



Instructions:

- Question no 1 to 48 are of objective type.
- Question no 49 to 56 to be written separately.

SECTION A: ELECTRICAL POWER

Qn 1 to 15 carries 2 marks each.

1.	Inductance is measured in Henry or _____ . (A) Wb.Turn/sec (B) Wb.Turn/Ampere (C) Ampere.Turn/Wb (D) Wb.Ampere/Turn
2.	Ideal Transformer donot have _____ . (A) Mag. Leakage (B) Losses (C) low efficiency (D) All of these
3.	Losses of a Transformer is proportional to square of its _____ (A) Voltage (B) Power (C) Current (D) Both B & C
4.	Regulation of a DC Generator can be negative due to _____ compounding of Field (A) Over (B) Under (C) Flat (D) None of these
5.	Infinite Bus in a generator system has _____ number of Generators. (A) Infinite (B) Large (C) less (D) Can't say
6.	'Watt.hour' is the Unit of _____ . (A) Power (B) Voltage (C) Energy (D) Current
7.	Overload in a circuit means _____ (A) Over Power (B) Over Current (C) Over Voltage (D) Over Power/Current
8.	Batteries form the basic source of DC power supply. (A) Always False (B) Sometimes False (C) Sometimes True (D) Always True
9.	A 12V 1.5 ohm battery connected to a _____ ohm load yields maximum power transfer. (A) 50 (B) 2 (C) 25 (D) 12.5
10.	Energy stored in an Inductive circuit is proportional to _____ .



Total
Qns:56

SAMUNDRA INSTITUTE OF MARITIME STUDIES

ETO SAMPLE QUESTION PAPER



Max Marks: 100
Duration: Sec A
to Sec D - 60
Min, Sec E - 15
Min

	(A) VI^2 (C) LI^2	(B) CV^2 (D) None of these
11.	The starting Torque of a slip ring Induction motor varies _____ to its Rotor resistance. (A) directly proportional (C) Equal to	
	(B) inversely proportional (D) None of these	
12.	Starting current of a 10 HP induction Motor is _____ time's full load current. (A) 5 (C) 10	
	(B) 8 (D) 20	
13.	Di-electric strength is also called as _____. (A) Insulation (C) twin-electric	
	(B) dual-electric (D) conductance	
14.	Electro Magnetic Induction is converting Electrical energy into magnetic energy between a _____ & a core. (A) Coil (C) A & B	
	(B) Solenoid (D) Wire	
15.	The efficiency of an autotransformer for the same rating compared to a two-winding transformer is _____. (A) Greater (C) Same	
	(B) Lesser (D) None of these	

SECTION B: ELECTRONICS & CONTROL

Qn 16 to 30 carries 2 marks each.

16.	A single phase Bridge rectifier has _____ diodes. (A) 2 (C) 6	
	(B) 4 (D) 8	
17.	A Thyristor is also called as _____ (A) SCR (C) 3 terminal device	
	(B) PNP Diode (D) All of these	
18.	A Darlington pair consists of two _____. (A) Diodes	
	(B) Transistors	



	(C) Thyristors	(D) None of these
19.	A Transistor is used in _____ .	
	(A) Oscillator	(B) Amplifiers
	(C) Modem	(D) None of these
20.	A Doide is used in _____ .	
	(A) Converter	(B) Rectifier
	(C) Doubler	(D) All of these
21.	Electrical analogous quantity for spring element (K) in force-voltage analogy is _____ .	
	(A) R	(B) L
	(C) C	(D) 1/C
22.	Which of the following is the disadvantage of a closed loop control system?	
	(A) Oscillatory response	(B) Costly
	(C) Complex circuit	(D) All of these
23.	Differentiation of parabolic response is a _____ response?	
	(A) Parabolic	(B) Ramp
	(C) Step	(D) Impulse
24.	In which of the following controller band width is increased?	
	(A) PI	(B) PD
	(C) P	(D) I
25.	Queue is also known as _____ memory.	
	(A) FIFO	(B) LIFO
	(C) FLASH	(D) FILO
26.	1 Kilobits in Digital circuits = _____ bits.	
	(A) 1024	(B) 1000
	(C) 1032	(D) 1016
27.	In n-type material is minority carriers.	
	(A) neutrons	(B) protons
	(C) electrons	(D) holes
28.	As a result of introduction of negative feedback which of the following will not decrease?	
	(A) Bandwidth	(B) Gain
	(C) Distortion	(D) Stability



29.	<p>If the arrow in the symbol for a transistor points away from the base lead, the transistor is a.....</p> <p>(A) NPN transistor (B) PNP transistor</p> <p>(C) FET transistor (D) MOSFET transistor</p>
30.	<p>Semiconductor materials have..... Bonds.</p> <p>(A) Ionic (B) Covalent</p> <p>(C) Mutual (D) Metallic</p>

SECTION C: GENERAL ENGINEERING

Qn. 31 to 40 carries 2 marks each.

