



# Lockdown 2.0 Study Plan Day 14



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1. According to the population, which of the following is the World's largest religion?

- A. Christian
- B. Jainism
- C. Muslim
- D. None of the above

Ans. A

Sol. Christianity represents about a third of the world's population and is the world's largest religion.

- A study has found that Christians make up about 32 percent of the world's population, followed by Muslims, the second largest group.
- Hindus are the third largest group, followed by Buddhists and Jews.

2. The Kala Ghoda festival is a most prominent cultural event in \_\_\_\_\_.

- A. Chennai
- B. Mumbai
- C. Surat
- D. Jaipur

Ans. B

Sol. The **Kala Ghoda festival** is a most prominent cultural event in **Mumbai**.

- The nine-day long festival is a prominent attraction for thousands of visitors from all over the country as well as from the world.
- Kala Ghoda festival is held annually in the months of January or February.

3. Hojagiri dance form is from which state?

- A. Manipur
- B. Tripura
- C. Nagaland
- D. Uttarakhand

Ans. B

Sol. **Hojagiri** is a folk dance, performed in the state of **Tripura, India** by the **Reang** people.

- It is performed by women and young girls, about **4 to 6** members in a team, singing, balancing on an earthen pitcher and managing other props such as a **bottle** on the head and earthen **lamp** on the hand. while only the lower half of the body is moved.

4. Where is Ross Island situated in India?

- A. Andaman & Nicobar
- B. Tamil Nadu
- C. Maharashtra
- D. None of the above

Ans. A

Sol. **Ross Island** is an island of the **Andaman Islands**.

- It belongs to the **South Andaman administrative district, Andaman and Nicobar Islands**.
- The island is situated **3 km (2 mi)** east from downtown **Port Blair**.

5. Who wrote the book "Why Socialism" ?

- A. Mahatma Gandhi
- B. Acharya Narendra Dev
- C. M.N. Roy
- D. Jayaprakash Narayan

Ans. D

Sol. In a book "Why Socialism?" (1932), Jayaprakash explained why socialism would be right for India. He was adored by the youth for his idealism.

6. Nur-Sultan is new capital of which country?

- A. Kazakhstan
- B. Uzbekistan
- C. Turkmenistan
- D. Tajikistan

Ans. A

Sol.

- Kazakhstan has renamed its capital **Astana to Nur-Sultan**.
- It is done in honour of its outgoing leader Nursultan Nazarbayev.

7. Rashtriya Smriti Sthal is memorial Place of which Indian leader?

- A. Jawaharlal Nehru
- B. Atal Bihari Vajpayi
- C. JP Narayan
- D. Sanjeev Reddy

Ans. B

Sol.

\* **Rashtriya Smriti Sthal is a memorial place of former Indian Prime Minister Atal Bihari Vajpayee.**

\* It is located in Delhi near Raj Ghat and Vijay Ghat.

\* He has served three terms as the Prime Minister of India, first for a term of 13 days in 1996.



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8. Harika dronavalli , who got Padma Shri in 2019, belongs to which sports?

- A. Table Tennis
- B. Chess
- C. Squash
- D. Snooker

Ans. B

Sol.

- *Harika Dronavalli* (born 12 January 1991) is an Indian chess grandmaster.

- In 2019, she was awarded the **Padma Shri** for her contributions towards the field of sports.

9. Who was the first person to reach the summit of Mount Everest twice?

- A. Santosh Yadav
- B. Nawang Gombu Sherpa
- C. Junko Tabei
- D. Erik Weihenmayer

Ans. B

Sol.

- **Nawang Gombu Sherpa** was the first person to reach the summit of Mt. Everest twice. In 1964, he became the first Nepali and Indian citizen and the third man in the world to summit Nanda Devi.

- He was the youngest member of the 1953 expedition which made the first ascent of Mt. Everest. He later reached the summit himself in 1965 and subsequently became the first person to climb Everest twice.

