlight the importance of spending the remittances for providing better amenities for the people in underdeveloped and developed countries. The policy makers should help to channelize these remittances for the betterment of the nation. This is correctly explained in option (d).

Hence, the correct option is d.

37. Which of the following can be concluded from the above passage?

- (1) Proper use of remittances is likely to help the economy of the country receiving that money.
 - (2) Asia is the largest originator of remittances globally.
- 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: (c)

Explanation: The passage mentions that the amount sent in remittances helps lift millions out of poverty and also helps the economy indirectly as it is spent on food, health, sanitation, housing and education. So, it can be safely concluded that correct use of remittances helps the economy of the country receiving the remittances. Hence, statement (1) can be concluded.

The passage clearly mentions that Asia has the largest origination of remittances due to its 77 million migrants. Hence, statement (2) can also be concluded.

Hence, the correct answer is option c.

38. Consider the given information and answer the question that follows.

All talented singers practice since childhood and all singers who practice since childhood gargle with warm water. Hence, all those singers who do not gargle with warm water are not talented singers.

Which conclusion logically follows from these statements?

- (a) A singer who is not talented does not practice since childhood.
- (b) No singer who does not gargle with warm water is a talented singer.
- (c) Every singer who gargles with warm water is a talented singer.
- (d) Every singer who practices since childhood is a talented singer.

Answer: (b)

DIRECTIONS for Q. 39-40: Two statements have been given, followed by two conclusions. Choose the conclusion(s) that follow from both the statements. Mark the answer as

- (A) Only Conclusion I follows.
- (B) Only Conclusion II follows.
- (C) Both Conclusions I and II follow.
- (D) Neither Conclusion I nor II follows.

39. Statements:

- 1. No book is a note.
- 2. All books are notebooks.

Conclusions:

- I. No note is a notebook.
- II. Some notes are books.

Answer: (d)

40. Statements:

- 1. Some lilies are lotuses.
- 2. All lotuses are lavenders.

Conclusions:

- I. All lilies are lavenders.
- II. Some lavenders are not lilies.

Answer: (d)

41. There are 15 points in a plane out of which 5 points are collinear. Find the number of straight lines formed by the points as vertices.

- (a) 95
- (b) 86
- (c) 97
- (d) 105

Answer: (b)

Explanation:

$$\begin{aligned} \text{Required answer} &= 15C_2 - 5C_2 + 1 \\ \left(\because nCr &= \frac{{}^n C_r}{{}^{n-r} C_r} \right) &= \frac{15 \times 14}{1 \times 2} - \frac{5 \times 4}{1 \times 2} + 1 \\ &= 105 - 10 + 1 \\ &= 96 \end{aligned}$$

42. A person is having two types of fruits. The number of the two types of fruits are consecutive positive integers. He does not remember the exact number of fruits of both the types, but he remembers that when the sum of the squares of these numbers was taken it was found to be 761. Which one of the following is one of the two numbers of fruits he was having?

- (a) 15
- (b) 20
- (c) 24
- (d) 25

Answer: (b)

Explanation: Let the number of two types of fruits be x and $x+1$

$$= x^2 + (x+1)^2 = 761$$

$$2x^2 + 2x - 760 = 0$$

$$x^2 + x - 380 = 0$$

$$(x+20)(x-19) = 0$$

$$\therefore x = 19$$

Two consecutive numbers can be 19 and 20.

Hence required answer is 20.

43. Consider the following statements:

- I. The opposite angles of a cyclic quadrilateral are supplementary.

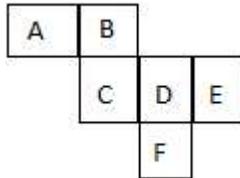
II. Angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle.

Which one of the following is correct in respect of the above statement?

- (a) I only
- (b) II only
- (c) Both I and II
- (d) Neither I nor II

Answer: (c)

44. Six squares are marked A,B,C,D,E and F are hinged together as shown in the figure given below. If they are folded to form a cube, what would be the faces adjacent to face C?



- (a) B, A, D and E
- (b) B, C, D and F
- (c) A, D, E and F
- (d) A, D, F and B

Answer: (d)

Explanation: C and E will be opposite to each other. Rest four faces will be adjacent to C.

