

COCHIN SHIPYARD LIMITED

(A Govt. of India Enterprise)

KOCHI -15

**OBJECTIVE TYPE WRITTEN TEST TO THE POST OF
PROJECT ASSISTANT (MECHANICAL)**

04 JANUARY 2025

DURATION OF THE TEST : 65 Minutes

MAXIMUM MARKS : 80

DO NOT OPEN THIS QUESTION PAPER-CUM-ANSWER BOOKLET UNTIL ASKED TO DO SO

GENERAL INSTRUCTIONS

1. **ANSWER ALL QUESTIONS.** There shall be no negative marks.
2. **Answers are to be marked using ✓ mark against the most appropriate option among the options provided in the Question Booklet using BALL POINT PEN.**
3. Rough work, if any, is to be done on space provided in the Question Booklet only. No separate sheet will be provided for rough work.
4. **Calculators, Mobile, Electronic items etc., are not permitted inside the examination hall.**
5. Candidates seeking, receiving and /or giving assistance during the test will be disqualified.
6. The right to exclude any question (s) from final evaluation rests with CSL.
7. Do not seek any clarification on any item in the Question Booklet. Use your judgment.

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Please fill in the following details using ball point pen.

Name of Candidate	
Registration No.	
Name of Post	
Signature of candidate	
Signature of invigilator	

**THIS QUESTION PAPER-CUM-ANSWER BOOKLET SHOULD BE HANDED OVER
TO THE INVIGILATOR ON COMPLETION OF THE TEST**

**OBJECTIVE TYPE TEST FOR THE POST OF PROJECT ASSISTANT (MECHANICAL) ON
CONTRACT BASIS FOR CKSRU, KOLKATA**

GENERAL KNOWLEDGE (1 mark each)

1. Which major initiative is associated with the Ministry of Shipping to enhance port infrastructure and connectivity.
 - a) **Sagarmala Project**
 - b) Bharatmala Pariyojana
 - c) Pradhan Mantri Awas Yojana
 - d) Swachh Bharat Mission

2. Which Indian city is known as the "Silicon Valley of India".
 - a) Mumbai
 - b) Chennai
 - c) Hyderabad
 - d) **Bengaluru (Bangalore)**

3. Who was the first Indian woman to go to space.
 - a) Rakesh Sharma
 - b) **Kalpana Chawla**
 - c) Sunita Williams
 - d) Valentina Tereshkova

4. Who was the first woman to win the Booker Prize?
 - a) **Arundhati Roy**
 - b) Kiran Desai
 - c) Shashi Tharoor
 - d) R. K. Narayan

5. What does the abbreviation "UNESCO" stand for?

- a) United Nations Economic and Social Council
- b) United Nations Educational, Scientific and Cultural Organization
- c) United Nations Environment and Science Organization
- d) United Nations Economic and Social Organization

REASONING (1 mark each):

6. If "ZEBRA" is written as "AFCSB", how would "LION" be written in the same code

- a) MJPO
- b) MKOQ
- c) MIPO
- d) MKPN

7. A person walks 10 meters North, then 5 meters West, then 10 meters South, and then 5 meters East. How far is the person from his starting point.

- a) 5 meters
- b) 10 meters
- c) 0 meters
- d) 15 meters

8. If A is the father of B, and B is the mother of C, what is the relationship between A and C.

- a) Father
- b) Brother
- c) Grand Father
- d) Uncle

9. If Tom is taller than Jerry, and Jerry is taller than Harry, who is the shortest?

- a) Tom
- b) Jerry
- c) Harry
- d) Can't be determined

10. Which one of the following is the odd one out.

- a) Apple
- b) Banana
- c) Mango
- d) Carrot

Quantitative Aptitude : (1 mark each)

11. A can do a piece of work in 20 days, and B can do the same work in 30 days. How many days will they take to complete the work together.

- a) 12 Days
- b) 14 Days
- c) 15 Days
- d) 16 Days

12. A person buys an article for ₹500 and sells it for ₹600. What is his profit percentage.

- a) 10%
- b) 15%
- c) 20%
- d) 25%

13. A cyclist travels 40 km at a speed of 20 km/h. How long will the journey take.

- a) 1 hour
- b) 2 hours
- c) 3 hours
- d) 4 hours

14. A sum of ₹8000 is invested at 5% simple interest per annum for 3 years. What is the interest earned.

- a) ₹1200
- b) ₹1500
- c) ₹ 2000
- d) ₹ 1800

15. The sum of the ages of a mother and her daughter is 60 years. The mother is 36 years older than her daughter. What are their present ages.

- a) Mother is 48, Daughter is 12
- b) Mother is 50, Daughter is 14
- c) Mother is 52, Daughter is 8
- d) Mother is 54, Daughter is 6

16. A person runs 200 meters in 20 seconds. What is his speed in meters per second.

- a) 8 m/s
- b) 10 m/s
- c) 12 m/s
- d) 15 m/s

17. A shopkeeper sells an article at ₹960 after giving a 20% discount. What is the cost price of the article if the shopkeeper gains a profit of 20%.

- a) ₹800
- b) ₹700
- c) ₹850
- d) ₹750

18. A car travels 60 km in 1 hour. What is its speed in meters per second?

- a) 16.67 m/s
- b) 30 m/s
- c) 15 m/s
- d) 10 m/s

19. What is the simple interest on a principal of ₹5000 for 2 years at 5% per annum?

- a) ₹200
- b) ₹250
- c) ₹500
- d) ₹600

20. What is the average of 13, 16, 21, and 32.

- a) 15.5
- b) 18.5
- c) 19.5
- d) 20.5

General English: (1 mark each)

21. What is the synonym of the word "Beautiful".

- a) Ugly
- b) **Pretty**
- c) Rough
- d) Weak

22. What is the plural form of "Child".

- a) Childs
- b) Childes
- c) **Children**
- d) Childrens

23. Which is the correct form of the verb in this sentence.

"She ____ to the market every day."