10. Freedom fighter Sucheta Kripalani, became the first woman chief minister of which state?

- A. Uttar Pradesh
- B. Gujarat
- C. Andhra Pradesh
- D. Rajasthan

Ans. A

Sol.

- Freedom fighter Sucheta Kripalani became the first woman chief minister of **Uttar Pradesh**. The highlight of her tenure was the firm handling of a state employees strike.

- Sarojini Naidu was the first female to become the governor of Uttar Pradesh.

11. **Select the most appropriate synonym of the given word.**

ADEQUATE

- A. sufficient
- B. unfit
- C. inept
- D. meagre

Ans. A

Sol.

Let's first learn the meanings of the words:

Adequate = satisfactory or acceptable in quality or quantity.

Meagre = (of something provided or available) lacking in quantity or quality.

Sufficient = enough; adequate.

Inept = having or showing no skill; clumsy.

Hence, option A is the correct answer.

12. **Select the option that can be used as a one-word substitute for the given group of words.**

Words written on a tombstone in the memory of the person who has died

- A. epilogue
- B. epitaph
- C. stela
- D. prologue

Ans. B

Sol.

The words written on a tombstone in the memory of the person who has died is called epitaph. Therefore B is the correct answer.

13. **Select the most appropriate word to fill in the blank.**

This is the girl \_\_\_\_\_ is going to IIT, Delhi.

- A. which
- B. whom
- C. who
- D. that

Ans. C

Sol.

The correct preposition for this sentence is "who" because it is used to introduce a clause giving further information about a person or people previously mentioned. That is why C is the right answer.

14. **Select the most appropriate word to fill in the blank.**



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We haven't been to Gangotri \_\_\_\_\_ almost ten years.

- A. for
- B. from
- C. to
- D. since

Ans. A

Sol.

"For" means from the beginning of the period to the end of the period. In this sentence, the exact time period is given i.e. ten years. That is why, A is the right answer.

15. **Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution'.**

The authorities are looked on the matter.

- A. are looking on the matter
- B. are looking into the matter
- C. are looked into the matter
- D. No substitution

Ans. B

Sol.

This sentence expresses an action that is currently happening. Therefore Present continuous tense should be used. That is why, B is the right answer.

16. **In the sentence identify the segment which contains the grammatical error.**

Across his morning walk on a beach in Mamallapuram, Prime Minister Modi was seen picking up plastic litter, bottles, and other items.

- A. Across his morning walk
- B. picking up plastic litter
- C. on a beach in Mamallapuram
- D. Prime Minister Modi was seen

Ans. A

Sol.

"Across" is the wrong preposition here. "Across" should be replaced with "during". Therefore there is an error in part A.

17. **Select the INCORRECTLY spelt word.**

- A. labour

- B. lantern
- C. literature
- D. laboratery

Ans. D

Sol.

Option D has the incorrectly spelt word. The correct spelling of the word is "laboratory".

18. **Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution'.**

I enjoy to watch a good detective movie.

- A. watch
- B. watched
- C. No substitution
- D. watching

Ans. D

Sol.

We use the "-ing" form after enjoy and not a "to-infinitive". Therefore "to watch" should be replaced by "watching". D is therefore the correct answer.

19. **Given below are four jumbled sentences. Pick the option that gives their correct order.**

P: The scientists said the circadian rhythm, or the body clock, is programmed to assist the body burn fat when people sleep.

Q: As a result, they said, when people skip breakfast and then a snack at night, it may lead to a delay in burning the fat.

R: According to the study published in the journal *PLOS Biology*, the human body's daily biological clock and sleep regulate how the food is metabolized.

S: It added that the choice of burning fats or carbohydrates also changes depending on the time of day or night.

- A. PRQS
- B. RSPQ
- C. QPRS
- D. SPQR

Ans. B

Sol.