45. 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, 32, 67, ?, 281, 568

- (a) 136
- (b) 126
- (c) 146
- (d) 138

Answer: (d)

Explanation: Pattern is:

$$15 \times 2 + 2 = 32$$

$$32 \times 2 + 3 = 67$$

$$67 \times 2 + 4 = 138$$

$$138 \times 2 + 5 = 281$$

$$281 \times 2 + 6 = 568$$

46. Ten years ago, Sanjay was twice as old as Arjun will be in 4 yrs. If Arjun is X years old now, how old is Sanjay in terms of X?

- (a) $3X - 4$
- (b) $2X + 18$
- (c) $2X + 6$
- (d) $(7X+8)/4$

Answer: (b)

Explanation: Let the present ages of Sanjay and Arjun be S and X respectively.

Therefore, $(s-10) = 2(X+4)$. Hence $s = 2X+18$. Choice (b)

47. On planet X, the week is six days long, and each week starts on Tuesday and ends on Sunday. January consists of 20 days, February 30 days, March 40 days, April 50 days, May 60 days and June 50 days. If 3rd January is a Tuesday then what will be the day on 24th June of that year?
- (a) Wednesday
 - (b) Sunday
 - (c) Friday
 - (d) Thursday

Answer: (b)

Explanation:

Monthly navigation gives No. Of odd days: January 2, February-0, March 4, April 2, May 0.
Date Navigation gives $24-03=21$ days means 3 odd days
Total no. Of Odd days $2+0+ 4+2+3=11$ means 5 odd days
Answer is 5 days after Tuesday hence Sunday.

48. A village panchayat constructed a rectangular water tank of dimensions 10 m length, 10 m breadth and 20 m height. The village has 5,000 people and on an average each person consumes 20 litres of water per day. Then, for how many days, the water stored in the tank will last if the tank is completely filled once?
- (a) 5 days
 - (b) 7.5 days
 - (c) 10 days
 - (d) 20 days

Answer: (d)

Explanation:

Volume of tank = $10 \times 10 \times 20 = 2000m^3$
Water requirement = $20 \times 5000 = 1,00,000$ per day
 $1m^3 = 1000\text{Lts}$, $1000 \times 2000 / 100000 = 20\text{days}$

49. In one of the exams conducted by the UPSC, hundred aspirants appeared. The average marks for the hundred aspirants in the test are 58. The average marks for the aspirant who passed the exams are 70. The average mark for the aspirants who failed the exam is 30. The number of aspirants who passed the exam is?
- (a) 25
 - (b) 30
 - (c) 65
 - (d) 70

Answer: (d)

Explanation: With The help of allegation Ratio of passed and failed will come 7:3, So passed=70

50. A dishonest shopkeeper professes to sell the goods at cost price but gives 700 gms instead of a kg. What is his profit/loss percentage?
- (a) 30% Profit
 - (b) 28.56% Loss
 - (c) 42.85 % Profit

- (d) None of the above

Answer: (c)

Explanation:

Profit percentage = 42.85%

$$\frac{1000 - 700}{700} \times 100\% = 42.85\%$$

Directions for the following 4 (four) items:

Read the following two passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

PASSAGE – 1

As India moves towards creating structures for universal healthcare with the National Health Protection Scheme, we need to get rid of some bugaboos that have kept important providers of healthcare out of the purview of public good in India. The first, most deep-rooted misleading belief, is that private practitioners are less suited to deliver healthcare services than public healthcare professionals. This is based on the baseless presumption that private practitioners are committed to profit while government doctors exist to serve the public. The second is that health outcomes of patients are immaterial, that there is no need to track patients or maintain records, spending more money on healthcare is enough. Consequently, it is believed that all that is needed is ideological goodness and commitment. That there is no need to create institutional systems to either rope in private practitioners into the public health system or to keep track of patient outcomes anywhere. One result that we see is in the barrage of criticism that is designed to create fears that the National Health Protection Scheme (NHPS) will promote corporate hospitals and put healthcare out of reach of the people. Under this scheme, the poor people will be the main beneficiaries.

