

# ONGC Diploma

Previous Year Paper (Electrical

16 Aug, 2022

Adda247



## OIL AND NATURAL GAS CORPORATION LIMITED

Participant ID	
Participant Name	
Test Center Name	
Test Date	16/08/2022
Test Time	8:30 AM - 10:30 AM
Subject	Diploma in Electrical Engineering

Section : General Aptitude and Reasoning

Q.1 સંયુક્ત જવાબદારી જૂથ બનાવવા પાછળનો હેતુ શું છે?

- Ans  1. મકાનોની ખરીદી કરવી
2. ઉદ્યોગોની સ્થાપના કરવી
3. માઈક્રો ક્રેડિટનો લાભ લેવો
4. કંપનીઓની રચના કરવી

Question ID : 1841224635  
Status : Answered  
Chosen Option : 3

Q.2 select the option that is appropriate for the blank.

Next year, I am going to America to \_\_\_\_\_ my son.

- Ans  1. visit
2. visiting
3. visited
4. will visit

Question ID : 1841224639  
Status : Answered  
Chosen Option : 1

Q.3 આમાંથી કઈ નદીઓ માનસરોવર પર્વતમાંથી નીકળે છે?

- Ans  1. બ્રહ્મપુત્રા નદી
2. નર્મદા નદી
3. કૃષ્ણા નદી
4. મહાનદી

Question ID : 1841224636  
Status : Answered  
Chosen Option : 1

Q.4 In a certain code, if 'S' means 'addition', '#' means 'multiplication', '@' means 'division' and '&' means 'subtraction', then find the value of  $595 @ 7 \# 5 S 16 \& 9 = ?$

- Ans
- ✓ 1. 432
  2. 24
  3. 352
  4. 12

Question ID : 1841224628  
Status : Answered  
Chosen Option : 1

Q.5 એક દવાની ગોળી નળાકાર આકારમાં છે જેનો વ્યાસ 0.6 cm છે અને બે ગોળાધો તેના બંને છેડે જોડાયેલા છે. આખી ગોળીની લંબાઈ 2 cm છે. તે તે ગોળીનું અંદાજિત ધનફળ આશરે (cubic cm માં) કેટલું હશે?

- Ans
1. 0.472
  - ✓ 2. 0.509
  3. 0.481
  4. 0.488

Question ID : 1841224633  
Status : Answered  
Chosen Option : 3

Q.6 If the sum of two numbers is 10 and their product is 21, find the sum of the cube of the numbers.

- Ans
1. 384
  2. 420
  3. 456
  - ✓ 4. 370

Question ID : 1841224629  
Status : Answered  
Chosen Option : 4

Q.7 એક માણસે ₹57,120 પ્રત્યેકની કિંમતે બે લેપટોપ વેચ્યા. એક લેપટોપ પર તે 12% નો નફો મેળવે છે જ્યારે કે બીજા પર તેને 15% ની ખોટ થાય છે. તે બંને લેવડદેવડમાં તેને કેટલો કુલ નફો કે ખોટ થઈ કહેવાય?

- Ans
- ✗ 1. નફો ₹3,520
  2. ખોટ ₹3,690
  3. ખોટ ₹3,960
  4. નફો ₹3,250

Question ID : 1841224630  
Status : Answered  
Chosen Option : 3

Q.8 બે ટ્રેનો A અને B અનુક્રમે 150 km/hr અને 90 km/hr ની ઝડપે સમાન દિશામાં દોડે છે. ઝડપી ટ્રેન A એ ટ્રેન B માં બેઠલા એક ઊકરાને 9 સેકન્ડમાં પસાર કરે છે. ટ્રેન A ની લંબાઈ (m માં) કેટલી છે?

- Ans
1. 180 m
  2. 135 m
  3. 125 m
  - ✓ 4. 150 m

Question ID : 1841224632  
Status : Answered  
Chosen Option : 4

Q.9 બંધારણના કયા ભાગમાં નાગરિકોની મૂળભૂત ફરજો દર્શાવવામાં આવી છે?

