## PRELIMINARY QUESTIONS \& ANSWERS OF <br> GS-II OCS-2020


#### Abstract

Direction (Q. Nos. 1 to 10): Read the following two passages and answer the questions that follow each passage. Your answers to these questions should be based on the passages only.


Passage -1
Indian philosophical and religious thought can be classified into Brahmanik and Shramanik traditions. Brahmanik tradition traces its origin to the Vedas. Shramanik traditions do not believe in the authority of the Vedas. While Brahmanik tradition does not advocate renunciation, Shramanik tradition favours asceticism for the attainment of emancipation from the misery of the cycle of birth and death.
Buddhism and Jainism belong to the Shramanik tradition. There were many other Shramanik traditions called Aajivkaas which either vanished with the passage of time or, like Sankhya-yoga, merged themselves into the Brahmanik tradition.
The founder of Buddhism Gautam Buddha (563$483 \mathrm{~B}(\mathrm{C})$ and the expounder of the present form of Jainism Mahavira (599-527 B(C) though contemporaries who dwelt in the same region, namely Magadha, had never met. By the time Gautam Buddha left his home at the age of twentynine, Mahavira was sixty-nine years of age.
Buddhism and Jainism originated and flourished in India almost at the same time under the patronage of powerful emperors of the time. Buddhism enjoyed the patronage of Ashoka (Third Century B(C) and Kanishka (First CenturyA(D) who spread it across their empire and helped it spread outside India, especially its border states.
Jainism too enjoyed the patronage of Chandragupta Maurya (Early Fourth Century B(C), Kharvela (Second Century B(C) and Kumarpala (Twelfth Century $A(D)$, they did not proselytize Jainism outside the boundaries of their empires.
However, with the passage of time around 1200 AD, after the advent of Shankaracharya, though Buddhism was completely uprooted from India, it became a world religion. While Jainism flourished
in India, till about past few decades, it remained confined to India. The primary reason for the opposite fates of Jainism and Buddhism was the nature of their inherent doctrines.

The primary reason for the uproot of Buddhism from India was that it did not prescribe any code of conduct for the layman. In it there is detailed code of conduct for the bhikhus and bhikkhunis residing in the Buddha Viharas but there is no prescribed rules and regulations of conduct for the laity.
Buddhism preached the abandonment of the extremes, and adoption of the middle path. It recommended moderation in the moral conduct, flexibility in the food habits and management of day-to-day affairs of the bhikkhus (monks) and bhikkhunis (nuns), thus allowing them to be adaptable to the alien ways of life and religions.
Jain monks and sadhavis, on the other hand, had to strictly follow the Mahavratas (vows). In practicing the Mahavratas, the monks had to follow the rules of conduct originally prescribed for them in the Agama granthas without any exception or laxity. Right conduct for Jainas `is to adopt the rules of discipline prescribed in the Jaina agmas'. It is difficult for an outsider to grasp, much less follow, this extreme adherence to the vows by the Jainas.

1. Shramanik tradition:
(A) Believe in the authority of the Vedas
(B) Do not believe in the authority of the Vedas
(C) Is indifferent to Vedas
(D) Is not a part of the Indian Philosophy

Answer: B
It is mentioned in the first paragraph that shramanic traditions do not believe in authority of vedas.
2. Shankaracharya uprooted from India:
(A) Buddhism
(B) Jainism
(C) Brahmanism
(D) All religions

## Answer: A

It is mentioned in sixth paragraph that after the advent of Shankracharya, Buddhism was completely uprooted from India.
3. Buddhism has a code of conduct for:
(A) Both for common man and for bhikkhus and bhikkhunis
(B) Neither for common man nor for bhikkhus and bhikkhunis
(C) Common man but not for bhikkhus and bhikkhunis
(D) Not for common man but for bhikkhus and bhikkhunis
Answer: D
It is mentioned in seventh paragraph that there is a code for bhikkus and bhikkhunis and not for layman.

## 4. Which one of the following is true?

(A) Both Jainism and Buddhism flourished in India alone
(B) Both Buddhism and Jainism flourished abroad
(C) Jainism flourished in India and Buddhism flourished abroad
(D) Buddhism flourished in India and Jainism flourished abroad

## Answer: C

It is mentioned in sixth paragraph that Jainism flourished in India and Buddhism flourished abroad.

## 5. Which one of the following is correct?

(A) Both Buddhism and Jainism allow flexibility in following the rules of conduct
(B) Jainism allows flexibility in following the rules of conduct, but Buddhism does not
(C) Jainism does not allow flexibility in following the rules of conduct but Buddhism does
(D) Both Buddhism and Jainism do not allow flexibility in following the rules of conduct

## Answer: C

It is mentioned in eighth and ninth paragraph that in Jainism, Jain monks had to strictly follow mahavrats whereas Buddhism recommended moderation of moral conduct.