An institutional infrastructure that tracks health outcomes is not difficult to set up. All that tracking health status really means is that patient outcomes like disease, death, infection and so on, be regularly ascertained, reported and monitored.

51. With reference to the passage, the following assumptions have been made:

- (1) Healthcare providers in the private sector are less likely to provide healthcare services at par with the public sector.
- (2) Public healthcare systems are of utmost benefit to poor people and are the only way to achieve universal and equitable access to health care.

Which of the above is/are valid assumption(s)?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer: (c)

Explanation: The passage mentions that there is a belief, though misleading, that private sector healthcare practitioners are less suited to provide healthcare services as compared to public sector practitioners. Hence, there is a clear assumption that healthcare providers in the private sector are not as efficient as those in the public sector; and are hence less likely to provide the same level of service. Hence, assumption 1 is valid.

The passage mentions the deep-rooted belief that private practitioners are committed to profit compared to public healthcare practitioners who are committed to helping people due to the

goodness of their heart. So, there is a clear assumption that only public healthcare systems can help poor people and achieve universal healthcare. Hence, assumption 2 is valid. Hence, the correct answer is option c.

52. Which of the following can be concluded from the passage?
- (a) Poor public health infrastructure has pushed Indians to private hospitals.
 - (b) NHPS is likely to increase social welfare of marginalised groups in the country.
 - (c) Corporate hospitals do not keep track of patient outcomes.
 - (d) None of the above

Answer: (b)

Explanation: The passage does not mention the state of the current public health infrastructure. As the same time, it shows private health infrastructure is actually maligned. Hence, option a is an incorrect conclusion.

The passage clearly states the poor would be the main beneficiaries under the NHPS. Hence, it can be concluded that the NHPS is likely to aid the social welfare of poor and marginalised people. Hence, option b is a valid conclusion.

The passage claims that healthcare policies in India do not focus at all on keeping track of patient outcomes. It does not state that corporate hospitals do so. Hence, option c is an incorrect conclusion.

Hence, the correct answer is option b.

PASSAGE – 2

A massive fraud in a public sector bank has ignited a call to privatise all Indian banks. However, the many scams in private hospitals and medical colleges in the country should challenge the presumption that private owners would do the right things in the public interest. Nor should one forget that huge frauds in the financial sectors of other countries, which caused grave public harm, were in institutions of the private sector. And, in India, the counterparts in the banking frauds are corrupt private sector business organisations.

It is unlikely that the conversion of publicly owned enterprises into privately owned ones will, by itself, reduce the rot and create enterprises that serve the public good. The fundamental problem is in the design of the enterprise, regardless of who the owner is.

Ideologies of public versus private cloud the clarity required to design a good enterprise. Moreover, the design of a good enterprise must be based on ethical considerations, not merely concerns of efficiency. An enterprise that serves public purposes best may not be the one that produces the most profits or increases its shareholders' wealth the most. However, these are the yardsticks universally applied to compare enterprises and to measure their worthiness.

53. With reference to the passage, the following assumptions have been made:
- (1) Enterprises designed only in pursuit of profits may compromise public interests.
 - (2) Privatisation of some, or even most, of India's state banks is not a simple or quick solution to the sector's problems.

Which of the above is/are valid assumption(s)?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer: (b)

Explanation: The passage contends that an enterprise that serves a public function or interest in the most suitable manner may not necessarily be the most efficient or profitable. It also states

that an enterprise has to be designed on the basis of efficiency and ethics both, rather than efficiency alone. Hence, it is a safe assumption that enterprises designed in pursuit of profits alone may not be conducive to public interest. Hence, assumption 1 is valid.

The whole passage is based on arguing against privatisation of India's state owned banks. This is obviously based on the assumption that privatisation of these banks may not be beneficial to the sector or solve its problems. Hence, assumption 2 is valid.

Hence, the correct answer is option b.

54. The passage emphasizes on
- (a) Development of an enterprise aiming for public good
 - (b) The loopholes in public sector banks
 - (c) Both a and b
 - (d) Neither a nor b

Answer: (c)

Explanation: After initially introducing the topic on how privatisation of India's public sector banks is not a good idea, the passage goes on to deal with how an enterprise should be designed and what should be the key points to consider while developing an enterprise for the public good. Hence, statement (a) is valid.

