

## Staying prepared: On scaling up the pace of COVID-19 genome sequencing

India needs to **scale up** the **pace** of its **genome sequencing**

Three years after **strict enforcement** of its Zero-COVID strategy, China **abandoned** it **abruptly**, **leading to** a jump in cases each day — an **estimated** 250 million people were infected in 20 days in December, according to the media, **overwhelming** hospitals and **crematoria**. Based on 30 genome sequences deposited between October and December and 14 genome sequences in December alone from China, the BF.7 appears to be the **dominant variant**. Though this variant was found in many countries, including India, months ago, there is fear that the uncontrolled **spread** of the virus in China **may result in** newer variants with an even higher **transmissibility**. **For instance**, **the BF.7 sub-lineage** with three additional **immune escape mutations** already seen in other variants **has** been found in some people arriving from China; these mutations may increase transmissibility further but will not increase disease **severity**. With a case **surge** in a few more countries, India has taken the right and **proactive** measures to be ready for any **eventuality**. With over 90% of the adult population already fully vaccinated by July this year, over one-fourth of adults also **boosted**, and **a large percentage** of the population also naturally **infected**, the **chances** of India **witnessing large-scale** deaths as seen during the second **wave** last year from **existing** variants **are slim**. In fact, **given** that a large percentage of the population enjoys **hybrid immunity** from vaccination and natural infection leading to all Omicron sub-lineages causing only a **mild** disease, the focus in India should not be on daily new infections but only on any increase in **hospitalisations**, particularly **ICU admissions**.

It is, therefore, not surprising that the Health Ministry has **urged** States to only **ramp up** genome sequencing (and not increase testing) to track new variants as the virus **evolves** by **accumulating** mutations. The **pace** of genome sequencing in India **has** to be **scaled up** soon after a **dramatic slowdown** this year. The **Government** in an effort to minimise the chances of the spread of new variants **has** introduced 2% random **post-arrival** sampling of international passengers and mandatory RT-PCR tests for arrivals from China and four other countries. The Ministry has also advised States to ensure **uninterrupted** supply of medical oxygen and conduct a **drill** in health **facilities** to ensure operational **readiness**. With seven COVID-19 vaccines, including the **intranasal vaccine**, manufactured using different vaccine platforms approved for use, India is vaccine self-sufficient. Besides **homologous boosters**, a couple of vaccines have got approval as a **heterologous booster** dose too. On the antiviral **front**, a Hyderabad-based company recently received WHO's **prequalification** for a **generic** version of Pfizer's COVID-19 oral antiviral drug, **Paxlovid**. [Practice Exercise]

- **Overwhelm** (verb) – If something overwhelms someone or something, it is too much, or almost too much, for them to manage पर भारी पड़ना
- **Given** (preposition) – considering, taking into account, bearing in mind देखते हुए

## Vocabulary

1. **Scale up** (phrasal verb) – increase, go up, mount बढ़ाना
2. **Pace** (noun) – speed, rate, swiftness, quickness गति
3. **Genome sequencing** (noun) – Genome sequencing is the process that involves deciphering/finding the exact order of base pairs in an individual.
4. **Strict** (adjective) – Severe, firm, stern, harsh, stringent, rigorous सख्त
5. **Enforcement** (noun) – implementation, coercion, enforce, execution, implementing अमल, प्रवर्तन
6. **Abandon** (verb) – to stop doing something, especially before it is finished छोड़ देना, त्याग देना
7. **Abruptly** (adverb) – Suddenly, unexpectedly, rapidly, hastily, immediately, quickly, hurriedly
8. **Lead** (to) (verb) – cause, give rise to, result in, bring about वजह बनना
9. **Estimated** (adjective) – projected, assessed, valued, appraised
10. **Crematoria** (noun) – a building in which the bodies of dead people are burned शवदाहगृह
11. **Dominant** (adjective) – predominant, chief, principal, leading, foremost प्रमुख
12. **Variant** (adjective) – variation, form, alternative, type प्रकार
13. **Result in** (phrasal verb) – give rise to, lead to, bring about, bring, produce नतीजतन
14. **Transmissibility** (noun) – the quality of a disease or trait being able to be passed on from one person or organism to another. प्रसार क्षमता
15. **For instance** (phrase) – For example, As, Such as उदाहरण के लिए
16. **BF. 7 sub-lineage** (noun) – BF.7 is a sub-lineage of the Omicron variant BA.5. It has the strongest infection ability since it is highly transmissible. It has an R-value of 10 to 18.6.
17. **Immune escape Mutation** (noun) – it occurs when the immune system of a host, especially of a human being, is unable to respond to an infectious agent
18. **Severity** (noun) – intensity, violence, harshness, fury, vehemence तीव्रता
19. **Surge** (noun) – Sudden rise उछाल
20. **Proactive** (adjective) – active, take-charge, enterprising, energetic, dynamic अग्रसक्रिय
21. **Eventuality** (noun) – a possible event or outcome संभावित परिस्थिति/ घटना