Sentence R introduces the topic - A study published in the Journal PLOS Biology, therefore it should be the first sentence of the sequence. Sentence Q begins with



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the phrase "as a result" which means that it should be placed at the end in the sequence of these sentences. There is only one option i.e. B with R at the start and Q at the end of sequence. Therefore, B is the correct choice.

20. **Direction:** Choose the most appropriate option to change the narration (direct / Indirect) of the given sentence.

"Can you pay him in cash?" she said to me.

- A. She asked me if he could pay me in cash.
- B. She asked him if I should pay him in cash.
- C. She asked him if I can pay him in cash.
- D. She asked me if I could pay him in cash.

Ans. D

Sol.

This is a simple sentence of direct speech, we will change it into indirect speech accordingly. Said to will be changed to asked as the reporting speech contains an object. As the reported speech is in question form, so inverted commas will be removed and if will be used as an conjunction. Can will be changed to could in the indirect narration. Second person pronoun will be changed according to the object of the reporting speech. Hence, option D is the correct answer.

21. Mr A allows a discount of 40% to the buyers. He sells only duplicated goods and as a bribe, he pays 10% of the cost of the article. If the cost price is Rs. 3750, then what should be the marked price if he desires to make a profit of 9.09%.

- A. 8000
- B. 7500
- C. 7250
- D. 7000

Ans. B

Sol.

Cost price (3750) + Bribe (10% of cost of article = 375) = Total cost to the shopkeeper (3750 + 375 = 4125)

Desired profit =  $4125 \times 9.09\% = 375$

Selling price for Mr A = Total Cost + Desired Profit =  $4125 + 375 = 4500$   
The selling price is 60% (100-40) of the marked price.

Hence marked price =  $\frac{4500}{60} \times 100 = \text{Rs. } 7500$

22. A solid cylinder of base radius 12 cm and height 15 cm is melted and recast into n toys each in the shape of a right circular cone of height 9 cm mounted on a hemisphere of radius 3 cm. The value of n is:

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.

- A. 48
- B. 64
- C. 54
- D. 27

Ans. A

Sol.

Volume of cylinder = x x volume of new shape

$$\pi r^2 h = x \left[ \frac{1}{3} \pi r^2 h + \frac{2}{3} \pi r^3 \right]$$

$$\pi \times 12 \times 12 \times 15 = x \left[ \frac{1}{3} \times \pi \times 9 \times 9 + \frac{2}{3} \pi \times 27 \right]$$

$$45x = 12 \times 12 \times 15$$

$$x = \frac{12 \times 12 \times 15}{45} = 48$$

23. If  $(5x - 3)^3 + (2x + 5)^3 + 27(4 - 3x)^3 = 9(3 - 5x)(2x + 5)(3x - 4)$ , then the value of  $(2x + 1)$  is:

- A. 13
- B. -15
- C. -13
- D. 15

Ans. D

Sol.

$$\text{Let } a = 5x - 3$$

$$b = 2x + 5$$

$$c = 3(4 - 3x)$$

If  $a + b + c = 0$  then  $a^3 + b^3 + c^3 - 3abc = 0$

If we compare the following equation, we get -



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$$a + b + c = 0$$

$$5x - 3 + 2x + 5 + 3(4 - 3x) = 0$$

$$-2x = -14$$

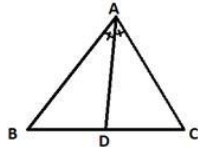
$$x = 7$$

Required  $2x + 1 = 7 \times 2 + 1 = 15$

24. The bisector of  $\angle A$  in triangle ABC meets BC in D. If AB = 15 cm, AC = 13 cm and BC = 14 cm. then DC = ?

- A. 6.5 cm
- B. 8.5 cm
- C. 8 cm
- D. 7.5 cm

Ans. A  
Sol.