The passage does not discuss loopholes in the banking sector. In fact, the discussion on privatisation could be due to the exploitation in such loopholes. Hence, statement (b) is invalid. Hence, the correct answer is option (c).

55. The law of demand states that, if all other factors remain equal, the higher the price of a good, the less people will consume that good. In other words, the higher the price, the lower the quantity demanded.
- Which of the following provides an example of this principle?
- (a) A company has a monopoly in the alarm-clock market so an increase in alarm-clock prices has little effect on the quantity demanded.
 - (b) The increase in petrol prices causes an increase in demand for fuel-efficient cars.
 - (c) An increase in the number of computer retailers leads to a decrease in the average price of computers.
 - (d) A reduction in the price of oranges from Rs 60 per kilo to Rs 45 per kilo results in 15 kilos of oranges being sold as opposed to 10 kilos.

Answer: (d)

Explanation: Option D provides an example where as the price of oranges decreases, the quantity demanded increases. Hence D.

Option A is wrong because an increase in the price of alarm-clocks does not decrease the quantity demanded.

Option B is wrong because it discusses the effect of the price of a related item, petrol, on the quantity of fuel-efficient cars demanded but does not directly illustrate the law of demand for a particular good as determined by its price.

Option C is wrong because it describes the effect of increased availability or competition and a decrease in price-it does not directly illustrate a relationship between price and demand.

56. If cost price of an article is 75% of its selling price, what is the profit/loss percentage?
- (a) 33.33% loss
 - (b) 13.04% profit
 - (c) 15% loss
 - (d) 33.33% profit

Answer: (d)

Explanation:

For example Selling Price is 100 Then Cost Price will be 75

$$\text{So } \frac{S.p.-c.p.}{c.p.} 100\% = \frac{100-75}{75} 100\% = 33.33\% \text{ Profit}$$

- 57.** 60 men can do a piece of work in 12.5 days. If the number of men is decreased by 33.33% then by what percent days should be increased to get the same work done?
- (a) 25%
 (b) 50%
 (c) 100%
 (d) None of the above

Answer: (b)

Explanation: No. of Men × No. of days = work done

So if no. of men is decreased by 33.33% then for same piece of work we have to increase no. of days by 50%

Alternate Method:-

$$M_1 \times D_1 = M_2 \times D_2$$

$$60 \text{ (men)} \times 12.5 \text{ Days} = 40 \text{ (men)} \times Y \text{ days}$$

$$Y = 18.75 \text{ days}$$

$$18.75 \text{ days} - 12.5 \text{ days} = 6.25 \text{ days}$$

$$6.25 \text{ is } 50\% \text{ of } 12.5$$

Directions: Study the following statements carefully and answer the Question No. 58 and 59.

Six persons Ajay, Babita, Chandan, Dinesh, Farooq and Ganesh are sitting in two rows, three in each. The people in each row face the people in the other row. Farooq is not at the end of any row Dinesh is second to the left of Ganesh. Chandan, the neighbour of Farooq, is sitting diagonally opposite to Dinesh. Babita is the neighbour of Ganesh.

- 58.** Which of the following are sitting diagonally opposite to each other?
- (a) Ajay and Chandan
 (b) Ajay and Dinesh
 (c) Ajay and Ganesh
 (d) Chandan and Farooq

Answer: (c)

- 59.** If Ajay interchanges his seat with Babita, who will be the neighbours of Ajay in the new position?
- (a) Dinesh and Ganesh
 (b) Dinesh and Farooq
 (c) Dinesh only
 (d) Chandan only

Answer: (a)

Explanation: According to the given conditions the following arrangements are possible:

Ganesh	Babita	Dinesh	OR
Ajay	Farooq	Chandan	

Chandan
Dinesh

Farooq
Babita

Ajay
Ganesh

60. Successive discount of 10% + 20% + 30% amounts to a single discount of:
- (a) 70%
 - (b) 60%
 - (c) 49.6%
 - (d) None of these

Answer: (c)

Explanation:

For example price of something is 100

First discount is 10% = Rs. 10 means new price is 90

Then second discount is 20% on 90 = Rs 18 means new price will be 72

Third discount is given 30% on Rs 72 = Rs 21.6

Total discount given is 10 + 18 + 21.6 = 49.6

So answer is 49.6%

Directions for the following 7 (seven) items:

Read the following three passages and answer the items that follow each passage. Your answers to these items should be based on the passages only.

