

Lockdown 2.0 Study Plan

Day 10 | Day 8

1. A is 50% more efficient than B. Working together they finished a work in 15 hours. If B will work alone, how long he will take to finish the same work?

- A. 24 hrs
- B. 36 hrs
- C. $37\frac{1}{2}$ hrs
- D. $32\frac{1}{4}$ hrs

2. Two cyclists started simultaneously towards each other and meet each other 3 hours 20 minutes later. How much time will it take the slower cyclist to cover the whole distance if the first arrived at the place of departure of the second 5 hours later than the second arrived at the point of departure of the first?

- A. 5
- B. 8
- C. 9
- D. 7

3. If $a:b = 5:8$, find the value of $(6a - 5b)/(a + 2b)$.

- A. 10/21
- B. -21/10
- C. -21/10
- D. -10/21

4. At 19% discount the selling price of a freezer is Rs 24000, what is the selling price if the discount is 32.5%

- A. Rs 13500
- B. Rs 20000
- C. Rs 16065
- D. Rs 21465

5. If the ages of A and C are added to twice the age of B, the total becomes 59. If the ages of B and C are added to thrice the age of A, the total becomes 68 and if the age of

A is added to thrice the age of B and thrice and age of C, the total becomes 108. What is the age of A?

- A. 18 years
- B. 15 years
- C. 12 years
- D. 20 years

6. If $1/2$ of tank hold 120 liters of water, then the quantity of water that $1/3$ of tank holds is:

- A. 80 liters
- B. 40 liters
- C. 100 liters
- D. 90 liters

7. After deducting 12% from a certain sum and then deducting 25% from the remainder, 2508 is left, then what is the initial sum?

- A. 3500
- B. 3450
- C. 3970
- D. 3800

8. In what ratio a retailer should mix two varieties of sugar costing Rs. 30/kg and Rs. 40/kg respectively so as to get a mixture worth of Rs. 33/kg?

- A. 4:5
- B. 5:8
- C. 7:9
- D. 7:3
- E. 5:3

9. Three persons start running at the same time from the same point. Their speeds are 9 km/h, 13 km/h and 10 km/h respectively. If they are running on an 8 km circular road then after how much time will they meet at the starting point?

- A. 8 hrs
- B. 10 hrs



Gradeup Green Card

Unlimited Access to All 350+ SSC & Railways Mock Tests

- C. 16 hrs
- D. 24 hrs

10. Unit digit of $(6474)^{1863} \times (605)^{427} \times (281)^{491} = ?$

- A. 0
- B. 1
- C. 3
- D. 2

11. An office opens at 10 AM and closes at 5 PM. The lunch interval is 30 minutes. The ratio of lunch interval to the total period of office hours is

- A. 1:7
- B. 1:14
- C. 7:1
- D. 14:1

In the following question, four alternatives are given for the idiom/phrase printed in bold in the sentence. Choose the alternative which best expresses the meaning of the idiom/phrase.

12. After getting a severe scolding from his mother, Raghu **got down to business**.

- A. began to work seriously
- B. joined his father's business
- C. started a business
- D. became business like

Direction: In the following question, a sentence has been given in Active/Passive Voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in Passive/Active Voice.

13. We must endure what we cannot cure.
- A. What cannot cured must endured.
 - B. What could be cure must be endured.
 - C. What we cure must be endured.
 - D. What cannot be cured must be endured.

In the following question, out of the five alternatives, select the word opposite in meaning to the given word.

14. Negligent
- A. Inattentive
 - B. Imprudent
 - C. Insignificant
 - D. Careful

In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If the sentence is free from error, select 'No error'.

15. Banks were developed to keep people's money safe (A)/ and to make it available (B)/ when they need it. (C)/ No error (D).

- A. (A)
- B. (B)
- C. (C)
- D. No error

Select the most appropriate word to fill in the blanks.

16. The new typist is _____ efficient _____ the previous one.

- A. as; as
- B. as; so
- C. such; as
- D. so; that

17. Based on the newspaper reports (1)/ we can conclude that (2)/ many accidents caused by reckless driving. (3)/ No error

- A. (1)
- B. (2)
- C. (3)
- D. No error

Direction: In the given question, out of the four alternatives choose the one which can be substituted for the given words/sentence.



18. One who hates women

- A. Harangue
- B. Lapidist
- C. Misogynist
- D. Panacea

the following question, a sentence has been given in Active/Passive Voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in Passive/Active Voice.

