

## Question paper for the appointment of JE( Mech) Level-6 in Diesel Shed.

Date :10.02.2025

Time Allowed: 03 Hours

Maximum Marks: 100

## Instructions:

- Answers may be written in Hindi or English. In case of Ambiguity Hindi version of question paper, the content of English version will prevail
- Candidate should not write their name, roll number, initial, designation, signature, address or any other identification marks on the answer paper as this will disqualify them for selection.
- Use of mobile phone/ gadgets is not permitted in the examination hall. Any candidate found possessing the same shall be debarred from the written examination and shall also be liable for disciplinary action.

## Part -I

Q. No. 1 Choose correct Answers (Any 40)

40x1= 40 Marks

- 1) Who is the first citizen of India?
  - A) Prime Minister
  - B) President
  - C) Governor
  - D) Chief Justice of India
- 2) Which gas is absorbed by plants?
  - A) Nitrogen
  - B) Oxygen
  - C) Carbon Dioxide
  - D) Methane
- 3) How many days a February month have in the leap year?
  - A) 26
  - B) 28
  - C) 29
  - D) 27
- 4) Name the hardest substance available on Earth?
  - A) Stone
  - B) Diamond
  - C) Glass
  - D) Metal
- 5) Which is Indian Railways fastest Train Set?
  - A) Duranto Express
  - B) Rajdhani Express
  - C) Vande Bharat Express
  - D) Shatabdi Express
- 6) International Yoga Day is celebrated on?
  - A) 27 June
  - B) 18 September
  - C) 21 June
  - D) 20 March

- 7) World Environment Day is celebrated on?
  - A) 20 March
  - B) 27 June
  - C) 18 September
  - D) 05 June
- 8) Name a shape that has Eight sides?
  - A) Pentagon
  - B) Hexagon
  - C) Polygon
  - D) Octagon
- 9) Largest Tea producing state of India?
  - A) Maharashtra
  - B) Madhya Pradesh
  - C) Kerala
  - D) Assam
- 10) Which is the longest Railway platform in India?
  - A) Raipur
  - B) New Delhi
  - C) Gorakhpur
  - D) Lucknow
- 11) Sardar Sarovar Project is situated on which river?
  - A) Ganga
  - B) Yamuna
  - C) Narmada
  - D) Kosi
- 12) Qutub Minar is situated at?
  - A) Lucknow
  - B) Agra
  - C) New Delhi
  - D) Bhopal
- 13) Which is the highest court in India?
  - A) High Court
  - B) District Court
  - C) Supreme Court
  - D) Labor Court
- 14) Which Indian city is known as the "Silicon Valley of India"?
  - A) Kolkata
  - B) Mumbai
  - C) Bengaluru
  - D) Hyderabad
- 15) Who was the first Indian woman to win a Nobel Prize?
  - A) Indira Gandhi
  - B) Mother Teresa
  - C) P.T. Usha
  - D) Sarojini Nayadu
- 16) Which Bank is known as the banker's bank?
  - A) State Bank
  - B) Reserve Bank
  - C) Gramin Bank
  - D) Swiss bank

Q:10 इस प्लेटफॉर्म के  
रख (Cancelled) समझा  
जाये।  
समाप्त  
10/11/24

17) Which is known as the Garden City of India?

- A) Bhopal
- B) Bengaluru
- C) Lucknow
- D) Kolkata

18) Which of the following state is associated with the classical dance, Odissi?

- A) Punjab
- B) Bihar
- C) Orissa
- D) Karnataka

19) Which is the National River of India?

- A) Yamuna
- B) Narmada
- C) Ganga
- D) Godavari

20) Chemical name of water is ?

- A) H<sub>2</sub>O
- B) CO<sub>2</sub>
- C) NH<sub>3</sub>
- D) SO<sub>2</sub>

21) Longform of ISRO?

- A) International Scientific Research Organization
- B) Indian Scientific Research Organization
- C) Indian Space Research Organization
- D) International Space Research Organization

22) Long form of NDRF?

- A) National Disaster Response Force
- B) National Disaster Response Fund
- C) National Disaster Recovery Force
- D) National Disaster Relief Fund

23) Taj Mahal is situated on the bank of which River?

- A) Ganga
- B) Narmada
- C) Yamuna
- D) Godavari

24) Tadoba National park known for sheltering tigers, panthers & bear is located in

- (A) Chandrapur (Maharashtra)
- (B) Assam
- (C) Karnataka
- (D) Tamil Nadu

25) Which is the highest literary award of India?