31.	<p>All the commercial liquid fuels are derived from</p> <p>(A) Coal (B) Crude oil</p> <p>(C) Fuel oil (D) LNG</p>
32.	<p>Which of the following is not a type of energy source?</p> <p>(A) rheostat (B) generator</p> <p>(C) battery (D) solar cell</p>
33.	<p>A 100 cc engine refers to</p> <p>(A) fuel tank capacity (B) lubricating oil capacity</p> <p>(C) swept volume (D) cylinder volume</p>
34.	<p>A four stroke diesel engine does not have</p> <p>(A) cooling system (B) ignition coil</p> <p>(C) cam shaft (D) piston rings</p>
35.	<p>Ratio of heat used in generation of steam to the heat supply by fuel in a same period is known as</p> <p>(A) boiler efficiency (B) economiser efficiency</p> <p>(C) chimney efficiency (D) none of these</p>
36.	<p>Which of the listed operations will cause an automatically controlled refrigeration compressor to restart?</p> <p>(A) Closing of solenoid valve (B) Closing of expansion valve</p> <p>(C) Increase in suction pressure (D) Decrease in suction pressure</p>
37.	<p>Centrifugal pump should be started with</p> <p>(A) delivery valve open (B) delivery valve close</p>



	(C) suction valve close	(D) none of above
38.	On psychometric chart, dew point temperature lines are	
	(A) horizontal	(B) vertical
	(C) straight inclined sloping downward to the right.	(D) curved.
39.	For same power, the floor area occupied by two-stroke cycle engine as compared to four-stroke cycle engine is	
	(A) more	(B) less
	(C) same	(D) none of these
40.	If the relative humidity of atmosphere air is 100% the rate of evaporation of water will be	
	(A) very high	(B) very low
	(C) same as the water content in air	(D) zero

SECTION D: LOGIC

Qn 41 to 48 carries 1 mark each.

41.	Yard is to inch as quart is to	
	(A) gallon	(B) ounce
	(C) milk	(D) liquid
42.	Choose the word that is a necessary part of the underlined word : election	
	(A) president	(B) voter
	(C) November	(D) nation
43.	What comes next in the given series? FAG, GAF, HAI, IAH, _____	
	(A) JAK	(B) HAL
	(C) HAK	(D) JAI
44.	All the offices on the 9th floor have wall-to-wall carpeting. No wall-to-wall carpeting is pink. None of the offices on the 9th floor has pink wall-to-wall carpeting.	
	If the first two statements are true, the third statement is	
	(A) True	(B) False
	(C) Uncertain	(D) None of all
45.	Look at this series: 8, 22, 8, 28, 8, ... What number should come next?	
	(A) 9	(B) 29
	(C) 32	(D) 34



46.	Look at this series: 3, 4, 7, 8, 11, 12, ... What number should come next?		
	(A) 7	(B) 10	
	(C) 14	(D) 15	
47.	Which word does NOT belong with the others?		
	(A) dodge	(B) flee	
	(C) duck	(D) avoid	
48.	The words in the bottom row are related in the same way as the words in the top row. Find the word that completes the bottom row of words.		
	meal	banquet	feast
	shelter	palace	?
	(A) mansion	(B) hallway	
	(C) protection	(D) haven	

SECTION E: ENGLISH

Solve the following questions. (4 x 1 = 4)

49.	Rearrange the jumbled up sentence into a meaningful one: on the road People queue formed a.
50.	Make a sentence with the following word: DISCLOSE
51.	Correct the following sentence: I no like coffee.
52.	Complete the following sentence: The best teacher is the one who....

Read the following passage and answer questions. (3 x 1 = 3)

Opera refers to a dramatic art form, originating in Europe, in which the emotional content is conveyed to the audience as much through music, both vocal and instrumental, as it is through the lyrics. By contrast, in musical theater an actor's dramatic performance is primary, and the music plays a lesser role. The drama in opera is presented using the primary elements of theater such as scenery, costumes, and acting. However, the words of the opera, or libretto, are sung rather than spoken. The singers are accompanied by a musical ensemble ranging from a small instrumental ensemble to a full symphonic orchestra.

53.	Why is opera referred as a dramatic art form?
54.	What are the primary elements of theater?
55.	What do you understand from the above passage?

Write about any one of the following topics in 100 words. (5 Marks)



Total
Qns:56

SAMUNDRA INSTITUTE OF MARITIME STUDIES

ETO SAMPLE QUESTION PAPER



Max Marks: 100
Duration: Sec A
to Sec D - 60
Min, Sec E – 15
Min

56.	Is competition among students good? Justify your answer.
	True friendship

===== ALL THE BEST =====

SAMPLE