22. **Boost** (verb) – to give someone a booster vaccine (= a small amount of a substance put into a person's body to protect them from illness, that increases the effect of the same substance that was given some time before)
23. **Witness** (verb) – see, observe, watch, look on at, be a witness to, view देखना
24. **Large-scale** (adjective) – broad, major, extensive, significant बड़े पैमाने पर
25. **Wave** (noun) – a sudden occurrence of or increase in phenomenon (i.e. COVID) लहर
26. **Existing** (adjective) – current मौजूदा
27. **Slim** (adjective) – very small.
28. **Hybrid immunity** (noun) – immunity provided by a combination of infection and vaccination
29. **Mild** (adjective) – not severe, serious, light हल्का
30. **Hospitalisation** (noun) – admission to hospital for treatment. अस्पताल में भर्ती करना
31. **ICU** (noun) – intensive care unit; a unit in a hospital providing intensive care for critically ill or injured patients
32. **Admission** (noun) – Admittance, entrance, entry भर्ती/ प्रवेश
33. **Urge** (verb) – Advise, insist, recommend, push for अनुरोध करना
34. **Ramp up** (phrasal verb) – Sharply increase in level or amount. बढ़ाना
35. **Evolve** (verb) – develop, progress, make progress, advance विकसित होना
36. **Accumulate** (verb) – Accrue, amass, collect, gather, hoard, add जमा /संचय करना
37. **Mutation** (noun) – variation, transformation, change उत्परिवर्तन
38. **Pace** (noun) – speed, rate, swiftness, quickness गति
39. **Scale up** (phrasal verb) – increase, rise वृद्धि करना/बढ़ना
40. **Dramatic** (adjective) – (of circumstance) sudden and striking नाटकीय
41. **Slowdown** (noun) – A decline in economic activity. मंदी
42. **Post-arrival** (adjective) – after arriving आगमन के बाद
43. **Uninterrupted** (adjective) – continuous, constant, nonstop, continual निरंतर/ निर्बाध

44. **Drill** (noun) – a rehearsal of the procedure to be followed in an emergency; training अभ्यास
45. **Facilities** (noun) – something designed to provide a service or fulfill a need सुविधाएँ
46. **Readiness** (noun) – Promptness, speediness, quickness, alacrity तत्परता
47. **Intranasal vaccine** (noun) – a vaccine administered to a person via the nose and does not require a needle
48. **Homologous booster** (noun) – shot involves the administration of the **same vaccine** as previously administered.
49. **Heterologous booster** (noun) – a person is injected with the **different vaccine** that was used for the two previous doses.
50. **Front** (noun) – a particular area of activity मोर्चा
51. **Prequalification** (noun) – preliminary requirements
52. **Generic** (adjective) – general, common, basic सामान्य
53. **Paxlovid** (noun) – an antiviral therapy that consists of two separate medications packaged together.

## Practice Exercise

**Direction: (Q1 – Q5): In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.**

The 2022 Commonwealth Games organisers will feel fortunate that the third largest multi-sport event is all set to take \_\_\_\_\_1\_\_\_\_\_ in Birmingham without being affected by the pandemic, on Thursday. The Games — representing 2.5 billion people from 72 nations and territories which were once ruled by the erstwhile British Empire — have been \_\_\_\_\_2\_\_\_\_\_ over the years amid anti-colonial sentiments and huge costs involved in hosting such an event. But the Commonwealth Games Federation (CGF) has \_\_\_\_\_3\_\_\_\_\_ that the Games — with its diversity that includes India with 1.3 billion people and Niue with a population of around 2,000 — have entered an era of renewed relevance. Underlining this, Birmingham, which replaced Durban as the host city and is ready to accommodate 6,500 athletes and officials by integrating 19 sports and eight para-sports, \_\_\_\_\_4\_\_\_\_\_ highlighted the uniqueness of this latest edition. The \_\_\_\_\_5\_\_\_\_\_ of women’s T20 cricket, 3x3 basketball and mixed synchronised swimming will be among the new features for the first carbon neutral games being held at an estimated budget of nearly £800 million.

