# MAHATMA GANDHI MISSION

## MGMUNIVERSITY

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# TATA STEEL

## CAMPUS PLACEMENT PREPARATION BOOKLET

## BATCH 2024

## About Company:

Tata Steel Limited is an Indian multinational steel-making company, based in Jamshedpur, Jharkhand and headquartered in Mumbai, Maharashtra. It is a part of the Tata Group. Tata Iron and Steel Company (TISCO) was founded by [Jamsetji Nusserwanji Tata](#) and established by [Sir Dorabji Tata](#) on 26 August 1907.Tata Steel is among the largest steel producing companies in the world, with an annual crude steel capacity of 35 million tons.

## Key Highlights :

| | |
|---|---|
| **Website** | https://www.tatasteel.com |
| **Industry** | Information Technology & Services |
| **Company Size** | 65,000+ employees |
| **Headquarters** | Mumbai, Maharashtra |
| **Type** | Public Company |
| **Founded** | 1907 |
| **Specialty** | Automotive, construction, consumer goods, engineering, packaging, lifting and excavating, energy and power, aerospace, shipbuilding, rail and defence and security sectors. |

## STUDENTS ELIGIBILITY CRITERIA :

| CRITERIA | DETAIL |
|---|---|
| **Qualification** | BTECH |
| **Year of passing** | 2024 pass-outs |
| **Academic requirement** | • SSC Percentage: 60% and above<br>• HSC Percentage: 60% and above |

**Here is the actual recruitment process & pattern for tata steel hiring for 2021 pass-outs.**

| TATA steels Test Pat- tern | Sections | Time | Questions | Importance |
|---|---|---|---|---|
| Objective Test Round | Civil | 20 mins | 25 | High |
| | English Comprehension | 15 mins | 25 | High |
| | Logical Ability | 15 mins | 25 | High |
| Group discussion | Solution management | 20 min | 1 question | High |
| Personal interview | For HR interview selection | 30 min | 6-7 approx. | High |

## Objective Test Round

# Section A : Logical reasoning

1. If a train travels at 60 mph for 3 hours, how far does it go?
    a) 150 miles
    b) 180 miles
    c) 200 miles
    d) 220 miles
   Answer: b) 180 miles

2. If X is greater than Y and Y is greater than Z, then:
    a) X is the smallest
    b) Z is the smallest
    c) Y is the largest
    d) Z is the largest
   Answer: d) Z is the largest

3. What is the next number in the sequence: 2, 5, 10, 17, ...?
    a) 24
    b) 26
    c) 28
    d) 30
   Answer: a) 24

4. If a car travels at 50 mph for 2.5 hours, what is the total distance covered?
    a) 100 miles
    b) 125 miles
    c) 150 miles
    d) 175 miles
   Answer: c) 150 miles

5. What comes next in the series: 2, 6, 12, 20, ...?
    a) 28
    b) 32
    c) 36
    d) 40
   Answer: a) 28

6. If A + B = 15 and B - A = 5, what is the value of B?
    a) 5
    b) 7.5
    c) 10
    d) 12.5
   Answer: c) 10

7. If 3x - 5 = 16, what is the value of x?
    a) 5
    b) 7
    c) 8
    d) 9
   Answer: c) 8

8. What is the product of 7 and the sum of 4 and 6?
    a) 70
    b) 77
    c) 84
    d) 90
   Answer: a) 70

9. A rectangular garden is 12 meters long and 8 meters wide. What is its area?
    a) 80 square meters
    b) 96 square meters

c) 100 square meters

d) 120 square meters

Answer: b) 96 square meters

10. If a triangle has angles of 30 degrees, 60 degrees, and 90 degrees, what is the measure of the longest side (hypotenuse)?