Passage - 2
The notion of Swadeshi occupies a pivotal place in Gandhi's thought and practices. The centrality of the notion of Swadeshi can be gauged from the fact that Gandhi believed that the way to Swaraj is through the practice of Swadeshi. He upheld that if we adopt Swadeshi not only in the economic, but also in the educational, religious and political arenas, we would be able to establish an equitable and just social order.
Gandhi does not use 'Swadeshi' in its literal sense viz., 'of one's own country' alone. According to him Swadeshi does not mean merely the use of what is produced in one's own country. Swadeshi actually means reliance on our own strength. 'Our strength' means the strength of our body, our mind and our soul. So, Swadeshi operates not only in the physical realm but it is also a spiritual principle.
While negatively Swadeshi means that the foreign goods should not be purchased at the peril of goods produced indigeneously ; positively it means that we should collectively apply 'our brains to the production of things as a substitute for foreign materials' or refining the indigenous goods and services. Swadeshi does not mean exclusion of everything foreign under every conceivable circumstance.
The principle of Swadeshi is not based on narrow patriotism. Swadeshi is a nationalist humanitarian principle because it strives for the welfare of whole humanity. Only he who cares for his neighbour has the right to say : 'All are kin to me.'
Swadeshi is not a punitive or revengeful vow, rather it is a religious duty. It is not a vrata that is aimed at harming anyone, including oneself. It is a principle which aims at the improvement and benefit of all. A Swadeshist has to voluntarily adhere to the principle of self-denial of refined goods at the cost of personal inconvenience. He has to make conscientious and persistent effort to improve the quality of goods produced in his country. Let me conclude by saying that Swadeshi as a global practice, will one day, improve the quality of goods and unite the whole world and make every nation self-reliant, atmanirbhar.

## 6. According to Gandhiji:

(A) Swaraj cannot be achieved through Swadeshi
(B) Swaraj and Swadeshi are not related
(C) Swaraj can be achieved only through Swadeshi
(D) Swadeshi can be achieved through Swaraj

Answer: C
It is mentioned in the first paragraph that Gandhiji believed that the way to Swaraj is through the practice of Swadeshi.
7. The principle of Swadeshi operates:
(A) Only in the physical realm
(B) Only in the spiritual realm
(C) Neither in the physical nor in the spiritual realm
(D) In the physical as well as in the spiritual realms
Answer: D
It is mentioned in the second paragraph that swadeshi operates not only in physical realm but also is a spiritual principle.
8. The principle of Swadeshi is based on:
(A) Narrow patriotic principle
(B) Harming our enemies
(C) Humanitarian principle
(D) The principle of doing good to our distant neighbours at the cost of our next door neighbours
Answer: C
It is mentioned in the fourth paragraph that swadeshi is based on a humanitarian principle.

## 9. Swadeshi Movement aims at:

(A) Improving the quality of goods made in one's own country
(B) Enjoying the refined imported goods
(C) Importing and using refined foreign goods
(D) Ignoring the coarse goods produced in one's own country
Answer: A
It is mentioned in the third paragraph that Swadeshi involves refining indigenous goods and services.
10. Swadeshi movement will lead to:
(A) Equality
(B) Injustice
(C) Economic degeneration
(D) Just social order

## Answer: D

It is mentioned in the first paragraph that adoption of Swadeshi will lead to just social order.
11. Which kind of communication is represented by Colour graphics?
(A) Verbal
(B) Non-verbal
(C) Visual
(D) Gestural

## Answer: C

Graphic communication as the name suggests is communication using graphic elements. These elements include symbols such as glyphs and icons, images such as drawings and photographs, and can include the passive contributions of substrate, colour and surroundings
https://en.wikipedia.org/wiki/Graphic_communicatio n
12. Which kind of communication is represented by Facial expressions and gestures?
(A) Non-verbal
(B) Verbal
(C) Visual
(D) Non-visual

## Answer: A

Nonverbal communication types include facial expressions, gestures, paralinguistics such as loudness or tone of voice, body language, proxemics or personal space, eye gaze, haptics (touch), appearance, and artifacts.
https://www.verywellmind.com/types-of-nonverbal-communication-2795397
13. Which kind of communication is represented by the speech of a leader on the television?
(A) Verbal
(B) Visual
(C) Both (A) and (B)
(D) Neither (A) nor (B)

## Answer: C

Speech of a leader is a form of Verbal Communication. Watching the speech of a leader on television is verbal as well as visual communication.
Direction (Q. Nos. 14 to 18) :
Fill in the blanks.
14. "I have a glass of milk."
(A) drank
(B) drunk
(C) drink
(D) drunken

Answer: B
In modern usage guides, drank is the past tense of drink, as in "I drank a lot last night," and drunk is the past participle (following "have"), as in "Yes, I have drunk wine before."
15. Ram's score on the test is the highest in the class; $\qquad$
(A) he should study last night
(B) he should have studied last night
(C) he must have studied hast night
(D) he must had to study last night

Answer: C
The structure of present perfect tense is as following:
Subject + has/have + past participle(V3) +object.
Ex: I have watched two seasons of Netflix's Dark.
Must and should express the necessity.
However, the usage of these terms in any sentence can modify the entire sentence meaning.
Both "must" and "should" are model verbs.
The term "must" is commonly used to express any unavoidable requirement or obligation.
On the other hand, "should" is used as a probability, obligation, advice, recommendation, conditional, and exceptional mood.
16. Because the first pair of pants did not fit properly, he asked for
(A) another pants
(B) others pants
(C) the others ones
(D) another pair