PASSAGE – 1

The process of job hunting can be arduous. While some sought-after job vacancies are never usually posted on the internet, the ones that are displayed can get lost between company websites, job boards and professional social media avenues. Moreover, sifting through multiple job postings is a cumbersome practice and finding the right position that fits one's passions, experience and goals can be a herculean task for many.

The future of job hunting will rely heavily on artificial intelligence (AI), which can simplify the process in more ways than one. While industry strategies may differ, experts in the recruiting field agree that AI can help streamline the connection between employers and candidates. With the vast amounts of data collected on skill-sets, job titles and salaries, AI can help job boards like LinkedIn make accurate predictions on hiring competition and compensation. It can bring down research time for job-seekers dramatically and assist employers to find qualified candidates faster than ever before.

AI is dominating conversations across the entire talent acquisition spectrum. Even though AI, chatbots, natural language processing, machine learning, algorithms, auto matching have led to scaremongering, the HR and recruitment fraternity must applaud these evolutions and not fear them.

61. Which of the following can be concluded from the passage?
- (a) AI will not completely eliminate the HR function.
 - (b) Utilising AI in the recruitment process will provide more qualified leads.
 - (c) Both a and b
 - (d) Neither a nor b

Answer: (c)

Explanation: The passage closes by saying that though AI and other technological developments have led to fears in the HR community, the HR and recruitment should applaud rather than fear these. This implies that AI and conventional HR can co-exist and may have separate parts to play in the overall HR function. Hence, statement a is a valid conclusion.

While showing the benefits of AI in HR, the passage clearly states that AI will help employers find qualified candidates much faster than earlier. Also, this may help make more accurate predictions regarding hiring competition. Thus, it can be concluded that AI should help HR get better leads and save time and effort. Hence, statement b is a valid conclusion. Hence, the correct answer is option c.

62. The passage emphasizes on:
- (a) The ability of AI to streamline the connection between employers and job-seekers.
 - (b) The emergence of AI in the recruitment sector.
 - (c) Both a and b
 - (d) Neither a nor b

Answer: (c)

Explanation: The passage talks about the role of AI in making the process of job hunting easy for job seekers and acquiring better talent easily for recruiters. In fact, the whole purpose of the passage is to demonstrate how can streamline the job search and recruitment process, thereby providing a better connection between employers and job-seekers. Hence, option a is true. The passage assumes that the future of recruitment is in AI. It also mentions that AI is dominating conversations across the entire talent acquisition spectrum. Hence, it can be concluded that AI has emerged as an important component of the HR spectrum. Hence, option b is true. Hence, the correct answer is option c.

PASSAGE – 2

Growth of agriculture decelerated from 3.5% from 1981-82 to 1996-97 to around 2% during 1997-98 to 2004-05 although there are signs of improvement in recent years (more than 3.5% in the last three years). Yield growth has also declined. Farmers' suicides have continued/increased in some states. Farming is becoming a non-viable activity. There are also other problems. Further scope for increase in net sown area is limited. Land degradation in the form of depletion of soil fertility, erosion and water logging has increased. There has been decline in the surface irrigation expansion rate and reduction in ground water table, exposure of domestic agriculture to international competition, volatility in prices, increased vulnerability to world commodity prices. Disparities in productivity across regions and crops and between rainfed and irrigated areas have increased. Long term factors like steeper decline in per capita land availability and shrinking of farm size are also responsible for the agrarian crisis.

However, there is some dynamism now in agriculture. Agriculture growth in the last three years was nearly 4%. There is some increase in high value agriculture, vertical integration of supply chains and some positive signs on biotechnology, particularly BT cotton and also some lagging regions like Bihar showing high growth in agriculture.