- Select the most appropriate option to fill in blank number 1.**
  - On
  - Down
  - Off
  - Into
- Select the most appropriate option to fill in blank number 2.**
  - Committed
  - Drawn
  - Staged
  - Seek
- Select the most appropriate option to fill in blank number 3.**
  - Dampen
  - Asserted
  - Bin
  - Concerted
- Select the most appropriate option to fill in blank number 4.**
  - Had
  - Is
  - Are
  - Has
- Select the most appropriate option to fill in blank number 5.**
  - Discipline
  - Fraternity
  - Sentiment
  - Debut

**Directions (Q6–Q7):** In the following questions, four words are given in each question, out of which only one word is rightly spelt. Find the correctly spelt word.

6. A. Loquocious  
B. Responsiveness  
C. Hetarogeneity  
D. Ironik
7. A. Untoched  
B. Penatration  
C. Enthusiasm  
D. Liebility

**Directions (Q8–Q9):** The question below consists of a set of labeled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.

8. P. In Tokyo, they built an expressway linking the international airport in Haneda to the centre, and widened some of the city's major arteries.  
Q. These infrastructure improvements helped to bring about the Japanese economic miracle over the next couple of decades.  
R. Tokyo 2020 was supposed to be a great economic stimulus, replicating the achievements of Tokyo 1964.  
S. It was thanks to hosting that Olympics that Japan invested in infrastructure such as the famous Shinkansen bullet train.  
A. RSPQ      B. QPRS      C. SRQP      D. PQRS
9. P. You can use proper lighting, reduce screen glare, and take more breaks.  
Q. However, one of the easiest habits to build is to follow the "20-20-20 rule".  
R. There are lots of ways you can protect your eyes during the day.  
S. Every 20 minutes of time spent staring at a screen, look away at an option that is at least 20 feet away for 20 seconds.  
A. SQPR      B. QRSP      C. RPQS      D. SPRQ

**Directions (Q10-Q12):** In the following questions, 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.

10. **Honest and polite people are admired by everyone.**  
A. Everyone has been admiring honest and polite people.  
B. Everyone admired honest and polite people.  
C. Everyone will admire honest and polite people.  
D. Everyone admires honest and polite people.
11. **Don't pluck the flowers.**  
A. The flowers should not be pluck.  
B. You are requested not to plucked the flowers.  
C. I am requesting you to pluck the flowers.  
D. Let the flowers not be plucked

12. **The company sold the newly introduced car to the highest bidder.**
- A. The newly introduced car was sold to the highest bidder by the company.
  - B. The company sold the newly introduced car to the highest bidder.
  - C. The newly introduced car has sold to the highest bidder by the company.
  - D. The newly introduced car sold to the highest bidder by the company.

**Directions (13-14): In the following questions, out of the four alternatives, choose the one which can be substituted for the given words/sentence.**

13. After my father passed away, I used to look at a series of stars, trying to find the unknown.
- A. Galaxy
  - B. Constellation
  - C. Caravan
  - D. Horde
14. **One who does something not professionally but for pleasure**
- A. Professional
  - B. Mature
  - C. Immature
  - D. Amateur

**Directions (15 – 16): Choose the alternative which best expresses the meaning of the Idiom/Phrase.**

15. I have been a vegetarian for a very long time.
- A. donkey's years
  - B. duck in the thunderstorm
  - C. die in harness
  - D. Damocles' sword
16. **In hot waters**
- A. To be in trouble
  - B. To dip in hot water
  - C. To be in a hot climate
  - D. To feel relaxed

**Directions (17-18): choose the word opposite in meaning to the given word.**

17. **DOMINANT**
- A. Impiety
  - B. Minor
  - C. Obsequies
  - D. Tycoon
18. **UNINTERRUPTED**
- A. Patrimony
  - B. Adamant
  - C. Druggist
  - D. Intermittent

**Direction: (19-20): In the following question, out of the four alternatives, choose the word which best expresses the meaning of the given word.**

19. **SLIM**
- A. Emancipation
  - B. Slight
  - C. Candid
  - D. Recapitulation

20. **EVENTUALITY**
- A. Steam
  - B. Occurrence
  - C. Anachronistic
  - D. Rhetoric

**Directions (21 – 22):** In the following questions, some part of the sentence is underlined. Which of the options given below the sentence should replace the part underlined to make the sentence grammatically correct. If the sentence is correct as it is given then choose option D 'No Correction required' as the answer.