- (A) VyanSamman
- (B) Gyanpeeth Award
- (C) Sahitya academy Award
- (D) Kabir Award

26) Which is the largest state in India in terms of area?

- (A) Maharashtra
- (B) Uttar Pradesh
- (C) Rajasthan
- (D) Karnataka

27) Who was written "Wings of fire" and "Ignited minds"

- (A) Dr. APJ Abdul Kalam
- (B) Dr. K R Narayan
- (C) Dr. Manmohan Singh
- (D) Arun Jetly

28) Who has written the national song of India ?

- (A) Ravindra Nath Tagore
- (B) Bankin Chandra Chaterjee
- (C) Mahatma Gandhi
- (D) Jawahar Lal Nehru

29) which of there is liquid Metal.?

- (A) Iron
- (B) Silver
- (C) Mercury
- (D) Gold

30) Where was 1st Cyber Police Station of India situated.

- (A) Kochi
- (B) New Delhi
- (C) Bengaluru
- (D) Chennai

31) What is Shri Harikota?

- (A) Satellite launch Centre
- (B) HydroPower Plant
- (C) Thermal Power Plant
- (D) None ofthere

32) Find the answer for the below equation  $66 / 314 \times 301 - 308 + 297$

- (A) 53.22
- (B) 50.21
- (C) 52.22
- (D) 52.27

33) Evaluate the expression:  $2 + 5 \times 6 - 7 \times 8 / 4 + 6$

- (A) 23
- (B) 24
- (C) 21
- (D) 15

34) COVID-19 blongs to?. COVID-19

- (A) Swine flu
- (B) corona virus
- (C) Barr Virus
- (D) Norwalk virus

35) If  $2A=3B=4C$ , then A:B:C will be-

- (A) 2 : 3 :4
- (B) 4:5:6
- (C) 6:4:3
- (D) 6:3:4



- 36) Which is the highest civilian award in India ?  
(A) Veer Chakra  
(B) Ashok Chakra  
(C) Arjun  
(D) Bharat Ratna
- 37) Select the antonym of the word Gather  
(A) amusing  
(B) absurd  
(C) awkward  
(D) tragic
- 38) Select the Correct word  
(A) Aggressive  
(B) Agrressive  
(C) Aggresive  
(D) Aggressiv
- 39) If day before yesterday was Thursday, then when will Sunday be ?  
(A) Today  
(B) Two days after today  
(C) Tomorrow  
(D) day after tomorrow
- 40)  $81 \times 81 + 68 \times 68 - 2 \times 81 \times 68$   
(A) 156  
(B) 169  
(C) 196  
(D) 201
- 41) You are removed \_\_\_\_\_ the service.  
(A) by  
(B) from  
(C) on  
(D) by
- 42) She is sitting next \_\_\_\_\_ her brother in second row.  
(A) By  
(B) towards  
(C) To  
(D) on
- 43) Find out the tense "The Earth moves around the Sun."  
(A) simple past  
(B) past perfect  
(C) simple present  
(D) past future perfect

## Part -II

Q.No. 3 Describe any 6 Nos. questions out of 10

( 6 x 5 = 30 Marks)

1. Explain physical properties of metals?
2. Describe the transformers and its types?
3. What is the purpose of a flywheel in an engine?
4. What is the purpose of a gearbox in a vehicle?
5. What is the role of bearings in machine design and their different types?
6. What is the difference between Generator and Alternator?
7. What are the different types of Fits?
8. What is the refrigerator and explain working of refrigerator?
9. What is Power Factor?
10. What is the difference between a pneumatic system and a hydraulic system?

Q.No.4 Answer briefly to any 15 questions out of 20

( 15 x 2 = 30 Marks)

1. Write the classification of I.C. Engines?
2. What are the types of Welding Joints?
3. What are the types of Threads?
4. What is Stress and Strain?
5. What is hardening process?
6. Which material is generally used as conductor?
7. Explain the purpose of a heat exchanger.
8. What is Ferrous Metals and Non Ferrous Metals?
9. Write down the names of heat treatment methods?
10. What is the purpose of a differential in an automobile?
11. State any four types of gears?
12. State any four types of measuring instruments?
13. What is factor of safety?
14. What are the three types of lubricants?
15. What are the types of Fire Extinguishers?
16. What is turbine? State any two types?
17. Define the work and energy?
18. What is Capillary action?
19. Which is the safety precaution to be taken during working in workshops?
20. Write-down any four PPEs (Personal Protective Equipments) for welder?

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