a) Half of the shortest side

b) Equal to the shortest side

c) $\sqrt{2}$ times the shortest side

d) 2 times the shortest side

Answer: c) $\sqrt{2}$ times the shortest side

11. The sum of two consecutive odd integers is 44. What are the integers?

a) 21, 23

b) 23, 25

c) 25, 27

d) 27, 29

Answer: b) 23, 25

12. If the ratio of boys to girls in a class is 3:2 and there are 30 students, how many boys are there?

a) 12

b) 15

c) 18

d) 21

Answer: c) 18

13. What is the next term in the series: 3, 6, 12, 24, ...?

a) 36

b) 48

c) 60

d) 72

Answer: b) 48

14. If the perimeter of a square is 32 meters, what is the length of one side?

a) 4 meters

b) 6 meters

c) 8 meters

d) 10 meters

Answer: a) 4 meters

15. A clock shows 4:45. What is the angle between the hour and minute hands?

    a) 112.5 degrees

    b) 120 degrees

    c) 135 degrees

    d) 150 degrees

    Answer: a) 112.5 degrees

16. If 2x - 3 = 7, what is the value of x?

    a) 4

    b) 5

    c) 6

    d) 7

    Answer: c) 6

17. The sum of three consecutive integers is 72. What are the integers?

    a) 23, 24, 25

    b) 24, 25, 26

    c) 25, 26, 27

    d) 26, 27, 28

    Answer: b) 24, 25, 26

18. If a rectangle has a length of 15 meters and a width of 8 meters, what is its area?

    a) 96 square meters

    b) 120 square meters

    c) 144 square meters

    d) 180 square meters

    Answer: c) 144 square meters

19. What is the average of the first 10 positive integers?

    a) 4.5

    b) 5

    c) 5.5

    d) 6

    Answer: b) 5

20. If a box contains 15 red balls and 25 blue balls, what is the probability of selecting a red ball randomly?

    a) 1/2

    b) 1/3

    c) 3/5

    d) 2/5

Answer: c) 3/5

21. A triangle has sides of lengths 7 cm, 24 cm, and 25 cm. What type of triangle is it?
    a) Equilateral
    b) Isosceles
    c) Scalene
    d) Right-angled
    Answer: d) Right-angled

22. If 20% of a number is 40, what is 10% of that number?
    a) 20
    b) 25
    c) 30
    d) 40
    Answer: a) 20

23. The sum of the angles in a hexagon is:
    a) 180 degrees
    b) 360 degrees
    c) 540 degrees
    d) 720 degrees
    Answer: c) 540 degrees

24. If the area of a square is 64 square units, what is the length of one side?
    a) 6 units
    b) 7 units
    c) 8 units
    d) 9 units
    Answer: c) 8 units

25. What is the value of $(3^2 + 4^2) / (5^2 - 1)$?
    a) 1/2
    b) 1
    c) 2
    d) 3
    Answer: b) 1

# Section B: English Vocabulary

1.Choose the synonym for "Ubiquitous":
   a) Rare
   b) Common
   c) Scarce
   d) Unusual
   e) Answer: b) Common

2. In the given paragraph, what does the word "Ephemeral" mean?
   "The beauty of the cherry blossoms is ephemeral, lasting only a short time each spring."
   e) Lasting a long time
   f) Temporary or short-lived
   g) Eternal
   h) Perennial
   Answer: b) Temporary or short-lived

3. Choose the antonym for "Benevolent":
   i) Malevolent
   j) Friendly
   k) Generous
   l) Altruistic
   Answer: a) Malevolent

4. In the given paragraph, what does the word "Conundrum" mean?
   "Solving the puzzle turned out to be a real conundrum."
   a) Mystery
   b) Simplicity
   c) Challenge
   d) Solution
   Answer: c) Challenge

5. Identify the synonym for "Effervescent":
   a) Dull
   b) Lively
   c) Stable
   d) Hazy
   Answer: b) Lively

6. Choose the correct meaning for the phrase "In the eleventh hour":
   a) Early in the morning
   b) At the last moment
   c) Every hour
   d) Eleven times
   Answer: b) At the last moment

7. What is the opposite of "Opaque"?

a) Transparent
b) Translucent
c) Shiny
d) Dull

Answer: a) Transparent

8. In the sentence "The concert was cacophonous," what does "cacophonous" mean?
    a) Beautiful
    b) Loud and harsh
    c) Harmonious
    d) Melodious

Answer: b) Loud and harsh

9. Identify the synonym for "Pernicious":
    a) Harmful
    b) Beneficial
    c) Serene
    d) Gentle

Answer: a) Harmful

10. Choose the antonym for "Ubiquitous":
    a) Rare
    b) Common
    c) Scarce
    d) Unusual

Answer: a) Rare

11. What is the meaning of "Eloquent"?
    a) Fluent and persuasive in speaking or writing
    b) Shy and reserved
    c) Rude and offensive
    d) Confusing and unclear

Answer: a) Fluent and persuasive in speaking or writing

12. In the sentence "The detective scrutinized the evidence," what does "scrutinized" mean?
    a) Ignored
    b) Studied carefully
    c) Destroyed
    d) Collected