21. The commissions are set up to ask into the incidents.
- A. Inquire
  - B. Demand
  - C. Look
  - D. No Correction required
22. I am angry upon you.
- A. Against
  - B. With
  - C. On
  - D. No Correction required

**Directions (Q23– Q25):** Find out the error, if any –

23. He wanted to go (A)/ to home (B)/ as he was sick. (C)/ No Error. (D)
24. Either you (A)/ or he (B)/ are happy. (C)/ No Error. (D)
25. In her address (A)/ she advised us to protect (B)/our nation. (C)/No Error. (D)



## Answers

1. C    2.C    3.B    4.D    5.D    6.B    7.C    8.A    9.C    10.D    11.D    12.A  
 13. B    14.D    15.A    16.A    17.B    18.D    19.B    20.B    21.C    22.B    23.B    24.C  
 25. D

## Explanations

- All set to take off** (phrase) – Be ready to start/begin something
- Stage** (verb) – put before the public, present, perform, act प्रदर्शन करना
  - Commit** (verb) –allocate, assign, allot, commit, give आवंटित करना
  - Draw** (verb) – attract, Obtain, extract, take, derive खींचना
  - Seek** (verb) –ask for, request, solicit, call on, demand मांगना
- Assert** (verb) – declare, maintain, contend, argue, state दृढ़ता से कहना
  - Dampen** (verb) – lessen, decrease, diminish, reduce, lower, कम करना
  - Bin** (verb) – throw away, discard, get rid of, scrap हटाना, अलग करना
  - Concerted** (adjective) – Jointly, collaborative, collective, combined सम्मिलित
- Debut** (noun) – The first public appearance of a new product or presentation of a theatrical show. लोगों के सामने पहली उपस्थिति
  - Discipline** (noun) – area, field, subject क्षेत्र
  - Fraternity** (noun) – union, organization, society, club, association बिरादरी
  - Sentiment** (noun) – feeling, emotion भाव
- Responsiveness** (noun) – The quality of reacting quickly and positively. जवाबदेही
  - Loquacious** (adjective) – talkative, garrulous, voluble, wordy, verbose बातूनी
  - Heterogeneity** (noun) – the fact of consisting of parts or things that are very different from each other विविधता
  - Ironic** (adjective) – paradoxical, incongruous, odd, strange, weird विडंबनात्मक
- Enthusiasm** (noun) – eagerness, keenness, ardour, fervour, warmth उत्साह, जोश
  - Untouched** (adjective) – Unhurt, intact, unharmed, unchanged अछूता
  - Penetration** (noun) – infiltration, entry, inflow, spread, spreading, diffusion प्रवेश
  - Liability** (noun) – financial obligation, debt, indebtedness, debit देयता
- RSPQ**  
 Tokyo 2020 was supposed to be a great economic stimulus, replicating the achievements of Tokyo 1964. It was thanks to hosting that Olympics that Japan invested in infrastructure such

as the famous Shinkansen bullet train. In Tokyo, they built an expressway linking the international airport in Haneda to the centre, and widened some of the city's major arteries. These infrastructure improvements helped to bring about the Japanese economic miracle over the next couple of decades.

9. **RPQS**

There are lots of ways you can protect your eyes during the day. You can use proper lighting, reduce screen glare, and take more breaks. However, one of the easiest habits to build is to follow the "20-20-20 rule". Every 20 minutes of time spent staring at a screen, look away at an option that is at least 20 feet away for 20 seconds.

10. Everyone admires honest and polite people.

11. Let the flowers not be plucked

12. The newly introduced car was sold to the highest bidder by the company.

13. **Constellation** – a group of stars forming a recognizable pattern that is traditionally named after its apparent form or identified with a mythological figure. नक्षत्र तारा समूह

14. **Amateur** – a person who engages in a pursuit, especially a sport, on an unpaid rather than a professional basis. शौकीन व्यक्ति

15. **Donkey's years** (phrase) – a very long time. बहुत लंबा समय

16. **In hot water** (phrase) – in a difficult situation; in trouble. मुसीबत में

17. **Dominant** (adjective) – predominant, chief, principal, leading, foremost प्रमुख

**Antonym – Minor**

• **Impiety** – Lack of respect or religious reverence नास्तिकता

• **Obsequies** – Funeral rites अंतिम संस्कार

• **Tycoon** – A wealthy, powerful person in business or industry व्यवसाय-प्रमुख

18. **Uninterrupted** (adjective) – continuous, unbroken, constant, nonstop, continual निरंतर

**Antonym – Intermittent**

• **Patrimony** – Property inherited from one's father or ancestor विरासत

• **Adamant** (adjective) – Obstinate, obdurate, unyielding हठी

• **Druggist** – A person who is qualified to prepare and sell drugs औषध विक्रेता