## Answer: D

The difference between another and other can be drawn clearly on the following grounds:
The word 'another' means an extra or additional, which may be similar to or different than the one you already have an idea of or specifically stated.
In contrast, 'other' can be understood as a person or thing which is not included in the one previously talked about, i.e. it represents the left out people or items.Another is mainly used with a singular nonspecific countable noun, but it can also be used with plural nouns also.As against, 'other' is used with plural nouns.Pair is used with pants, pants cannot be used alone, hence another pair is correct
17. Shaili has not $\qquad$
(A) lived lonelynessly in times previous
(B) never before lived sole
(C) ever lived alone before
(D) before lived without the company of his friends
Answer: D
The correct answer is before lived without the company of his friend.
Lonelynessly is not a word hence cannot be used, option 1 is not correct.
'Not' is not followed by either never or ever, hence options 2 and 3 are not correct.
Option 4 perfectly fits in the given blank.
Present perfect tense (have/has + past participle)
18. The committee has met and
(A) They have reached a decision
(B) It has formulated themselves a decision
(C) It has formulated its decision
(D) It has reached a decision

Answer: D
The subject of the given question (the committee) is singular.'The committee' is a collective noun. It is generally followed by a singular verb and uses a singular pronoun.
For example: The committee agreed to allow the policy to stand as long as it was reviewed after a period of consultation. The management committee
meets regularly. According to the above rule and explanation, only option 4 will be the correct answer to the given blank. Hence, the correct sentence is: The committee has met and it has reached a decision.
Direction (Q. Nos. 19 to 23): The given pair of words contains a specific relationship to each other. Select the best pair of choices which expresses the same relationship as the given.
19. APIARY: BEE :
(A) Mountain : Skier
(B) Airport : Flight
(C) Schedule : Event
(D) Stable: Horse

Answer: D
apiary : bee :: Stable : horse
20. SEA : SHIP : :
(A) River: Shore
(B) Bat : Football
(C) Rain: Cloud
(D) River: Boat

Answer: D
Sea: ship :: River : boat
21. Peel: Peal::
(A) Coat: Rind
(B) Laugh : Bell was reached at
(C) Rain : Reign
(D) Brain: Cranium

Answer: C
Homophones are the words that are the same in pronunciation but have different meaning. A homophone may be different in spelling and origin. For examples: new and knew, dual and duel.
22. Club : Golf : :
(A) Author: Book
(B) Goalkeeper: Soccer
(C) Racket: Tennis
(D) Cricket: Bat

## Answer: C

A CLUB is used to strike a BALL in the game of golf Similarly a RACKET is used to strike a BALL in the game of TENNIS
23. Love: Obsession :
(A) Happiness : Victory
(B) Amity : Enmity
(C) Enemy: Hatred
(D) Sorrow : Misery

Answer: D
In extreme cases Love leads to obsession. Similarly, in extreme cases Sorrow leads to misery. Hence, 'Sorrow: Misery' is the correct answer.
24. There are two bags, one of which contains 5 red and 7 white balls and the other 3 red and 12 white balls. A ball is to be drawn from either of the two bags. What is the chance of drawing a red ball?
(A) $35 / 110$
(B) $37 / 120$
(C) $15 / 84$
(D) $21 / 60$

## Answer: B

The event can be defined as: First bag is selected and red ball is drawn. $1 / 2 \times 5 / 12+\mathrm{y} 2 \times 3 / 15=$ $(5 / 24)+(3 / 30)=37 / 120$
25. Karthik started a business investing Rs. 9,000 . After 5 months, Shyam joined with a capital of Rs. 8,000 . If at the end of the year, they earn a profit of Rs. 6,970 , then what will be the share of Shyam in the profit?
(A) Rs. 2,480
(B) Rs. 2,390
(C) Rs. 2,540
(D) Rs. 2,380

## Answer: D

Now as per question, Kamal invested for 12 months and Sameer invested for 7 months. So Kamal : Sameer $=(9000 \times 12): \quad(8000 \times 7)$
= 108 : 56
= 27 : 14
Sameer Ratio in profit will be
$=6970 \times 14 / 41=$ Rs. 2380
26. If Vaishali can paint a house in 4 hours, and Karan can paint the same house in 6 hours, how long will it take for both of them to paint the house together?
(A) 2 hours and 24 minutes
(B) 3 hours and 12 minutes
(C) 3 hours and 44 minutes
(D) 4 hours and 10 minutes

## Answer: A

Sally can paint a house in 4 hours; Which means in 1 hour she can paint 1/4th of the house. John can paint the same house in 6 hours. Which means in 1 hour she can paint 1/6th of the house.
Together in 1 hour they can paint: - $1 / 4+1 / 6=$ 5/12th of the house.
Total Hours for painting the house together will be 12/5 = 2.4 Hours.

Hence Answer A
27. Solve the following equation for

$$
A: 2 A / 3=24 / 5:
$$

(A) -7.2
(B) 7.2
(C) 3.6
(D) -3.6

Answer: No correct answer
$A: 2 A / 3=24 / 5: ? \Rightarrow A \times(3 / 2(A)=24 / 5: ?$
$\Rightarrow 3 / 2=(24 / 5) \times(1 / ?) \Rightarrow 1 / 2=(8 / 5) \times$ ?
$\Rightarrow 5 \times$ ? $=16 \Rightarrow$ ? $=16 / 5$
$\Rightarrow$ ? $=3.2$

## $\therefore$ The required value is 3.2

28. If Aarushi is $\mathbf{6}$ years older than Inaya, and Vishnu is 5 years older than Inaya, and the total of their ages is 41. Then how old is Inaya?
(A) 8
(B) 10
(C) 14
(D) 19