19. She is reading the book everyday.

- A. The book is being read by her every day.
- B. The book is read by her every day.
- C. The book was read by her every day.
- D. The book was being read by her every day.

20. **Direction** : In the following questions, four alternatives are given for the idiom/phrase in bold in the sentence. Choose the alternative which best expresses the meaning of the idiom/phrase.

The policy caught the thief **red handed**.

- A. in a red uniform
- B. with blood in hands
- C. after reading the rules
- D. at the times of committing the crime

21. Which one of the following statements about gratuity is NOT correct?

- A. Gratuity is given by the employer to his/her employee for the services rendered by him/her during the period of employment
- B. Gratuity is usually paid at the time of retirement but it can be paid before retirement provided certain conditions are met.
- C. A person is eligible to receive gratuity only if he has completed minimum seven years of service with an organization

D. Gratuity can be paid before the completion of five years or the death of an employee or if he has become disabled due to accident or disease

22. In 2019, who became the first Indian to win an election in Japan?

- A. Charandeep Singh
- B. Yogendra Puranik
- C. Kishore Kafley
- D. Piyush Jindal

23. Which of the following is wrongly matched?

- A. Barometer -Pressure
- B. Lactometer- Milk
- C. Coluomb's law- Charges
- D. Nuclear reactor-Electron

24. What is the rank of India on Human Development Index 2018?

- A. 181
- B. 130
- C. 210
- D. 21

25. Marie curie, best known for her research in radioactivity won _____ nobel prizes

- A. 3 nobel prizes
- B. 1 nobel prizes
- C. 2 nobel prizes
- D. 7 nobel prizes

26. In December 2019, who has been appointed as the new chairman of the leading stock exchange National Stock Exchange (NSE)?

- A. Shashikant Jha
- B. Virendra Kant
- C. Arun Sinha
- D. Girish Chandra Chaturvedi



Gradeup Green Card

Unlimited Access to All 350+ SSC & Railways Mock Tests

27. When was Menstrual Hygiene Day observed globally in the year 2019?

- A. 28th May
- B. 10th March
- C. 12th April
- D. 12th June

28. Where was Khelo India Youth Games 2019 Held?

- A. Pune
- B. Ludhiana
- C. Delhi
- D. Noida

29. Who is the author of the famous book 'Meghdoot'?

- A. Kalidasa
- B. Sudraka
- C. Bhasa
- D. Vatsyayana

30. Tipu sultan was the ruler of _____.

- A. Hyderabad
- B. Madurai
- C. Mysore
- D. Vijayanagar

31. In the following question, select the missing number from the given alternatives.

7	9	6
4	5	7
2	3	?
9	11	9

- A. 4
- B. 5
- C. 7
- D. 8

32. In the following question, select the missing number from the given alternatives.

8	68	2
7	50	1
4	?	3

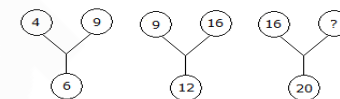
- A. 25
- B. 20
- C. 21
- D. 24

33. In the following question, select the missing number from the given alternatives.

1	4	4
5	8	?
25	16	9

- A. 7
- B. 6
- C. 3
- D. 1

34. In the following question, select the missing number from the given alternatives.



- A. 21
- B. 23
- C. 43
- D. 25

35. In the following question, select the missing number from the given alternatives.

9	7	3
8	4	9
4	2	2
18	14	?

- A. 13.5
- B. 12.5
- C. 11.5
- D. 14.5



36. In the following question, select the missing number from the given alternatives.

1	2	3
11	7	5
120	45	?

- A. 19
- B. 16
- C. 15
- D. 17

37. In the following question, select the missing number from the given alternatives.



- A. 125
- B. 25
- C. 156
- D. 625

38. In the following question, select the missing number from the given alternatives.

254	108	12
178	70	42
?	82	38
305	96	16

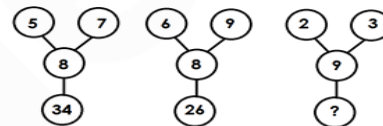
- A. 72
- B. 63
- C. 127
- D. 132

39. In the following question, select the missing number from the given alternatives.

874		
1	3	5
2	4	6
3	1	9
1	7	?