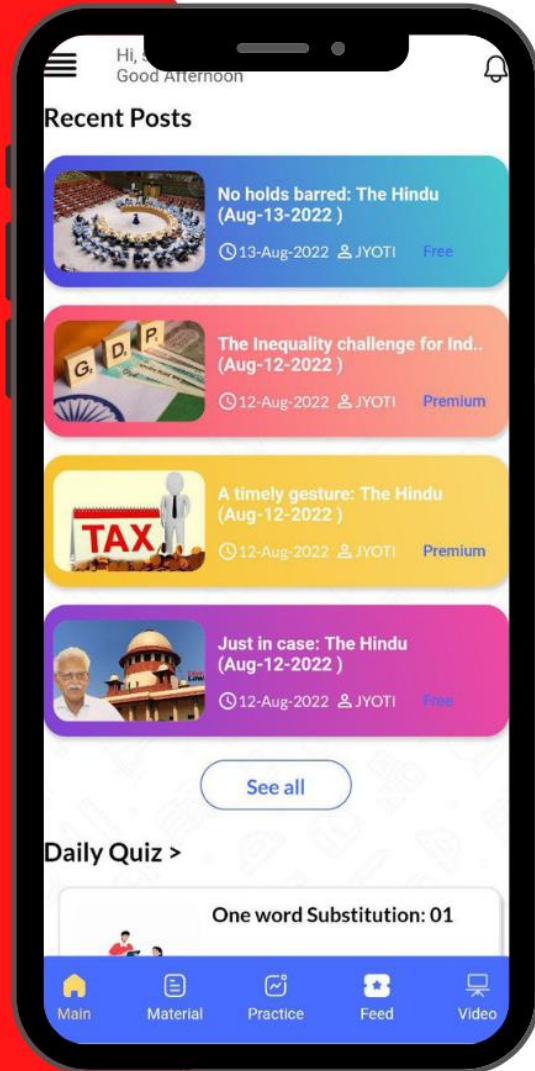
19. **Slim** (Adjective) – small, slight, very small कम

• **Emancipation** (noun) – Liberation, freedom, deliverance, release मुक्ति

• **Candid** (adjective) – Frank, open, honest, truthful, sincere सच्चा

• **Recapitulation** (noun) – Recap, summary, restatement, review, outline संक्षिप्त

20. **Eventuality** (noun) – event, contingency, incident, happening, occurrence स्थिति / संभावित घटना
- **Steam** – To cook (food) by heating it in steam from boiling water भाप
  - **Anachronistic** – That which is out of place कालभ्रमित
  - **Rhetoric** – The art of elegant speech of writing लफ्फाजी
21. (C) 'ask' बदले 'look' का प्रयोग होगा क्योंकि 'ask' का अर्थ है 'पूछना/कहना' और इसके बाद 'into' का प्रयोग नहीं होता है जबकि 'look into' एक Phrasal Verb है और जिसका अर्थ है 'छानबीन करना', 'जाँच पड़ताल करना'।
- 'look' will be used instead of 'ask' because 'ask' means 'to ask/say' and is not followed by 'into' whereas 'look into' is a Phrasal Verb and means 'To investigate'.
22. (B) 'upon' के बदले 'with' का प्रयोग होगा क्योंकि 'angry with somebody' किन्तु 'angry at something' का प्रयोग होता है।
- 'with' will be used instead of 'upon' because 'angry with somebody' but 'angry at something' is used.
23. (B) 'home' के पहले 'to' का प्रयोग नहीं होगा क्योंकि 'come /go /return / send somebody/take somebody + home' का प्रयोग होता है; जैसे-
- i. He wanted to go home.
  - ii. She came home late last night.
- 'to' shall not be used before 'home' as 'come /go /return / send somebody/take somebody + home' is used; like-
    - i. He wanted to go home.
    - ii. She came home late last night.
24. (C) 'are' के बदले 'is' का प्रयोग होगा क्योंकि 'Either... or', 'Neither nor,' 'Not only ... but also' या 'or' यदि दो Subjects जुड़ते हैं तो Verb अपने नजदीक वाले Subject के अनुसार होता है; जैसे-
- i. Either you or he has made this mistake.
  - ii. Are either you or he ready to go there?
- 'is' will be used instead of 'are' because 'Either... or', 'Neither nor,' 'Not only ... but also' or 'or' if two subjects are joined then Verb It happens according to the subject near you; like-
    - i. Either you or he has made this mistake.
    - ii. Are either you or he ready to go there?
25. (D) No error.



# Learn Vocabulary Through Reading Articles

English Madhyam