AD is angle bisector of  $\angle BAC$ .

$$\frac{AB}{AC} = \frac{BD}{CD}$$

$$\frac{15}{13} = \frac{BD}{CD}$$

$$\Rightarrow \frac{15}{13} + 1 = \frac{BD}{CD} + 1$$

$$\frac{28}{13} = \frac{BC}{CD}$$

$$CD = \frac{13 \times 14}{28}$$

$$CD = 6.5 \text{ cm}$$

25. The graph of the equations  $5x - 2y + 1 = 0$  and  $4y - 3x + 5 = 0$ , intersect at the point  $P(\alpha, \beta)$ . What is the value of  $(2\alpha - 3\beta)$ ?

- A. 6
- B. 4
- C. -3
- D. -4

Ans. B  
Sol.

$$5x - 2y + 1 = 0 \dots (i)$$

$$4y - 3x + 5 = 0 \dots (ii)$$

$P(\alpha, \beta)$  = intersection of line (i) and line (ii)

$$10\alpha - 4\beta = -2$$

$$-3\alpha + 4\beta = -5$$

$$7\alpha = -7$$

$$\alpha = -1$$

Put  $\alpha = -1$  in equation (i),

We get  $\beta = -2$

Required,

$$2\alpha - 3\beta = 2 \times (-1) + 6 = 4$$

26. If  $\sec\theta + \tan\theta = p$ , ( $p > 1$ ) then

$$\frac{\operatorname{cosec}\theta + 1}{\operatorname{cosec}\theta - 1} = ?$$

- A.  $p^2$
- B.  $\frac{p+1}{p-1}$
- C.  $2p^2$
- D.  $\frac{p-1}{p+1}$

Ans. A  
Sol.

$$\sec^2\theta - \tan^2\theta = 1$$

$$(\sec\theta + \tan\theta)(\sec\theta - \tan\theta) = 1$$

$$(\sec\theta - \tan\theta) = \frac{1}{\sec\theta + \tan\theta}$$

$$(\sec\theta + \tan\theta) = p$$

$$(\sec\theta - \tan\theta) = \frac{1}{p}$$

$$2\sec\theta = p + \frac{1}{p}$$

$$\sec\theta = \frac{p^2 + 1}{2p}$$

$$\tan\theta = p - \frac{p^2 + 1}{2p}$$

$$\tan\theta = \frac{2p^2 - p^2 - 1}{2p} = \frac{p^2 - 1}{2p}$$

Hence, we can conclude that -

$$H = p^2 + 1, P = p^2 - 1, B = 2p$$



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$$\frac{\operatorname{cosec}\theta + 1}{\operatorname{cosec}\theta - 1} = \frac{\frac{H}{P} + 1}{\frac{H}{P} - 1}$$

$$= \frac{\frac{p^2 + 1}{p^2 - 1} + 1}{\frac{p^2 + 1}{p^2 - 1} - 1} = \frac{2p^2}{2}$$

$$= p^2$$

27. If  $(5x + 2y) : (10x + 3y) = 5 : 9$ , then  $(2x^2 + 3y^2) : (4x^2 + 9y^2) = ?$

- A. 16 : 47
- B. 10 : 27
- C. 1 : 3
- D. 31 : 87

Ans. D

Sol.

$$\frac{(5x + 2y)}{(10x + 3y)} = \frac{5}{9}$$

$$45x + 18y = 50x + 15y$$

$$5x = 3y$$

$$\frac{x}{y} = \frac{3}{5} \Rightarrow \frac{x^2}{y^2} = \frac{9}{25}$$

Required -

$$\frac{(2x^2 + 3y^2)}{(4x^2 + 9y^2)} = \frac{y^2 \left( 2\frac{x^2}{y^2} + 3 \right)}{y^2 \left( 4\frac{x^2}{y^2} + 9 \right)}$$

$$= \frac{2 \times \frac{9}{25} + 3}{4 \times \frac{9}{25} + 9}$$

$$= \frac{\frac{93}{25}}{\frac{261}{25}} = \frac{93}{261}$$

$$= \frac{31}{87}$$

28. Select the letter combination that is placed sequentially on the blank spaces

of the letter series given below to complete the given series.

r \_ t e \_ a t \_ r a \_ e r \_ t e

- A. areta
- B. raret
- C. aetrt
- D. raeta

Ans. A

Sol.