Answer: B
Aarushi=6 + Inaya
Vishnu= $5+$ Inaya
$6+$ Inaya $+5+$ Inaya + Inaya $=41$
Inaya=10 years
29. Which one of the following numbers is neither prime nor composite?
(A) 1
(B) 3
(C) 5

## (D) 7

## Answer: A

1 has only one factor, which is itself. It doesn't satisfy the definition of both prime and composite numbers, so it cannot be a prime or composite number. So on this basis we can easily say that " 0 " and " 1 " are neither prime nor composite
30. Which one of the following numbers is the smallest composite number ?
(A) 2
(B) 3
(C) 4
(D) 6

Answer: C
In mathematics, composite numbers also known as composites in Mathematics are numbers that have more than 2 factors, not like prime numbers that have only one factor, i.e. 1 and the number itself. Composite numbers are all natural numbers that are not prime numbers since they can be divided by more than two numbers.
Therefore, the smallest composite number is 4 . The smallest composite number of 2 digits is 10.
4 is a composite number because there are 2 variables. One is $1 \times 4=4$ and the other is $2 \times 2=$ 4.
31. If selling price is doubled, the profit triples. Find the profit percent:
(A) 66.6
(B) 100
(C) 105.3
(D) 120

## Answer: B

We solve the problem by assuming that the original cost price and selling price be CP and SP. Now, we have the profit (p), we have, $p=S P-C P-$ (1)
It is given in the problem that on doubling the selling price, the profit triples, we have, $3 p=2 S P-C P--(2)$
Now, we need to find the profit percent given by Selling Price - Cost Price/Cost Price $\times 100$
We need to find SP in terms of CP to find the profit percent. We use equations (1) and (2) and solve them to find SP in terms of CP. Firstly, we subtract (1) from (2), we get -
$3 p-p=S P$
$S P=2 p--(A)$
Putting this in (1), we get,
$p=2 p-C P$
$C P=p--(B)$
From (A) and (B), we get that SP = 2CP. Now, we put this in the formula of profit percentage given by Selling Price - Cost Price/Cost Price $\times 100$.
We get,
(2CP-CP/CP) $\times 100=100 \%$
Hence, the correct option is (B) $100 \%$.
32. A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20\%?
(A) 3
(B) 4
(C) 5
(D) 6

Answer: C
CP of six toffees= Re. 1
SP of 6 toffees $=(120 \%)^{*} 1=$ Rs. $6 / 5$
For $6 / 5$ rupees, toffees sold= 6
For Re. 1, toffees sold=6*5/6=5
33. The ratio between the speeds is 7 : 8.If the second train runs 400 km in 4 hours, then the speed of the first train is:
(A) $70 \mathrm{kms} / \mathrm{hr}$
(B) $75 \mathrm{kms} / \mathrm{hr}$
(C) $84 \mathrm{kms} / \mathrm{hr}$
(D) $87.5 \mathrm{kms} / \mathrm{hr}$

Answer: D
The ratio of speed of two trains $=7: 8$
Formula Used: Distance $=$ speed $\times$ time
Speed of 2nd train $=400 \mathrm{kms} / 4=100 \mathrm{~km} / \mathrm{hr}$
From the ratios, speed of 1 st train $=7 x$, and speed of $2 n d$ train $=8 x$
$\Rightarrow 8 \mathrm{x}=100$
$\Rightarrow \mathrm{x}=12.5 \mathrm{~km} / \mathrm{hr}$
So, speed of 1 st train $=7 x=7 \times 12.5=$
$87.5 \mathrm{~km} / \mathrm{hr}$
34. The distance between two places $A$ and $B$ is 570 kms . A train starts from $A$ at 50 kmph at 6 AM and another starts from B at 80 kmph at 7 AM towards each other. At what time will they meet?
(A) 10.00 AM
(B) 10.30 AM
(C) 11.00 AM
(D) 11.30 AM

## Answer: C

Distance between two places
$A$ and $B=570 \mathrm{~km}$
Train starts from A at $6 \mathrm{AM}=50 \mathrm{kmph}$
Train starts from $B$ at $7 \mathrm{AM}=80 \mathrm{kmph}$

## Calculation:

Let they will meet after $x$ hours after the train starts from A
To meet each other they together have to cover 570 km
According to question
$\Rightarrow 50 x+80(x-1)=570$
$\Rightarrow 50 x+80 x-80=570$
$\Rightarrow 130 x=650$
$\Rightarrow x=5$
They will meet $6 A M+5 A M=11$ AM
$\therefore$ They will meet at 11.00 AM
35. In covering a distance of 30 km, Rajinder takes 2 hours more than Sameer. If Rajinder double his speed, then he would take 1 hour of less than Sameer. Rajinder's speed is
(A) 5 kmph
(B) 6 kmph
(C) 7 kmph
(D) $\quad 7.5 \mathrm{kmph}$

Answer: A
Let Abhay's speed be $x \mathrm{~km} / \mathrm{hr}$
Then, $30 x-302 x=3 \Rightarrow 6 x=30 \Rightarrow x=5 k m / h r$
36. Identify the next number in the series 2 , $3,5,9,17,33,65$,
(A) 120
(B) 129
(C) 145
(D) 170

Answer: B
( $2 \times$ previous element) -1
37. Find the wrong number in the series, 23 , 46, 95, 191.
(A) 23
(B) 95
(C) 46
(D) 191

