



UDUPI COCHIN SHIPYARD LIMITED
MALPE
Ministry of Ports, Shipping and Waterways, Govt. of India.

OBJECTIVE TYPE WRITTEN TEST

For recruitment to the post of Assistant Manager (Mechanical) on regular Basis

13 SEPTEMBER 2024

DURATION OF THE TEST : 45 Minutes

*MAXIMUM MARKS : 40 (40 Q * 1 mark each)*

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

GENERAL INSTRUCTIONS

1. **ANSWER ALL QUESTIONS in PART A & B.** Right answer will carry 1 mark. There shall be no negative marks.
2. **Answers are to be marked using ✓ mark ON THE SERIAL NUMBER OF THE MOST APPROPRIATE OPTION AMONG THE OPTIONS PROVIDED AGAINST EACH QUESTION IN THE QUESTION BOOKLET, USING BALL POINT PEN. (Blue or Black). Answers that are marked incorrectly /indecisively shall not be considered for evaluation.**
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. **Mobile, Electronic items etc., are not permitted inside the examination hall.**
5. **~~Normal type scientific calculators (Non-programmable type) are allowed.~~**
6. Candidates seeking, receiving and /or giving assistance during the test will be disqualified.
7. The right to exclude any question (s) from final evaluation rests with UCSL.
8. Do not seek any clarification on any item in the Question Booklet. Use your judgment.
9. **Candidate shall Write the Registration No. in all pages with signature, falling which the sheet will not be considered for evaluation.**

Please fill in the following details using ball point pen.

Name of Candidate	
Registration No.	
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 WRITTEN TEST – PART A & B

Part A

General Knowledge:

1. First Indian to win an individual gold medal at the Olympics
 - a) Neeraj Chopra
 - b) Dhyan Chand
 - c) Abhinav Bindra
 - d) Manu Bhaker
 - e) Mirabai Chanu

2. India is the most successful team in Olympic field hockey with --- gold medals
 - a) 7
 - b) 8
 - c) 9
 - d) 6
 - e) 3

3. National song of India
 - a) Jana Gana Mana
 - b) Sandese Aate Hai
 - c) Vande Mataram
 - d) Saare Jahan Se Achha
 - e) Maa Tujhe Salaam

4. The present Governor of the Reserve Bank of India (RBI)
 - a) Shaktikanta Das
 - b) Raghuram Rajan
 - c) Urjit Patel
 - d) D. Subbarao

5. Find out the odd one in the following list of Olympics medalists of India
 - a) Manu Bhaker
 - b) P. V. Sindhu
 - c) Yogeshwar Dutt
 - d) Sushil Kumar
 - e) None one of these

6. Which of the following statement is correct about the NITI Aayog?
 - a) NITI Aayog was formed in 25 January 2014
 - b) NITI Aayog comes under the Ministry of Commerce and Industry

- c) The full form of NITI Aayog is National Integrated Transformation of India
- d) The NITI Aayog is a policy think tank of the Government of India, which collaborates with state governments
- e) NITI Aayog is an institution under Planning Commission

General English

7. Meaning of the idiom “by hook or crook”

- a) Always arguing
- b) By practical experience
- c) Rapidly
- d) By any means right or wrong
- e) Between two dangers

8. Find the synonym of the underlined word in the following sentence: “He was exhilarated at the outcome of election results”

- a) Satisfied
- b) Surprised
- c) Disappointed
- d) Overjoyed
- e) Rebuked

9. Find the word which expresses the antonym of the underlined word in the following sentence: “It was a unanimous decision

- a) Uncertain
- b) Partial
- c) Divergent
- d) Discordant
- e) rejected

10. Find the correctly spelt word

- a) Faithfully
- b) Sincerely
- c) Truly
- d) Affectionatly
- e) All are correct

11. In the following items forms some part of sentence which has been jumbled. You are required to arrange the same in the correct sequence.

The Indian women wants

(P) in a male dominated society (Q) as an equal partner
(R) and it is not too much to demand (S) her rightful place

- a) QPSR
- b) RSQP
- c) SQPR**
- d) SRPQ
- e) PRQS





















12. Which of the phrases – a, b, c, d that is given below the sentence, that should replace the phrase marked in bold and underlined , to make the sentence grammatically correct;

The **crime has growth rapidly** in Russia since the disintegration of the communist system

- a) Rapid crime has grown
- b) Crime has grown rapidly**
- c) Crimes grow rapidly
- d) Crimes have been rapidly grown
- e) No correction required

Reasoning

13. Chose the figure which is different from the rest

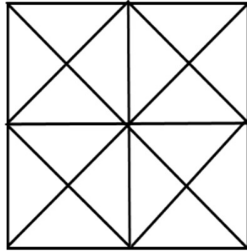
									
									
(1)	(2)	(3)	(4)	(5)					

- a) 1
- b) 2
- c) 3**
- d) 4
- e) 5

14. Radha moves towards the south-east a distance of 7 km, and then she moves towards west and travels a distance of 14 km. From here she moves towards north west a distance of 7 km and finally she moves a distance of 4 km towards east. How far is she now from the starting point?

- a) 3km
- b) 4km
- c) 10km**
- d) 12km
- e) 11km

15. How many triangles are there in the figure given below:



- a) 31
- b) 32
- c) 33
- d) 34
- e) 35

16. If 'sky' is 'star', 'star' is 'cloud', 'cloud' is 'earth', 'earth' is 'tree', and 'tree' is 'book', then where do the birds fly?