Answer: b) Studied carefully

13. Identify the synonym for "Loquacious":
    a) Talkative
    b) Silent
    c) Reserved
    d) Shy

Answer: a) Talkative

14. What does the phrase "To throw in the towel" mean?
    a) To fight bravely
    b) To surrender or give up
    c) To celebrate a victory
    d) To start a new challenge
    Answer: b) To surrender or give up

15. Choose the correct meaning for the phrase "Bite the bullet":
    a) To avoid a difficult situation
    b) To face a difficult situation with courage
    c) To complain about a problem
    d) To ignore a problem
    Answer: b) To face a difficult situation with courage

16. What is the synonym for "Serendipity"?
    a) Misfortune
    b) Luck
    c) Tragedy
    d) Calamity
    Answer: b) Luck

17. In the sentence "Her words were laden with sarcasm," what does "sarcasm" mean?
    a) Seriousness
    b) Sincerity
    c) Irony or mockery
    d) Politeness
    Answer: c) Irony or mockery

18. Identify the antonym for "Voracious":
    a) Hungry
    b) Indifferent
    c) Insatiable
    d) Ravenous
    Answer: b) Indifferent

19. In the phrase "A bolt from the blue," what does "bolt from the blue" mean?
    a) A sudden and unexpected event
    b) A clear sky
    c) A planned occurrence
    d) A thunderstorm
    Answer: a) A sudden and unexpected event

20. Choose the synonym for "Exemplary":
    a) Faulty
    b) Praiseworthy
    c) Mediocre
    d) Inferior
    Answer: b) Praiseworthy

21. What is the meaning of "Cacophony"?
    a) A harmonious blend of sounds
    b) A sweet melody
    c) A harsh, discordant mixture of sounds
    d) Silence
    Answer: c) A harsh, discordant mixture of sounds

22. In the sentence "His altruistic actions benefited the community," what does "altruistic" mean?
    a) Selfish
    b) Greedy
    c) Generous and selfless
    d) Ambitious
    Answer: c) Generous and selfless

23. Choose the antonym for "Ubiquitous":
    a) Scarce
    b) Abundant
    c) Pervasive
    d) Widespread
    Answer: a) Scarce

24. What is the meaning of "Ubiquity"?
    a) The state of being everywhere
    b) Rare occurrence
    c) Limited presence
    d) Singular existence
    Answer: a) The state of being everywhere

25. Identify the synonym for "Enigmatic":
    a) Transparent
    b) Mysterious
    c) Clear
    d) Understandable
    Answer: b) Mysterious

# Section C: Civil Engineering

1. What is the purpose of a retaining wall in civil engineering?
   a. To support vertical loads
   b. To resist lateral pressure of soil
   c. To provide aesthetic appeal
   d. To control water flow

   Answer: b) To resist lateral pressure of soil

2. What is the formula for calculating the area of a trapezoid?
   a. (a + b) * h
   b. (a + b) / 2
   c. a * b * h
   d. (a - b) * h

   Answer: b) (a + b) / 2

3. Which type of foundation is suitable for a high-rise building?
   a. Shallow foundation
   b. Deep foundation
   c. Spread footing
   d. Raft foundation

   Answer: b) Deep foundation

4. What is the purpose of a geotechnical investigation in civil engineering?
   a. Designing architectural plans
   b. Analyzing structural stability
   c. Evaluating soil and rock properties
   d. Estimating construction costs

   Answer: c) Evaluating soil and rock properties

5. Which type of bridge is known for its arch shape?
   a. Suspension bridge
   b. Arch bridge
   c. Beam bridge
   d. Cable-stayed bridge

   Answer: b) Arch bridge

6. What is the role of a civil engineer in the construction project's planning phase?
   a. Supervising construction activities
   b. Creating detailed project schedules
   c. Designing structural elements
   d. Ensuring worker safety

   Answer: b) Creating detailed project schedules

7. What is the purpose of a survey in civil engineering?

a.  Determining property boundaries
b.  Calculating construction costs
c.  Designing structural elements
d.  Analyzing traffic patterns

Answer: a) Determining property boundaries

8.  In reinforced concrete, what is the purpose of adding steel reinforcement?
    a.  To increase compressive strength
    b.  To resist tension forces
    c.  To decrease overall weight
    d.  To enhance thermal insulation