Answer: C
The logic followed here is:
$(11 \times 2)+1=23$;
$(23 \times 2)+1=47 \neq 46$;
$(47 \times 2)+1=95$;
$(95 \times 2)+1=191$;
Hence, '46' is the wrong term in the given series.
38. Introducing a boy, a girl said, "He is the son of the daughter of the father of my uncle." How is the boy related to the girl ?
(A) Brother-in-law
(B) Uncle
(C) Brother
(D) Nephew

Answer: C

39. Pointing to a photograph Lata says, "He is the son of the only son of my grandfather." How is the man in the photograph related to Lata?
(A) Uncle
(B) Brother
(C) Cousin
(D) Inadequate

## Answer: B

The man in the photograph is the son of the only son of Lata's grandfather i.e., the man is the son of Lata's father. Hence, the man is the brother of Lata.
40. Pointing to a photograph Bajpai said, "He is the son of the only daughter of the father of my brother." How Bajpai is related to the man in the photograph ?
(A) Nephew
(B) Maternal uncle
(C) Father
(D) Brother

## Answer: B

The man in the photo is the son of the sister of Bajpai. Hence, Bajpai is the maternal uncle of the man in the photograph.
Direction (Q. Nos. 41 to 45): Study the following graph and answer.
The bar graph given below shows the sales of books (in thousand number) from six branches of a publishing company during two consecutive years 2000 and 2001.
Sales of Books (in thousand numbers) from Six Branches - B1, B2, B3, B4, B5 and B6 of a publishing Company in 2000 and 2001.

41. What is the ratio of total sales of Branch $B 2$ for both the years to the of total sales of branch B4 for both the years
(A) $2: 3$
(B) $3: 5$
(C) $4: 5$
(D) $7: 9$

Answer: D
Sales of branch B2 for both years $=$
75 + 65 = 140
Sales of branch B4 for both years $=$
$85+95=180$

$$
\frac{140}{180}=\frac{7}{9}=7: 9
$$

Required ratio $=$
42. Total sales of branch B6 for both the years is what percent of the total sales of branches B3 for both the years?
(A) $68.54 \%$
(B) $71.11 \%$
(C) $73.17 \%$
(D) $75.55 \%$

## Answer: C

Total sales of branch B6 for both the years =
$70+80=150$

Total sales of branch B3 for both the years $=95+$
$110=205$
Required percentage =

$$
\left(\frac{150}{205} \times 100\right) \%=73.17 \%
$$

43. What is the average sales of all the branches (in thousand numbers) for the year 2000 ?
(A) 73
(B) 80
(C) 83
(D) 88

Answer: B
Average sales of all the six branches (in thousand numbers) for the year 2000
$=\frac{1}{6} \times(80+75+95+85+75+70)$
$=80$
44. Total sales of branches B1, B3 and B5 together for both the years (in thousand numbers) is:
(A) 250
(B) 310
(C) 435
(D) 560

## Answer: D

According to the question,
Total sales of branches B1, B3 and B5 together for both the years (in thousand numbers)
= Total sales of branch B1 for both years + Total sales of branch B3 for both years + Total sales of branch B5 for both years
$=(80+105)+(95+110)+(75+95)$
$\Rightarrow 185+205+170$
$\Rightarrow 560$
45. Ratio of total number of books sold in the year 2000 and in the year 2001 is:
(A) $96: 110$
(B) $48: 45$
(C) $120: 80$
(D)
80:90

## Answer: A

Total sale of books for all branches for
$2000=80+75+95+85+75+70=480$
Total sale of books for all branches for $2001=105$ $+65+110+95+95+80=550$
$\therefore$ Ratio of total sales of all branches for the year 2000 to $2001=480 / 550=48: 55$

Direction (Q. Nos. 46 to 48): In the questions two statements follow two conclusions, which of the conclusion follow the two given statements?
46. Statements:

Some actors are singers. All the singers are dancers:
Conclusions:
(A) Some actors are dancers.
(B) No singer is actor.
(A) Only (A) conclusion follows
(B) Only (B) conclusion follows
(C) Either (A) or (B) follows
(D) Neither (A) nor (B) follows

Answer: A

47. Statements:

Some ants are parrots. All the parrots are apples.
Conclusions:
(A) All the apples are parrots.
(B) Some ants are apples.
(A) Only (A) conclusion follows
(B) Only (B) conclusion follows
(C) Either (A) or (B) follows
(D) Neither (A) nor (B) follows

Answer: B

(or)

Ants

Only (2) follow.
48. Statements:

Some papers are pens. All the pencils are pens.