- a) Cloud
- b) Sky
- c) Star
- d) Earth
- e) Tree

17. Find the suitable relation of the second pair of words as shown in the first pair :
Ankle: Knee || Wrist: ?

- a) Elbow
- b) Hand
- c) Finger
- d) Foot
- e) Palm

18. Find the odd one out :

- a) 3:12
- b) 4:20
- c) 6:42
- d) 7:63
- e) 5:30

Quantitative Aptitude

19. The simplified value of $(1 - 1/3)(1 - 1/4)(1 - 1/5)(1 - 1/6).....(1 - 1/99)(1 - 1/100)$

- a) 2/99
- b) 1/25
- c) 1/50
- d) 1/100

e) $2/75$

20. LCM of two numbers is 16 times the HCF. The sum of LCM and HCF is 850. If one number is 50, then what is the other number?

- a) 800
- b) 1200
- c) 1600
- d) 2400
- e) 3200

21. The value of $(256)^{0.16} \times (16)^{0.18}$

- a) 4
- b) -4
- c) 16
- d) 64
- e) 256

22. A person spends 30% of monthly salary on rent 25% on food 20% on children's education and 12% on electricity and the balance of Rs. 1040 on the remaining items. What is the monthly salary of the person?

- a) 10600
- b) 9600
- c) 8000
- d) 9000
- e) 12400

23. A student was asked to find $5/16^{\text{th}}$ of a number. By mistake he found $5/6^{\text{th}}$ of that number and his answer was 250 more than the correct answer. find the given number.

- a) 300
- b) 500
- c) 480
- d) 450
- e) 240

24. The average weight of A, B and C is 45 kg, that of A and B is 40 kg, and of B and C is 43 kg. What is the weight of B?

- a) 31kg
- b) 17kg
- c) 26kg
- d) 24kg
- e) 23kg

Part B

Mechanical Engineering

1. Which of the following pump is used for pumping viscous fluid like hydraulic oil
 - a. Centrifugal pump
 - b. Gear pump
 - c. Reciprocating pump
 - d. Jet pump
 - e. Axial flow pump

2. The Kelvin- Plank Statement forms the part of which law of thermodynamics?
 - a. Zeroth Law
 - b. First Law
 - c. Second Law
 - d. Third Law
 - e. Fourth Law

3. Filler material in welding should be :
 - a. Same composition as the parent metal to be welded
 - b. Same melting point as the parent metal to be welded
 - c. Same composition and melting point as the parent metal to be welded
 - d. Same composition of the electrode
 - e. Melting temperature should be lower than the melting temperature of the parent metal to be welded

4. The ratio of brake or actual work done to the indicated work done is called

 - a. Overall Efficiency
 - b. Mechanical Efficiency
 - c. Braking Efficiency
 - d. Thermal Efficiency
 - e. Relative Efficiency

5. The is the point where an imaginary vertical line passing through the center of buoyancy intersects with another vertical line through a new center of buoyancy when the body is tilted or displaced in water
 - a. Centre of Gravity
 - b. Centre of Pressure
 - c. Buoyancy Point
 - d. Metacentre
 - e. Centre of Displacement

6. is used to produce gas tight seal between the piston and the cylinder liners
- Piston rings
 - Connecting rod
 - Fuel nozzle
 - Crankshafts
 - Camshaft
7. states that a change in pressure applied to an enclosed incompressible fluid is transmitted undiminished to all parts of the fluid and to the walls of its container
- Boyles Law
 - Joules Law
 - Archimedes Principle
 - Law of Buoyancy
 - Pascals Law
8. describes the functioning of a typical spark ignition piston engine
- Carnot cycle
 - Joule Cycle
 - Atkinson cycle
 - Otto Cycle
 - Diesel Cycle
9. According to Principle , for an incompressible, frictionless fluid, the total mechanical energy (comprising pressure energy, kinetic energy, and potential energy) remains constant along a streamline
- Reynold's
 - Darcy Weisbach's
 - Bernoulli's
 - Chezy's
 - Weber's
10. Which of the following options would you recommend to measure the discharge (or flow rate) through pipes
- Differential manometer
 - Gate Valves
 - Orifice meters
 - Venturi meters
 - both d & c
11. Density of water is maximum at ...
- 0°C
 - 0°K

- c. 4°C
- d. 4°K
- e. -4°C

12. Chromium in Steel

- a. gives ductility, toughness, tensile strength and anticorrosion properties
- b. Improve cutting ability and reduces hardenability
- c. Make Steel hard
- d. Improve wear resistance, cutting ability and toughness
- e. Refine grain size and produces less tendency to carburization, improve corrosion and heat resistant properties

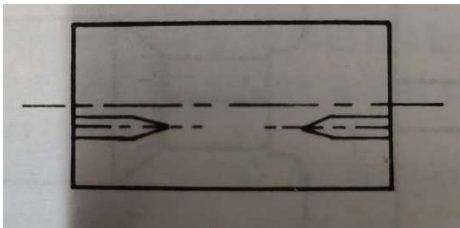
13. Which of the following is not related with Gantt chart ?

- a. Timeline
- b. Break even point
- c. Dependencies
- d. Milestones
- e. Progress Tracking

14. Which of the following conditions would you recommend for a ship , for its stability in water

- a. The metacenter is above the center of gravity
- b. The metacenter is below the center of gravity
- c. the metacenter and the center of gravity are at the same height
- d. the center of gravity is very low in the ship and a large distance to the metacenter
- e. Always avoid metacentric height

15. The following figure shows a case of error in relative location of surfaces. This case is for:



- a. Misalignment
- b. Axial runout
- c. Radial runout
- d. Non parallelism of axes
- e. Squareness error

16. The ignition quality of fuel for S.I Engines is determined by number rating

- a. Cetane
- b. Octane
- c. Iso-Octane
- d. Heptane
- e. N-heptane