- Ans
1. ભાગ VI-A
  2. ભાગ V-A
  - ✓ 3. ભાગ IV-A
  4. ભાગ VII-A

Question ID : 1841224638  
Status : Answered  
Chosen Option : 3

Q.10 ફૂલના જે ભાગમાં પરાગકોશ અને તંતુ હોય છે તેને શું કહેવાય છે?

- Ans
- ✓ 1. પુંકેસર (Stamen)
  2. પાંખડી (Petal)
  3. ફૂલનો બીજકોશ (Pistil)
  4. રીસેપ્ટેકલ (Receptacle)

Question ID : 1841224637  
Status : Answered  
Chosen Option : 1

Q.11 નીચેના અક્ષર, સંખ્યા, પ્રતીક શબ્દમાળાનું અવલોકન કરો અને નીચે આપેલા પ્રશ્નનો જવાબ આપો:

K 5 3 \$ E 3 A % U P 4 8 E 6 A \$ 5 E W 9 ≥ Z 2 F # 3 U # 7 2 π E 6

શબ્દમાળામાં આવા કેટલા સ્વરો છે, જેમાંના પ્રત્યેકની તરત જ આગળ એક સંખ્યા આવે છે અને તરત જ પછી એક પ્રતીક આવે છે?

- Ans
1. 2
  2. 3
  - ✓ 3. 4
  4. 5

Question ID : 1841224625  
Status : Answered  
Chosen Option : 3

Q.12 નીચેનામાંથી કયા દાર્શનિક (philosophical) જૂથની દેવેન્દ્રનાથ ટાગોર દ્વારા સ્થાપના કરવામાં આવી હતી?

- Ans
- ✓ 1. તત્ત્વબોધિની સભા
  2. આર્ય સમાજ
  3. પ્રાર્થના સમાજ
  4. આત્મીય સભા

Question ID : 1841224634  
Status : Answered  
Chosen Option : 3

Q.13 select the option that is appropriate for the blank.

The chandelier fell \_\_\_\_\_ the ceiling and broke into pieces.

- Ans
1. of
  2. out of
  - ✓ 3. from
  - ✗ 4. on

Question ID : 1841224640  
Status : Answered  
Chosen Option : 3

Q.14 અમુક રાશિ પર વાર્ષિક 12% વ્યાજ દરે 2 વર્ષ માટે ચક્રવૃત્તિ અને સાદા વ્યાજનો તફાવત ₹504 છે. હવે એ મૂળ રાશિ પર ચક્રવૃત્તિ વ્યાજની ગણના જો દર છ મહિને કરવામાં આવે તો 1 વર્ષના અંતે કેટલી રકમ મળશે?

- Ans
1. ₹39,200
  2. ₹39,326
  3. ₹39,604
  4. ₹39,458

Question ID : 1841224631  
Status : Answered  
Chosen Option : 3

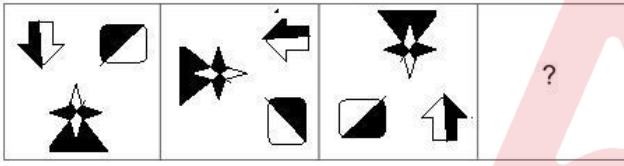
Q.15 Fill in with most appropriate word:

Sohan came across his roommate \_\_\_\_\_ reading a literary journal.

- Ans
1. humorously
  2. steadfastly
  3. avidly
  4. modestly

Question ID : 1841224641  
Status : Answered  
Chosen Option : 3

Q.16 Select the figure that will replace the question mark (?) in the following figure series.

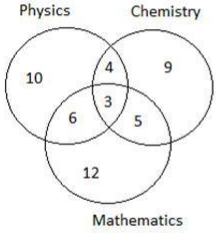


Ans

- ✗ 1.
- ✗ 2.
- ✓ 3.
- ✗ 4.

Question ID : 1841224627  
Status : Answered  
Chosen Option : 3

Q.17 આપેલ રેખાકૃતિનો કાળજીપૂર્વક અભ્યાસ કરો અને પ્રશ્નનો જવાબ આપો. જુદા જુદા વિભાગોમાંની સંખ્યાઓ વિવિધ વિષયોમાં 75% થી વધુ ગુણ મેળવનાર વિદ્યાર્થીઓની સંખ્યા દર્શાવે છે.