## Conclusions:

(A) Some pens are pencils.
(B) Some pens are papers.
(A) Only (A) conclusion follows
(B) Only (B) conclusion follows
(C) Either (A) or (B) follows
(D) Both (A) and (B) follows

Answer: D

49. A grocer has a sale of Rs. 6,435, Rs. 6,927, Rs. 6,855, Rs. 7,230 and Rs. 6,562 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs.6,500?
(A) Rs. 4,991
(B) Rs. 5,991
(C) Rs. 6,001
(D) Rs. 6,991

## Answer: A

Total sale for 5 months
$=$ Rs. $(6435+6927+6855+7230+6562)$
=Rs. 34009
Therefore Required sale
$=$ Rs. [(6500 $\times 6$ ) - 34009]
$=$ Rs. (39000-34009)
= Rs. 4991
50. Which one of the following pairs of thinkers advocated the doctrine and practice of Sarvodaya?
(A) Gandhi and Marx
(B) Gandhi and Tilak
(C) Gandhi and Vinoba
(D) Gandhi and Bose

Answer: C
Sarvodaya is a sanskrit term meaning 'universal uplift' or 'progress of all'. The term was used by Mahatma Gandhi as the title of his 1908 translation of John Ruskin's tract on political economy, Unto This Last, and Gandhi came to use the term for the ideal of his own political philosophy.
Later Gandhians, like the Indian non violence activist Vinoba Bhave, embraced the term as a name for the social movement in postindependence India which strove to ensure that self-determination and equality reached all strata of Indian society.It was Gandhi who laid the foundation of 'SarvodayaSamaj' (A society for the Welfare of All). Acharya Vinoba Bhave and Jayaprakash Narayan and many Gandhians joined hands with him in this movement.
51. In the first 10 overs of a cricket game, the run rate was only 3.2. What should be the run rate in the remaining 40 overs to reach the target of $\mathbf{2 8 2}$ runs?
(A) 6.25
(B) 6.5
(C) 6.75
(D) 7

Answer: A
for the 1st 10 overs the score will be 10*3.2=32 so the remaining score is 282-32=250 remaining overs $=40$
so the run rate $250 / 40=6.25$
ans is 6.25
52. A family consists of two grand-parents, two parents and three grand-children. The average age of the grandparents is 67 years, that of the parents is 35 years and that of the grandchildren is 6 years. What is the average age of the family?
(A) $28 \frac{4}{7}$ years
(B) $31^{\frac{5}{7}}$ years
(C) $32 \frac{1}{7}$ years
(D) None of these

Answer: B
Required average $=$
$(67 * 2+35 * 2+6 * 3) /(2+2+3)$
$=(134+70+18) / 7=222 / 7=31(5 / 7)$ years.
53. 3 pumps, working 8 hours a day, can empty a tank in 2 days. How many hours a day must 4 pumps work to empty the tank in 1 day?
(A) 9
(B) 10
(C) 11
(D) 12

## Answer: D

## Formula used:

$M_{1} \times T_{1}=M_{2} \times T_{2}$
Where $M_{1}$ and $M_{2}$ is men
and $T_{1}$ and $T_{2}$ is time

## Calculation:

Let H hours be the number of hours required
Applying the above formula
$\Rightarrow 3 \times 8 \times 2=4 \times 1 \times H$
$\Rightarrow \mathrm{H}=48 / 4$
$\Rightarrow H=12$ hours
54. A boat can travel with a speed of 13 $\mathrm{km} / \mathrm{hr}$ in still water. If the speed of the stream is $4 \mathrm{~km} / \mathrm{hr}$, find the time taken by the boat to go 68 km down-stream:
(A) 2 hours
(B) 3 hours
(C) 4 hours
(D) 5 hours

## Answer: C

Speed downstream $=(13+4) \mathrm{km} / \mathrm{hr}=17 \mathrm{~km} / \mathrm{hr}$.

Time taken to travel 68 km downstream $=68 / 17 \mathrm{hrs}$ $=4 \mathrm{hrs}$.

Direction (Q. Nos. 55 to 58) Pick out the most effective word to fill in the blanks.
55. I saw a $\qquad$ of cows in the field.
(A) group
(B) herd
(C) swarm
(D) flock

Answer: B
A group of cows or the collective noun of cows is herd. Herd is the group that shares the same characteristics or has something similar.
56. The grapes are now ................ enough to be picked.
(A) ready
(B) mature
(C) ripe
(D) advanced

Answer: C
Ripe - It is used to refer to fruits, when they are ready to be plucked and taste the best at that time.
57. Rohan and Rohit are twin brothers, but they do not look $\qquad$
(A) unique
(B) different
(C) likely
(D) alike

Answer: D
Twins are expected to be identical in their looks.
So, alike is the most appropriate word.
58. To err is $\qquad$ to forgive is divine.
(A) beastly
(B) human
(C) inhuman
(D) natura

## Answer: B

To err is human, to forgive divine.
A commonly used proverb which means that it is natural for a man to make mistakes but the one who forgives (another) easily acts godlike (divine).
59. The present population of a village is 8,000 . If every year the population increases at the rate of $10 \%$, what shall be the population of the village after three years?
(A) 16,048
(B) 10,648
(C) 16,480
(D) 14,068

## Answer: B

New population $=$ Present population $\times[(100+$ increase\%)/100]nwhere, $\mathrm{n}=$ number of years
New population $=8000 \times[(100+10) / 100] 3$
$\Rightarrow 8000 \times 110 / 100 \times 110 / 100 \times 110 / 100$
$\Rightarrow 8 \times 11 \times 11 \times 11$
$\Rightarrow 10,648$
60. 8 tailors can mend 360 shirts in 12 average weight of 18 students is days. How many tailors are required to mend 450 shirts in 15 days?
(A) 8
(B) 12
(C) 15
(D) 20