- a) Go
- b) **Goes**
- c) Going
- d) Gone

24. Complete the Sentence. "She is afraid ____ the dark."

- a) With
- b) For
- c) **Of**
- d) At

25. What does the word "Innovative" mean.

- a) Ordinary
- b) Creative and new
- c) Useless
- d) Repeated

26. Choose the correct option. "The train ___ at 6:00 AM tomorrow."

- a) Leaves
- b) Leave
- c) Leaving
- d) Left

27. What does the idiom "Piece of cake" mean.

- a) Something delicious
- b) Something very easy
- c) A part of a larger thing
- d) A reward

28. Choose the correct option. "The train ___ at 6:00 AM tomorrow."

- a) Leaves
- b) Leave
- c) Leaving
- d) Left

(WITHDRAWN DUE TO REPITITION)

29. Choose the correct article. "He is ___ honest man."

- a) A
- b) An
- c) The
- d) None

30. Choose the word that best fits the blank: She is very _____ and always helps others.

- a) Kind
- b) Loud
- c) Shy
- d) Angry

SUBJECT BASED (2 mark each)

31. In a Diesel cycle, the combustion process occurs at.

- a) Constant pressure
- b) Constant volume
- c) Constant temperature
- d) Grinding

32. Which type of stress occurs when a material is subjected to a force that tends to twist it.

- a) Tensile stress
- b) Compressive stress
- c) Shear stress
- d) Torsional Stress

33. A four-stroke diesel engine does not have.

- a) Cooling system
- b) Ignition coil
- c) Cam shaft
- d) Piston Rings

34. Feeler gauge is used for measuring.

- a) Depth
- b) Diameter
- c) Gap
- d) Length

35. Instrument used to measure speed in rpm of the rotating machinery.

- a) Anemometer
- b) Spectrometer
- c) Tachometer
- d) Clinometer

36. Name the property of metal which can be drawn into wires without rupture.

- a) Ductility
- b) Tenacity
- c) Elasticity
- d) Malleability

37. What defect occurs when gas bubbles become trapped in the molten metal during welding.

- a) Slag inclusion
- b) Porosity
- c) Burn-through
- d) Overlap

38. What is used to shield the weld area in TIG welding.

- a) A metal cover
- b) Inert gas (like argon)
- c) Electric Current
- d) Heat-resistant gloves

39. Which unit is commonly used to measure stress.

- a) Kilograms (kg)
- b) Newtons per square meter (N/m^2)
- c) Meters (m)
- d) Joules (J)

40. What is the unit of shear force.

- a) Newtons (N)
- b) Meters (m)
- c) Pascals (Pa)
- d) Joules (J)

41. The relationship between stress and strain in the elastic region of a material is described by which law.

- a) Hooke's Law
- b) Newton's Law
- c) Bernoulli's Principle
- d) Pascal's Law

42. Which of the following gases is commonly used as a shielding gas in welding.

- a) Nitrogen
- b) Fluorine
- c) Argon
- d) Chlorine

43. In a refrigeration cycle, which component is responsible for absorbing heat from the space to be cooled.

- a) Condenser
- b) Evaporator
- c) Compressor
- d) Expansion valve

44. What is the main environmental concern associated with the use of refrigerants like R-22.

- a) High cost
- b) Toxicity
- c) Ozone depletion
- d) Flammability

45. What does the term "bending moment" refer to in mechanical engineering.

- a) The moment caused by axial loads on a structure
- b) The rotational force applied to a shaft
- c) The force that causes a structural member to bend
- d) The shear force acting perpendicular to a beam

46. The ability of a material to absorb energy and plastically deform without fracturing is known as.

- a) Brittleness
- b) Hardness
- c) Toughness
- d) Elasticity

47. Which test is commonly used to determine the impact strength of a material.

- a) Tensile test
- b) Compression test
- c) Charpy test
- d) Hardness test

48. What is the primary function of a forklift in material handling.

- a) To lift materials to a higher position
- b) To move materials horizontally over long distances
- c) To stack materials in high places
- d) To carry materials for inspection

49. Which type of pump is most commonly used for pumping large quantities of water in industrial applications.

- a) Diaphragm pump
- b) Centrifugal pump
- c) Gear pump
- d) Piston pump

50. What does EOT in "EOT crane" stand for.

- a) Electrical Overhead Transport
- b) Electric Operated Transport
- c) Electric Overhead Travelling
- d) Engine Operated Travelling

51. Which material is commonly used for manufacturing cutting tools?

- a) Cast Iron
- b) High Speed Steel
- c) Aluminium
- d) Copper

52. What is the primary purpose of cutting fluids in machining operations?

- a) To lubricate the tool
- b) To cool the material
- c) To reduce friction
- d) All of the above

53. Which machine is used to shape metal by applying high pressure?

- a) Lathe
- b) Shaper
- c) Press
- d) Milling Machine

54. Which machining process is used to create holes in materials?

- a) Turning
- b) Milling
- c) Drilling
- d) Grinding

55 . Which of the following processes is used to form a material by forcing it through a die?

- a) Casting
- b) Forging
- c) Extrusion
- d) Welding