The Steering Committee report on agriculture for 11th Plan (GOI, 2007a) has identified the possible reasons for deceleration in agriculture since mid-1990s. According to the report, the major sources of agricultural growth are: public and private investment in agriculture and rural infrastructure including irrigation, technological change, diversification of agriculture and fertilizers. It looks like the progress on all these sources slowed down since mid-1990s.

Because of demographic pressures, there has been significant increase in small and marginal farm holdings. These farmers have to face the challenges of globalization. Risk and uncertainty has also increased as cultivation has spread to marginal lands. The diversification of agriculture also raised concerns on food security.

63. According the passage, what are the reasons for the agrarian crisis?
- (1) The highly distortive and exploitative international market.

- (2) Unavailability of adequate amount of water for crops
 - (3) Absence of a long-term solution to meet the food demand of the growing population
- Select the correct answer using the codes given below:

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 only
- (d) 1, 2 and 3

Answer: (c)

Explanation:

Statement 1 cannot be considered a valid reason for the crisis as the passage states that domestic agriculture has now started facing competition from the international market. However, it neither states nor compares the parameters on which these two agricultural structures (domestic vs international) are measured.

The passage clearly mentions that the ground water table level has dropped and the surface irrigation expansion rate has also decreased. Both of these have been mentioned as factors that make agriculture unviable. Hence, unavailability of water is a valid reason for the agrarian crisis. Hence, statement (2) is a valid reason.

Food demand (or food security) has been mentioned as something that may suffer due to the agrarian crisis, rather than something that may cause the crisis. Hence, it is an effect rather than a cause. Hence, statement (3) cannot be considered a valid reason.

Hence, only statement (2) is a valid reason.

Hence, the correct answer is option c.

- 64.** Which of these can be called a globally initiated factor adversely affecting the agriculture sector?
- (a) Loss of arable land under irrigation
 - (b) Use of modern biotechnology to grow BT crops
 - (c) Falling prices of domestic crops in the international market
 - (d) None of the above

Answer: (d)

Explanation: The loss of arable land under irrigation is a factor that adversely affects agriculture but the passage nowhere mentions that this has happened due to global reasons.

The use of modern biotechnology has, in fact, been mentioned in the passage as a positive development in the sector rather than an adverse effect.

The passage does not mention an actual fall in the domestic crop prices. It only mentions the vulnerability of domestic agriculture to international competition.

Thus, none of the given statements is actually valid as an adverse factor that would have been initiated at a global level.

Hence, the correct answer is option d.

- 65.** With reference to the passage, the following assumptions have been made:

- (1) Agriculture is no longer the economic backbone of India.
- (2) The agriculture sector has started turning around.

Which of the above is/are valid assumption(s)?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer: (b)

Explanation: The passage talks about the various growth rates of agriculture as a sector. However, it does not mention the contribution of this sector to India's economy. There is no other data in the passage that India's economy has been overly dependent on agriculture. Thus, it cannot be assumed that agriculture was or is the economic backbone of India.

The passage starts off by saying that the growth in agriculture dropped from 3.5% to 2% but has been **more than 3.5%** in the last three years. The passage also reiterates that there is now dynamism in the agricultural sector with a growth rate of nearly 4% in the last 3 years. Both these statements point to a turnaround in the sector. Hence, statement 2 can be considered a valid assumption.

Hence, the correct answer is option b.

PASSAGE – 3

It is time for IT companies to show that they are much more than just about shipping low-cost skilled labour to countries such as the US to drive higher margins. The industry needs to look inwards and find that entrepreneurial spark again, to quickly move up the value chain in terms of switching over to new transformational platforms such as robotics, artificial intelligence and automation. This also requires re-skilling its legacy workforce on mission mode to make them ready to take up jobs that require very different capabilities compared to implementing an enterprise resource planning software. To compensate for any loss from traditional outsourcing jobs from other geographies, IT companies should harness the potential in the domestic market, given that India is at the cusp of a major digital transformation. Incremental push on these fronts will not be enough to resurrect the IT sector to its former glory.