Answer: A
8 tailors can mend 360 shirts = 12 days
Formula used:
$\mathrm{M} 1 \times \mathrm{D} 1 / \mathrm{W} 1=\mathrm{M} 2 \times \mathrm{D} 2 / \mathrm{W} 2 \mathrm{Where}, \mathrm{M} 1$ and M 2 are Tailors, D1 and D2 are days, W1 and W2 are works
Let $M$ be the numbers required
Applying the above formula
$\Rightarrow(8 \times 12) / 360=(M \times 15) / 450$
$\Rightarrow 96 / 360=15 \mathrm{M} / 450$
$\Rightarrow 4 / 15=\mathrm{M} / 30$
$\Rightarrow 15 \mathrm{M}=120$
$\Rightarrow M=8$
$\therefore 8$ tailors are required to mend 450 shirts in 15 days
61. If a man takes 5 minutes to go round a circle of circumference 44 meters, how long he would take to cover a distance equal to the distance of its diameter?
(A) $5 / 22$ minutes
(B) $15 / 22$ minutes
(C) $25 / 22$ minutes
(D) 35/22 minutes

## Answer:D

Circumference $=(22 / 7)^{\star} \mathrm{d}=44$
$\mathrm{d}=14 \mathrm{~m}$
speed*time=distance
speed*5=44
speed $=44 / 5 \mathrm{~m} / \mathrm{min}$
speed*time=distance
(44/5)*time=14
Time $=14 * 5 / 44=35 / 22$ minutes
62. What is $\mathbf{2 0 \%}$ of $\mathbf{4 0 \%}$ ?
(A) $8 \%$
(B) $80 \%$
(C) $60 \%$
(D) $6 \%$

## Answer: A

$20 \%$ of $40 \%$ can be written as
$=20 / 100 \times 40 \%$
= $8 \%$
63. Out of 30 students in a class, the average weight of 18 students is 20 kg and the average of remaining 12 students have average weight 25 kg . What is the average weight of all the 30 students of the class?
(A) 11 kg
(B) 20 kg
(C) 22 kg
(D) 23.5 kg

Answer: C
Average weight of all the 30 students= $\left(18^{*} 20\right)+(12 * 25) / 30=22 \mathrm{~kg}$

$\Rightarrow 713.36$
Required percentage $=(495.4 / 713.36 \times 100)$
$\Rightarrow$ 69.4\%
$\therefore$ Required percentage is $69.4 \%$
66. What is the average amount of interest per year which the company had to pay during this period?
(A) Rs. 33.72 lakhs
(B) Rs. 34.66 lakhs
(C) Rs. 36.66 lakhs
(D) Rs. 37.77 lakhs

Answer: C
The amount of interest per year $=(23.4+32.5+$ $41.6+36.4+49.4)$
$\Rightarrow 183.3$
Required average amount of interest $=183.3 / 5$
$\Rightarrow 36.66$ lakhs
67. The total amount of bonus paid by the company during the given period is approximately what percent of the total amount of salary paid during this period?
(A) $1.25 \%$
(B) $1.11 \%$
(C) $0.98 \%$
(D) $0.89 \%$

## Answer: C

Total bonus $=3+2.52+3.84+3.68+3.96=17$ lakh
Totalsalary $=288+342+324+336+420=1710$ lakh
Required percentage $=17 / 1710 \times 100=0.99$
Direction (Q. Nos. 68 to 70): The linediagram showing the number of studentsappearing to a competitive examinationfrom various towns $A$, $B, C, D, E$ (inthousands). Study the diagram carefullyand answer the question below.
68. What is the ratio of number of students appearing for the competitive examination from town $B$ to that from town A ?
(A) 13: 14
(B) $13: 15$
(C) $16: 15$
(D) 13:16

Answer: D

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Ratio of number of students from Town $B$ to that from Town A

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\(=32.5 \times 1000 / 40 \times 1000=325 / 400=13 / 16=13: 16\)
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69. What is the average number of students appearing the competitive examination from all the town together?
(A) 33.5 thousand
(B) 3.35 thousand
(C) 17.5 thousand
(D) 35.3 thousand

## Answer: A

Total number of students appearing the competitive examination from all the town together
$=(40+32.5+17.5+42.5+35)$
$\Rightarrow 167.5$
Average number of students appearing for the competitive examination $=167.5 / 5$
$\Rightarrow 33.5$
70. The number of students appearing for the competitive examination from town $D$ is approximately what percentage of the number of students appearing for the competitive examination from town $C$ ? (approximation to be done nearest integer)
(A) $341 \%$
(B) $243 \%$
(C) $273 \%$
(D) $342 \%$

Answer: B
Required
percentage $=\{(42.5 \times 1000) /(17.5 \times 1000)\} \times 100 \%=(42$ $5 / 175 \times 100) \%=425 \times 4 / 7 \%=1700 / 7 \%=242.85 \% \approx 243$ \%
Direction (Q. Nos. 71 to 80): Read thefollowing two passages and answer the questions that follow each passage. Youranswers to these questions should bebased on the passages only.
Passage - 1
The Shah of Persia had heard ofBirbal's intelligence and he wrote to Emperor Akbar requesting that Birbal beallowed to visit his Court.

