

# **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 (Electrical) 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 <u>marked using ✓ mark ON THE SERIAL NUMBER OF THE MOST APPROPRIATE</u>

  <u>OPTION AMONG THE OPTIONS PROVIDED AGAINST EACH QUESTION IN THE QUESTION BOOKLET,</u>

  <u>USING BALL POINT PEN. (Blue or Black). Answers that are marked incorrectly /indecisively shall not be</u>

  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. 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 UCSL.
- 7. Do not seek any clarification on any item in the Question Booklet. Use your judgment.
- 8. 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

#### 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

Registration No:

Page 2 of 9

Signature:

- 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) Faithfuly
  - b) Sincerely
  - c) Truely
  - 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

**Registration No:** Page 3 of 9 **Signature:** 

- 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 <u>crime has growth rapidly</u> 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

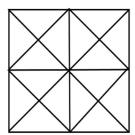
## Reasoning

13. Chose the figure which is different from the rest

| *   | 0 | 0 | *   | * | 1   | <b>\$</b> | * | 0   | 0 |     | * |
|-----|---|---|-----|---|-----|-----------|---|-----|---|-----|---|
| 0   | * | * | 0   | 0 | (   | 9         | 0 | *   | * |     | 0 |
| (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

**Registration No:** 

| 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<br>b) 1200<br>c) 1600<br>d) 2400<br>e) 3200   |
| 21. The value of $(256)^{0.16} \times (16)^{0.18}$   |
| a) 4<br>b) -4<br>c) 16   |

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

d) 64 e) 256

e) 12400

23. A student was asked to find  $5/16^{th}$  of a number. By mistake he found  $5/6^{th}$  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

Page 6 of 9 Registration No: Signature:

### Part B

# **Electrical Engineering**

- 1. Which among the following is most suitable to be followed
  - a) Cables provided for primary circuits of transformer are to have current carrying capacities not less than the load connected
  - b) Cables provided for primary circuits of transformer are to have current carrying capacities not less than 1.10 times load connected
  - c) Cables provided for primary circuits of transformer are to have current carrying capacities not less than the cable selected for secondary circuit
  - <u>d</u>) Cables provided for primary circuits of transformer are to have current carrying capacities not less than the rated primary current
- 2. When generators are not envisaged for parallel connection, the following protection is not required to be provided
  - a) Overload Protection
  - b) Short Circuit Protection
  - c) Thermal Damage Protection
  - d) Reverse Power Protection
- 3. A transformer for outdoor application should have ingress protection of minimum
  - a) IP X7
  - **b)** IP26
  - c) IP 66
  - **d)** IP56
- 4. Hazardous area zone 0 means
  - a) The presence of explosive atmosphere is intermittent in normal operation (likely)
  - b) The presence of explosive atmosphere is continuous, frequent or for long time periods
  - c) The presence of explosive atmospheres is occasional or for short periods (never in normal operations)
- 5. Which among the following is not true for a soft starter
  - a) It regulates AC voltage using thyristors
  - b) It can change the voltage as well as frequency
  - c) A soft starter is bypassed by a contactor at full speed
  - **d)** It is a semiconductor-based motor starter. It is used to start and stop an induction motor

**Registration No:** Page 7 of 9 **Signature:** 

- 6. Which of the following is false- A generator is said to be synchronised when it meets thefollowing conditions
  - a) The generator frequency is equal to the system frequency
  - b) The generator voltage is equal to the system voltage
  - c) The incoming generator voltage is 180 ahead of system voltage
  - d) The phase sequence of the generator is same as that of the system
- 7. Battery cells in series
  - a) Increase the current capacity
  - b) Decrease the output voltage
  - c) Increase the output voltage
  - d) Decrease the internal resistance
- 8. Class A motors are characterised by
  - a) Normal starting torque, high starting current and low operating slip
  - b) Normal starting torque, low starting current and low operating slip
  - c) High starting torque, low starting current
  - d) High starting torque, low starting current
- 9. As per IEC class IE2 class induction motor means
  - a) High efficiency
  - **b)** Premium efficiency
  - c) Standard efficiency
  - d) Super premium efficiency
- 10. A ground fault circuit interrupter (GFCI) is used to protect against:
  - a) Overcurrent faults
  - **b)** Short circuit faults
  - c) Ground faults
  - d) All of the above
- 11. The starting current of a squirrel cage induction motor is:
  - a) High
  - b) Low
  - c) Moderate
  - d) Depends on the motor size
- 12. The first step in troubleshooting a VFD that is not functioning properly?
  - a) Replace the VFD
  - b) Check the input voltage

Registration No:

Page 8 of 9

Signature:

- c) Check the output voltage
- d) Check the motor
- 13. If details of fault current ratings are not available for a distribution network, then it is recommended to select .... kA short circuit current rating of MCB.
  - a) 5 kA
  - **b)** 10 kA
  - c) 20 kA
  - **d)** 9 kA
- 14. The magnetic tripping element in an MCCB is used for
  - a) Overcurrent Protection
  - **b)** Short circuit Protection
  - c) Both Over current and Short Circuit Protection
  - d) None of the above
- 15. The most common type of fault in a power system is
  - a) Single -Phase to ground fault
  - b) Three phase fault
  - c) Double phase fault
  - d) Line to line fault
- 16. The typical range of SOC values of a battery is
  - a) 0 to 100
  - b) -100 to 100
  - c) 1 to 10
  - d) .01 to 1000