66. With reference to the passage, the following assumptions have been made:
- (1) India's IT sector needs to rediscover the formula for sustained growth.
 - (2) IT companies in India face various regulatory challenges which hinders their growth.
- Which of the above is/are valid assumption(s)?
- (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2

Answer: (a)

Explanation: The passage indicates that Indian IT companies are stuck at some point in the IT value chain. Hence, it exhorts them to think like an entrepreneur again, move to new technologies and platforms and also re-skill its exist workforce. It also says that IT companies need to compensate for lost outsourcing business by tapping newly emerging digital companies in India. Thus, it is a valid assumption that Indian IT (which is aware of some formula for growth) now needs to rediscover a new formula based on the current times. Hence, assumption 1 is valid.

The emphasis of the passage is on the challenges that Indian IT faces in terms of technological advances and steps that it should take. None of these challenges are attributed to government intervention or regulatory challenges. Hence, assumption 2 is invalid.

Hence, the correct answer is option a.

67. The passage argues for:
- (a) Increasing the standards of Indian IT industry matching international standards.
 - (b) Harnessing the potential of the domestic Indian IT market.
 - (c) Both a and b
 - (d) Neither a nor b

Answer: (b)

Explanation: The passage mentions the various efforts that the Indian IT industry needs to put in to stay relevant in a world of large technological advances. However, it does not indicate that Indian IT is in anyway inferior or substandard compared to other countries. So, while the passage does argue for increasing the standards of Indian IT, it is more in relevance with matching business requirements than meeting global standards. Hence, statement a is invalid. The passage claims that re-skilling the IT professionals to meet technological advances could lead to loss of outsourcing business. It then goes on to claim that India is on the verge of a digital revolution, which will provide a lot of opportunities and then argues that the IT industry should tap this potential. Hence, statement b is valid. Hence, the correct answer is option b.

DIRECTIONS for Q. 68-69: In each question, the main statement is followed by four sentences. Select the pair of sentences that relates logically to the given statement.

- 68.** All irresponsible parents shout if their children do not study.
 A. All irresponsible parents do not shout.
 B. Children study.
 C. Children do not study.
 D. All irresponsible parents shout.

Select the correct answer using the code given below:

- (a) AB
 (b) DC
 (c) BA
 (d) All of these

Answer: (a)

- 69.** If a customer defaults on a loan, the bank freezes his assets immediately.
 A. The customer has not defaulted on a loan.
 B. The bank froze his assets immediately.
 C. The bank did not freeze his assets immediately.
 D. The customer has defaulted on a loan.

Select the correct answer using the codes given below:

- (a) CA
 (b) BD
 (c) BA
 (d) AC

Answer: (a)

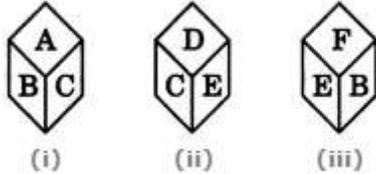
- 70.** Choose the set in which the third statement is a logical conclusion of the first two.
 (1) Only women are resilient. T is resilient. T is a woman.
 (2) Only men are industrious. H is a man. H is industrious.
 (3) All people are sapiens. No sapien is amphibious. No people are amphibious.

Select the correct answer using the code given below:

- (a) 1 and 2 only
 (b) 2 and 3 only
 (c) 1 and 3 only
 (d) 1, 2 and 3

Answer: (c)

71. The six faces of a dice have been marked with alphabets A, B, C, D, E and F respectively. Consider the following statements:



- (1) Figures II and III are sufficient to know as to which face is opposite to the face A.
 (2) Figures II and III are sufficient to know as to which face is opposite to the face C.
 (3) Figures I and III are sufficient to know as to which face is opposite to the face D.
 Which of the statements given above are correct?
 (a) 1 and 3 only
 (b) 1 and 2 only
 (c) 2 and 3 only
 (d) 1, 2 and 3

Answer: (d)

Explanation: Property of cube: If only one face is common for two different views then we can find all the 3 pairs of opposite faces so all three statements are correct.

72. If 5th Jan 2018 was Tuesday then what will be the day on 26th Nov 2018?
 (a) Monday
 (b) Friday
 (c) Saturday
 (d) None of these

Answer: (b)

Explanation: From 5th Jan 2018 to 5th Nov 2018 we are having 24 odd days means effectively 3 odd days.