Akbar waspleased because he was extremely proud
of Birbal, and sent him to the Persian courtin all splendor.
As soon as Birbal reached thePersian capital, the Shah sent for him. When he reached the royal audiencechamber, he saw a semicirculararrangement of seats. In each of them wasa well-dressed regal figure and all of themwere dressed exactly alike. Anyone ofthem could have been the Shah of Persia. Birbal stopped for a while, thenlooked keenly, went and bowed to the realShah.
Taken aback by this, the Shah ofPersia listened to Birbal's floweryaddress and replied in the same flowerylanguage. Then he asked, "YourMajesty! When I looked round, I foundeveryone looking at you. Only you did notlook at anyone. I knew at once who thereal Shah of Persia as." The Shahbestowed upon Birbal the title Ocean ofIntelligence by which men knew him everafter.
71. The Shah of Persia invited Birbalbecause he wanted to
(A) Test his immense wisdom
(B) Test his mental alertness
(C) Test his well-known valor
(D) Test his wit and humour

## Answer: A

The Shah of Persia had heard of Birbal's intelligence and he wrote to Emperor Akbar requesting that Birbal be allowed to visit his Court
72. In each seat sat a well-dressed regal figure. The phrase a regal figure here suggests
(A) A royal person
(B) An ordinary person
(C) Atypical person
(D) An eccentric person

## Answer: A

If you describe something as regal, you mean that it is suitable for a king or queen, because it is very impressive or beautiful.
73. Emperor Akbar sent Birbal to Persia in splendor. The underlined phrase here means.
(A) In all glory and pomp
(B) In all richness and majesty
(C) In all majesty and glory
(D) In all humility and grace

## Answer: C

Majesty and glory fit perfectly in the given context, as Akbar was proud of Birbal and he wanted to show all the majestic (dignity) and glory (Notable achievement) to the Persian king.
74. The Shah of Persia was taken aback by the way in which Birbal recognized him. In other words, he
(A) Was perturbed
(B) Was badly hurt
(C) Was turned back
(D) Was surprised

Answer: D
Taken aback: to surprise or shock (someone)
75. The author has used the wordflowery to show that Birbal:
(A) Was a handsome man
(B) Was fond of flowers
(C) Was a very noble man
(D) Was very learned

Answer: D
Passage - 2
The greatest enemy of mankind, people have discovered is not science, but war. Science merely reflects the prevailing social forces. It is found that when there is peace, science is constructive, when there is war, and science is perverted to destructive ends. The weapons which science gives us do not necessarily cause war, they make war increasingly terrible. Till now, it has brought us to the doorstep of doom. Our main problem, therefore, is not to curb science, but to stop war to substitute law for force, international government for anarchy in the relations ofone nation with another. That is a job in which everybody must participate, including the scientists. The fact that we have very little time. The hour is late andour work has scarcely begun. Nowwe areface to face with an urgent question - caneducation and tolerance, understandingand create intelligence run fast enough tokeep us abreast with our own
mountingcapacity to destroy? That is the questionwe shall have to answer one way or theother in this generation. Science must helpus in arriving at the answer, but the maindecision lies within ourselves.
76. According to the writer, the realenemy of mankind is not science, butwar because
(A) Science merely invents the weapons with which war is fought
(B) Science during wars becomes destructive
(C) The weapons that science invents necessarily lead to war
(D) The weapons invented by science do not cause war, though these make it more destructive

## Answer: D

The passage discusses the greatest enemy of mankind, War.
From the given passage,'...Science merely reflects the prevailing social forces. It is found that when there is peace, science is constructive, when there is war, and science is perverted to destructive ends. The weapons which science gives us do not necessarily cause war, they make war increasingly terrible...'

We can imply that science itself is not the enemy of mankind but the use of science for war, hence weapons that have been invented do not cause war but the intentions of human beings will.
Option 1 cannot be true as we cannot conclude that science merely helps in weapon-making, it is true from the passage that we have advanced in the weapon system to a level where we have doom at our doorstep.
Option 2 doesn't substantiate the real enemy of mankind is war.
Option 3 is opposite to the view mentioned in the passage, weapons invented by science doesn't lead to war.
77. War can be stopped if:
(A) Science is not allowed to lead us to utter destruction
(B) We replace force and lawlessness by law and International Government
(C) Science is restricted to be utilized only during wartime
(D) Weapons invented by science are not used to launch a war
Answer: B
Our main problem, therefore, is not to curb science, but to stop war - to substitute law for force, international government for anarchy in the relations ofone nation with another.
78. According to the writer, the main, problems we are faced with is to:
(A) Stop science from reflecting social forces
(B) Stop science activities everywhere
(C) Abolish war
(D) Prevent scientists from participating in destructive activities

## Answer: C

Our main problem, therefore, is not to curb science, but to stop war - to substitute law for force, international government for anarchy in the relations ofone nation with another.
79. Our mounting sagacity to destroy can be under control by:
(A) Encouraging social forces
(B) Education and broad-mindedness
(C) Insight and constructivethinking
(D) Both (B) and (C) as abovetogether

## Answer: D

That is the question we shall have to answer one way or the other in this generation. Science must help us in arriving at the answer, but the main decision lies within ourselves.
80. The expression "bring to the doorstep of doom" means:
(A) Carry close to death and destruction
(B) Head to the threshold of a new destiny
(C) Indulge in a ruinous activity
(D) Introduces to an unpredictable destiny

## Answer: A

As the author is speaking about the death and destruction being made increasingly terrible byscience, warning the magnanimity of the weapons that can destroy the whole world in seconds,Hence using the idiom doorstep of doom which means carry close to death and destruction.'Doorstep doom' also means Head to the threshold of a new density and Indulge in a ruinous activity. However, in the given context it means closer to death and destruction.