- A. 6
- B. 8
- C. 2
- D. 4

40. In the following question, select the missing number from the given alternatives.



- A. 59
- B. 51
- C. 35
- D. 42



Gradeup Green Card
Unlimited Access to All 350+ SSC & Railways Mock Tests

###ANSWERS###

1. Ans. C.

Ratio of efficiency $A:B = 150:100 = 3:2$

Ratio of time taken $A:B = 2:3$

Efficiency of B

$$= \frac{1}{\frac{1}{2} + \frac{1}{3}} \times \frac{1}{3} = \frac{2}{75}$$

Time taken by B $= \frac{75}{2} \text{ hrs} = 37\frac{1}{2} \text{ hrs}$

2. Ans. A.

Since the two cyclist meet after = 200 minutes they cover 0.5% of the distance per minutes and 30% per hour.

This condition is satisfied only if the slower cyclist takes 10 hour. and faster cycle takes 5 hours

3. Ans. D.

a:b=5:8

put a=5 and b=8 in the given expression

$$\frac{6a - 5b}{a + 2b} = \frac{30 - 40}{5 + 16} = -\frac{10}{21}$$

4. Ans. B.

We know that,

$$\text{New SP} = \text{Old SP} \times \frac{(100 - \text{new discount})}{(100 - \text{old discount})}$$

$$= 24000 \times \frac{100 - 32.5}{100 - 19}$$

= Rs20000

5. Ans. C.

A.T.Q.:

$A + C + 2B = 59$, $3A + B + C = 68$ and $A + 3B + 3C = 108$

$A + 3B + 3C = 108$

$\Rightarrow B + C = 68 - 3A$ and $A + 3(B + C) = 108$

Putting value of (B+C):

$\Rightarrow A + 3(68 - 3A) = 108$

$\Rightarrow 8A = 204 - 108$

$\Rightarrow A = 96/8 = 12$ years

6. Ans. A.

1/2 of tank capacity = 120 liters

Tank capacity = 240 litres

1/3 of tank Capacity = $(1/3) * 240 = 80$ litres

7. Ans. D.

Let the initial sum be x.

sum after deducting 12% = $x - 12\%x = 88\%$ of x

sum after deducting 25% from remainder = 88% of x - 25% of 88% of x

= 75% of 88% of x

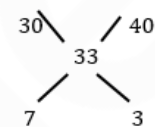
$$\Rightarrow \frac{75}{100} \times \frac{88}{100} \times x = 2508$$

$\Rightarrow x = 3800$

Initial sum = Rs.3800

8. Ans. D.

\Rightarrow According to the condition given in the problem,



\Rightarrow Required ratio = 7:3

9. Ans. A.

Speed of the first person = 9 km/hr

It means he covers 9 km in 1 hour. So, in covering the complete round of 8 km, first person will take $(8/9)$ hrs.

Similarly, second and third persons will take $(8/13)$ & $(8/10)$ hours respectively.

Hence, required time = L.C.M of $(8/9)$, $(8/13)$ & $(8/10)$

$= [\text{LCM of } (8,8,8)] / [\text{HCF of } (9,13,10)] = 8/1$

= 8 hours

10. Ans. A.

Unit digit:

$$= (6474)^{1863} \times (605)^{427} \times (281)^{491}$$

$$= (\dots 4)^{\frac{1863}{4}} \times (\dots 5)^{427} \times (\dots 1)^{491}$$

$$= (\dots 4)^3 \times 5 \times 1 \left[\frac{1863}{4} = 3 (\text{remainder}) \right]$$

$$= 4 \times 5 \times 1$$



Gradeup Green Card
Unlimited Access to All 350+ SSC & Railways Mock Tests

= 0

11. Ans. B.

Total period of office hours = 7 hrs

And lunch interval = 0.5 hrs

∴ Required ratio = 0.5 : 7 = 1 : 14

12. Ans. A.

The idiom "get down to business" means to begin doing something with the seriousness or determination the action requires; to begin doing what needs to be done. Therefore, option A is the correct answer.

13. Ans. D.

The given sentence is a combination of two sentences. "We must endure" is the first sentence and "what cannot be cured" is the second statement. So, while making the passive voice, we'll convert both the sentences into passive voice. The second statement will work as an object, so it will come in the beginning of the passive voice sentence. So, our passive voice statement will be as "What cannot be cured, must be endured."