Answer: b) To resist tension forces

9.  What is the main function of a dam in civil engineering?
    a.  Providing water supply
    b.  Flood control
    c.  Generating electricity
    d.  All of the above

Answer: d) All of the above

10. What is the purpose of a soil compaction test in construction?
    a.  Evaluating soil fertility
    b.  Determining soil color
    c.  Assessing soil drainage
    d.  Achieving proper soil density

Answer: d) Achieving proper soil density

11. In construction, what does the term "formwork" refer to?
    a.  The process of forming concrete
    b.  Temporary molds for shaping concrete
    c.  Structural steel components
    d.  The final finish of a concrete surface

Answer: b) Temporary molds for shaping concrete

12. Which construction material is known for its excellent thermal insulation properties?
    a.  Concrete
    b.  Steel
    c.  Glass
    d.  Wood

Answer: d) Wood

13. What is the purpose of a soil bearing capacity test?
    a.  Determining the load-bearing capacity of the soil
    b.  Evaluating soil fertility
    c.  Assessing soil compaction
    d.  Analyzing soil moisture content

Answer: a) Determining the load-bearing capacity of the soil

14. In civil engineering, what is the function of a retaining wall?
    a. Supporting vertical loads
    b. Preventing soil erosion
    c. Enhancing aesthetics
    d. Diverting water flow
    Answer: a) Supporting vertical loads

15. Which type of foundation is typically used for tall structures like skyscrapers?
    a. Spread footing
    b. Raft foundation
    c. Pile foundation
    d. Mat foundation
    Answer: c) Pile foundation

16. What is the primary function of a water treatment plant in civil engineering?
    a. Generating electricity
    b. Treating wastewater for reuse
    c. Controlling floodwaters
    d. Providing irrigation water
    Answer: b) Treating wastewater for reuse

17. In structural engineering, what is the purpose of a beam?
    a. Providing lateral stability
    b. Supporting vertical loads
    c. Resisting shear forces
    d. Controlling water flow
    Answer: b) Supporting vertical loads

18. What is the primary purpose of a stormwater drainage system in civil engineering?
    a. Supplying water to households
    b. Controlling surface runoff during storms
    c. Irrigating agricultural fields
    d. Treating industrial wastewater
    Answer: b) Controlling surface runoff during storms

19. What is the main advantage of using precast concrete in construction?
    a. Cost-effectiveness
    b. Flexibility in design
    c. Rapid construction
    d. Resistance to corrosion
    Answer: c) Rapid construction

20. In civil engineering, what is the function of a geosynthetic material?
    a. Providing structural support

b. Enhancing soil stability
c. Improving water quality
d. Filtering air pollutants

Answer: b) Enhancing soil stability

21. What is the purpose of a traffic impact study in civil engineering?
   a) Analyzing the effects of traffic on air quality
   b) Evaluating the economic impact of traffic
   c) Assessing the safety of road intersections
   d) Estimating the impact of new developments on traffic flow

Answer: d) Estimating the impact of new developments on traffic flow

22. What is the significance of the term "seismic design" in structural engineering?
   a) Designing structures to resist earthquake forces
   b) Designing structures for aesthetic appeal
   c) Ensuring structural stability during floods
   d) Enhancing the thermal insulation of buildings

Answer: a) Designing structures to resist earthquake forces

23. If a rectangular-shaped field has a length of 50 meters and a width of 30 meters, what is its area in square meters?
   a) 1,500 square meters
   b) 1,800 square meters
   c) 2,000 square meters
   d) 2,500 square meters

Answer: a) 1,500 square meters

24. In civil engineering, what is the purpose of a soil stabilization technique?
   a) Enhancing soil fertility
   b) Improving soil drainage
   c) Reducing soil erosion
   d) Increasing the load-bearing capacity of soil

Answer: d) Increasing the load-bearing capacity of soil

25. If the volume of concrete needed for a construction project is 500 cubic meters, and each cubic meter requires 7 bags of cement, how many bags of cement are required in total?
   a) 3,500 bags
   b) 4,000 bags
   c) 4,500 bags
   d) 5,000 bags

Answer: b) 4,000 bags

## Group discussion

A Group Discussion is an informal discussion in which candidates are given topics to talk on. The topic of discussion is generally provided by a panelist or a group of panelists. Candidates are given a specific subject or theme to discuss.

## Personal Interview

Employers will also likely ask some personal questions that are more generic in nature. These are geared toward your personality, your work style, how you handle stress and other questions about your character.