The sequence is - rate

The complete series is - rate/rate/rate/rate.

Hence, option A is the correct response.

29. Choose the set of numbers that is similar to the following set.

(6, 19, 17)

- A. (3, 11, 9)
- B. (5, 13, 12)
- C. (11, 19, 7)
- D. (7, 21, 8)

Ans. B

Sol.

The sum of last two numbers is the square of first number.

$$19 + 17 = 36 = 6^2$$

Similarly,

$$13 + 12 = 25 = 5^2$$

Hence, option (b) is correct.

30. In the following question, select the odd number pair from the given alternatives.

- A. 2687 - 672
- B. 2123 - 161
- C. 3217 - 148
- D. 8123 - 293

Ans. A

Sol. The pattern is:

$$2 + 1 + 2 + 3 = 1 + 6 + 1$$

$$3 + 2 + 1 + 7 = 1 + 4 + 8$$

$$8 + 1 + 2 + 3 = 2 + 9 + 3$$

But,

$$2 + 6 + 8 + 7 \neq 6 + 7 + 2$$

Hence, the correct option is A.

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

8743 : 44 :: 6545 : ?

- A. 40



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- B. 45
- C. 37
- D. 42

Ans. A

Sol. In a pair second number is twice of the sum of digits of first number.

⇒ In 8743 : 44

⇒ (8 + 7 + 4 + 3) = 22 × 2 = 44

In the similar way,

⇒ (6 + 5 + 4 + 5) = 20 × 2 = 40

इसलिए, विकल्प A सही उत्तर है।

**32. In the following question, select the related word from the given alternatives.**

Lion : Roar :: Owl : ?

- A. Gibber
- B. Chirp
- C. Hoot
- D. Quack

Ans. C

Sol. Roar is the sound produced by the lion.

Similarly, Hoot is the sound produced by the Owl.

Hence, option C is the correct response.

33.

**Select the correct combination of mathematical signs to replace \* signs and to balance the following equation:**

96 \* 12 \* 5 \* 7 \* 2 \* 45

- A. x ÷ + = -
- B. ÷ x + - =
- C. x ÷ + - =
- D. = + x - ÷

Ans. B

Sol. The original equation is 96 \* 12 \* 5 \* 7 \* 2 \* 45

Going through each option and replacing \* sign with mathematical signs we get,

Option (A): 96 x 12 ÷ 5 + 7 - 2 = 45

Applying BODMAS rule we get,

⇒ 1152 ÷ 5 + 7 - 2 = 45

It is clear from above that this option does not lead to desired solution.

Option (B): 96 ÷ 12 x 5 + 7 - 2 = 45

Applying BODMAS rule we get,

⇒ 8 x 5 + 7 - 2 = 45

⇒ 40 + 7 - 2 = 45

⇒ 45 = 45

LHS = RHS

Hence, B is the correct option.

**34. In the following question, select the related word from the given alternatives.**

Cytology: Cells :: ? : Words

- A. Odontology
- B. Mycology
- C. Etymology
- D. Ornithology

Ans. C

Sol. The study of cells is called cytology. Similarly the study of words is to be found out.

Odontology: The scientific study of the structure and diseases of teeth.

Mycology: The scientific study of fungi.

Etymology: The study of the origin of words and the way in which their meanings have changed throughout history.

Ornithology: The scientific study of birds. Hence, option C is the right answer.

**35. Find the missing numbers from the given alternatives**

86	480	38
72	510	21
36	?	12

- A. 120
- B. 360
- C. 100
- D. 240

Ans. D

Sol. Taking the first row,

86 - 38 = 48

48 x 10 = 480

Second row,

72 - 21 = 51

51 x 10 = 510

Third row,

36 - 12 = 24

24 x 10 = 240

Hence, option D is the correct response.

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