14. Ans. D.

The word Negligent (Adjective) means: failing to give somebody/something enough care or attention; relaxed; not formal or awkward. So, the correct antonym is "careful".

15. Ans. B.

The error lies in part (B) of the sentence. The preposition 'to' is not required again. Please note that when two actions are connected by "and", the preposition "to" is used with the first action only. See the example:

We went there to play basket ball and hang out with friends.

16. Ans. A.

Comparative adjectives such as 'as' are used for like things. Therefore, the correct sentence will be as follows.

The new typist is **as** efficient **as** the previous one.

Therefore, option (A) is the correct answer.

17. Ans. C.

The part (2) suggests that sentence is of present tense. The use of the preposition "by" suggests that part (3) of the sentence is in passive voice. Therefore, we must introduce the helping verb "are" to make the sentence grammatically correct.

18. Ans. C.

Harangue= a lengthy and aggressive speech

Lapidist= someone skilled in working with precious stones

Misogynist= one who dislike women

Panacea= a solution or remedy for all difficulties or diseases

19. Ans. A.

The given sentence is in active voice. Its tense is present continuous. The structures for active/passive voices are:

Active: Subject + is/are/am + verb (ing) + object...

Passive: Object + is/are/am + being + verb (IIIrd form) + by + subject...

So, with the help of the above structures, we can convert the given sentence into passive voice as:

The book is being read by her every day.

20. Ans. D.

Red handed means a person has been discovered in or just after the act of doing something wrong or illegal. Hence 'at the times of committing the crime' is the most suitable response.

21. Ans. C.

Option C is not correct here.

- The **Gratuity Bill Act, 2018** introduced several new change in gratuity rule, some important are as follow-

- Gratuity shall be payable to an employee on termination of employment after he has



Gradeup Green Card

Unlimited Access to All 350+ SSC & Railways Mock Tests

rendered continuous service for not less than **5 years**. Hence option c is incorrect.

- The bill seeks to make formal sector workers eligible for tax free **Rs 20 lakh gratuity**.

22. Ans. B.

- In 2019, **Yogendra Puranik became the first Indian to win an election in Japan**.

- He is the first Indian origin person to win an election in Japan.

- He was elected to the Tokyo's Edogawa City assembly as City Councillor in April 2019.

23. Ans. D.

- A **nuclear reactor**, formerly known as atomic pile is a device used to initiate and control a sustained nuclear chain reaction.

- **Nuclear reactors** are used at nuclear power plants for electricity generation and in propulsion of ships.

- In the heart of the **reactor** (the core), atoms split apart and release heat energy, producing neutrons and splitting other atoms in a controlled **nuclear reactor**.

24. Ans. B.

The Rank of India in Human Development Index 2018 was 130.

* The Rank of India in Human Development Index **2019 is 129**.

* The human development index is released by United Nations Development Programme.

* The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: **a long and healthy life, being knowledgeable and have a decent standard of living**.

* The HDI is the geometric mean of normalized indices for each above mentioned three dimensions.

25. Ans. C.

* **In 1903 Marie Curie** was the first women to win a Nobel Prize for the discovery of radio activity.

* **In 1911** Curie won the Nobel Prize for her discovery of radium and polonium and became the first person to win two Nobel Prize.

* She was the first women to win a Nobel Prize, and she is the only women to win the award in two different fields.

26. Ans. D.

- In December 2019, **Girish Chandra Chaturvedi** has been appointed as the new chairman of the leading stock exchange National Stock Exchange (NSE).

- The appointment was approved by the markets regulator Securities and Exchange Board of India (SEBI).

- The position has been lying vacant after the resignation of Ashok Chawla as the chairman of NSE in January 2019.

- The National Stock Exchange was established in **1992**.

- It is headquartered in **Mumbai, Maharashtra**.

27. Ans. A.

- Menstrual Hygiene Day is an annual awareness day. Menstrual Hygiene Day **observed globally on May 28**.

- It was initiated by the German-based NGO WASH United in 2014.

28. Ans. A.

- Khelo India Youth games 2019 was held at **Shree Shiv Chhatrapati Sports Complex in Pune, Maharashtra**.

- Previously, these games were called as Khelo India School Games.

- It has been now renamed as Khelo India Youth Games.

- The Khelo India Youth Games (KIYG) is an effort to promote sports development at the grass root level.