From 5th Nov to 26th Nov we are having 21 odd days means 0 odd days.

Total no. of odd days are 3 so Answer will be Friday.

73. A man completes a journey in 5 hours. He travels first half of the journey at the rate of 42 km/hr and second half at the rate of 48 km/hr. Find the total journey in km.
 (a) 220 km
 (b) 224 km
 (c) 230 km
 (d) 234 km

Answer: (b)

Explanation:

$$\frac{x}{42} + \frac{x}{48} = 5, \text{ value of } x = 112 \text{ km so distance} = 2 \times 112 = 224$$

Directions for questions 74 and 75:

Five buses B1, B2, B3, B4 and B5 travel between two stations S1 and S2. The first bus, which leaves from S1, is the third bus to reach S2. B1, the 2nd bus to reach S2, reaches after B5. B4,

the 2nd bus to leave S1, is the last to reach S2, immediately after B2, which leaves S1 after B5 and B1 respectively.

- 74.** Which is the first bus to leave from S1?
 (a) B1
 (b) B2
 (c) B5
 (d) B3

Answer: (d)

- 75.** What is the position of B1, in reaching S2 and leaving S1 respectively?
 (a) 2nd, 4th
 (b) 4th, 3rd
 (c) 4th, 3rd
 (d) 3rd, 4th

Answer: (a)

Explanation: 2nd and 4th

Order of leaving S1	Order of reaching S2
1. B3	1. B5
2. B4	2. B1
3. B5	3. B3
4. B1	4. B2
5. B2	5. B4

76. In a certain language, "apple is mango" is coded as BKL, "guava is banana" is coded as KMN and "mango is not banana" is coded as NKQL. What is the code for banana?

- (a) M
 (b) Q

- (c) N
 (d) L

Answer: (c)

Explanation: N

apple is mango - (1)

B K L

guava is banana - (2)

K M N

mango is not banana - (3)

N K Q L

From (1) and (2) above, 'is' is K, from (1) and (3) mango is L, and from (2) and (3) banana is N.

- 77.** In a three digit number, the sum of the digits is 15. The tens digit is one less than the units digit. Which of the following numbers cannot be a digit in the hundreds place?
 (a) 7
 (b) 6
 (c) 8
 (d) 4

Answer: (a)

Explanation:

Lets assume the number to be 100x+10y+z

From the conditions above $x+y+z=15$ and $y=z-1$; Solving the above $x=2(8-z)$. According to the above, x needs to be a multiple of 2. In the answer options only 7 does not satisfy the condition of being a multiple of 2.

78. Sachin spends $1/4^{\text{th}}$ of his leisure time on reading and $2/3^{\text{rd}}$ of the remaining watching TV. If he spends 2 hrs on watching TV what is his total leisure time?
- (a) 4 hours
 - (b) 6 hours
 - (c) 8 hours
 - (d) 10 hours

Answer: (a)

Explanation: 4 hrs

$1/4^{\text{th}}$ or 25 percent of leisure time is being spent on reading.

$2/3^{\text{rd}}$ of remaining ($3/4^{\text{th}}$) or $1/2$ or 2hrs is spent on TV.

So total is 4 hours.

79. The sum of the digits of a two-digit number is 13. If the number is halved, the sum of the digits of the resultant number is 11. What is the number?
- (a) 58
 - (b) 94
 - (c) (a) and (b) only
 - (d) More than two such numbers are possible

Answer: (d)

Explanation:

58, 94 and 76 are three such numbers.

80. In a certain farm, there are some chickens and some sheep. If the total number of heads is 23 and the total number of legs is 70, then how many more/less are chickens as compared to the number of sheep?
- (a) one more
 - (b) one less
 - (c) two more
 - (d) two less

Answer: (b)

Explanation:

Let the number of chicken is x and sheep is y

$$x + y = 23 \text{ -- (1)}$$

$$2x + 4y = 70 \text{ -- (2)}$$

Solving the above, $x = 11$ and $y = 12$.

Answer is (b)