29. Ans. A.



Gradeup Green Card

Unlimited Access to All 350+ SSC & Railways Mock Tests

• **Meghaduta is a lyric poem written by Kalidasa.**

• It is one of Kalidasa's most famous works. This book is divided into two parts, Purva-megha and Uttara-megha.

• Kalidasa is widely regarded as the greatest poet and dramatist in the Sanskrit language of India.

30. Ans. C.

Tiger of Mysore **Tipu Sultan** was a ruler of the Kingdom of **Mysore**. He was the **eldest son** of **Sultan Hyder Ali** of Mysore.

31. Ans. A.

In every column, we get the fourth number by adding first and second number and then subtracting the result from the third number.

1st Column: $(7 + 4) - 2 = 9$

2nd Column: $(9 + 5) - 3 = 11$

3rd Column: $(6 + 7) - ? = 9$

$\Rightarrow ? = 4$

Hence, option A is the correct answer.

32. Ans. A.

In every row, we get the middle number by adding the squares of first and third number.

1st row: $(8)^2 + (2)^2 = 68$

2nd row: $(7)^2 + (1)^2 = 50$

3rd row: $(4)^2 + (3)^2 = 25$

Hence A is the required answer.

33. Ans. B.

In every, column we get the second number by multiplying first and third number and then finding out the square root of number obtained after multiplying.

1st Column: $\sqrt{1 \times 25} = \sqrt{25} = 5$

2nd Column: $\sqrt{4 \times 16} = \sqrt{64} = 8$

3rd Column: $\sqrt{4 \times 9} = \sqrt{36} = 6$

Hence B is the required answer.

34. Ans. D.

Here, we get the lower number by multiplying the above two numbers and finding its square root.

1st Figure: $\frac{\sqrt{4 \times 9}}{\sqrt{9 \times 16}} = 6$

2nd Figure: $\frac{\sqrt{4 \times 9}}{\sqrt{9 \times 16}} = 12$

Similarly for 3rd figure we get,

$\frac{\sqrt{16 \times ?}}{\sqrt{9 \times 16}} = 20$

$\Rightarrow ? = 20$

On solving the above equation we get 25 as the missing number. Hence, D is the required answer.

35. Ans. A.

In every column, we get the fourth number by multiplying first and second element and then dividing the results by third element.

1st Column: $\frac{9 \times 8}{7 \times 4} = 18$

2nd Column: $\frac{2}{3 \times 9} = 14$

3rd Column: $\frac{2}{3 \times 9} = 13.5$

Hence, option (A) is the correct answer.

36. Ans. B.

I column;

$11^2 - 1^2 = 121 - 1 = 120$

II column;

$7^2 - 2^2 = 49 - 4 = 45$

III column;

$5^2 - 3^2 = 25 - 9 = 16$

Hence, option B is the right answer.

37. Ans. D.

It is clear that,

$(10 + 7)^2 = 17^2 = 289$

$(2 + 3)^2 = 5^2 = 25$

$(15 + 6)^2 = 21^2 = 441$

$(13 + 12)^2 = 25^2 = \mathbf{625}$

Hence, D is correct.

38. Ans. C.



Gradeup Green Card
Unlimited Access to All 350+ SSC & Railways Mock Tests

The sum of the first two numbers is equal to the sum of the last two numbers in each column.

Third column: $(12+42)=54$, $(38+16)=54$

Second column: $(108+70)=178$,

$(82+96)=178$

First column: $(254+178)=432$, $(?+305)=$

432 , $? = 127$

Hence, option C is correct.

39. Ans. D.

Clearly,

$$\begin{array}{r} 135 \\ +246 \\ +319 \\ +174 \\ \hline 874 \end{array}$$

874		
1	3	5
2	4	6
3	1	9
1	7	4

Hence, option D is the correct response.

40. Ans. B.

$$5 \times 7 + 8 = 43 \leftrightarrow 34$$

$$6 \times 9 + 8 = 62 \leftrightarrow 26$$

$$\text{Similarly, } 2 \times 3 + 9 = 15 \leftrightarrow 51$$

Hence, option B is the right answer.



Gradeup Green Card

Unlimited Access to All 350+ SSC & Railways Mock Tests



Gradeup Green Card

Features:

- › 350+ Full-Length Mocks
- › 30+SSC & Railways Exams Covered
- › Tests Available in English & Hindi
- › Performance Analysis & All India Rank
- › Previous Year Question Papers in Mock Format
- › Available on Mobile & Desktop