એવા કેટલા વિદ્યાર્થીઓ છે જેમણે ભૌતિકશાસ્ત્ર અને રસાયણશાસ્ત્ર બંનેમાં 75% થી વધુ ગુણ મેળવ્યા હોય પરંતુ ગણિતમાં નહીં?

- Ans
1. 14
  2. 7
  - ✓ 3. 4
  4. 3

Question ID : 1841224624  
 Status : Answered  
 Chosen Option : 3

Q.18 In a certain code language, 'RAJ' is written as 7, 'VIPUL' is written as 11, how will 'RATNESH' be written in that language?

- Ans
1. 10
  2. 11
  3. 13
  - ✓ 4. 15

Question ID : 1841224626  
 Status : Answered  
 Chosen Option : 3



**Comprehension:**

Read the passage and answer the questions that follow:

Yoga originated in ancient India thousands of years ago, long before the first religion or belief system was born. It is believed that Shiva is the first Yogi or Adiyogi and the first guru. Thousands of years ago, on the banks of Lake Kantisarovar in Himalayas, Adiyogi shared his knowledge into legendary seven sages as it was hard to put all his wisdom and knowledge in one person.

The fossil remains of Indus-Saraswati civilization are an evidence of the presence of Yoga in ancient India. This presence finds a mention in the folk traditions. It is included in the Indus valley civilization, Buddhist and Jain traditions. According to the studies, Yoga was being practiced under the direct guidance of a Guru and its spiritual value was given a lot of importance. Sun was given the highest importance during Vedic period and that's how Suryanamaskar was invented later on.

However, Maharishi Patanjali is known as the father of Modern Yoga. He did not invent Yoga as it was already there in various forms. He assimilated it into the system. He saw that it was getting quite complex for anyone to understand it in any meaningful way. So he assimilated and included all aspects into a certain format – Yoga Sutras.

SubQuestion No : 19

Q.19 Which is the most appropriate title of the passage?

- Ans
- 1. Yoga
  - 2. Yoga and Life
  - 3. Yogic History
  - 4. Relevance and Importance of Yoga

Question ID : 1841224643

Status : Answered

Chosen Option : 4

## Comprehension:

Read the passage and answer the questions that follow:

Yoga originated in ancient India thousands of years ago, long before the first religion or belief system was born. It is believed that Shiva is the first Yogi or Adiyogi and the first guru. Thousands of years ago, on the banks of Lake Kantisarovar in Himalayas, Adiyogi shared his knowledge into legendary seven sages as it was hard to put all his wisdom and knowledge in one person.

The fossil remains of Indus-Saraswati civilization are an evidence of the presence of Yoga in ancient India. This presence finds a mention in the folk traditions. It is included in the Indus valley civilization, Buddhist and Jain traditions. According to the studies, Yoga was being practiced under the direct guidance of a Guru and its spiritual value was given a lot of importance. Sun was given the highest importance during Vedic period and that's how Suryanamaskar was invented later on. However, Maharishi Patanjali is known as the father of Modern Yoga. He did not invent Yoga as it was already there in various forms. He assimilated it into the system. He saw that it was getting quite complex for anyone to understand it in any meaningful way. So he assimilated and included all aspects into a certain format – Yoga Sutras.

SubQuestion No : 20

Q.20 Select the option that is the correct synonym for

'assimilated'.

- Ans
- 1. equated
  - 2. digested
  - 3. adjusted
  - 4. incorporated

Question ID : 1841224644  
Status : Answered  
Chosen Option : 2

Section : Domain Knowledge

Q.1 Which is wrong application of autotransformer?

- Ans
- 1. Welding transformer
  - 2. Furnace transformers
  - 3. To give small boost to a distribution cable to correct for the voltage drop
  - 4. Induction motor starters

Question ID : 1841224660  
Status : Answered  
Chosen Option : 2

Q.2 Which of the following is an INCORRECT statement about transformers connected in parallel to line?

- Ans
- 1. Cost of spares will be improve when extra unit connected according to load demand
  - 2. Maximum operating efficiency archive
  - 3. Power supply can be maintained if one unit fails
  - 4. Additional unit can be installed if load demand increases

Question ID : 1841224687  
Status : Answered  
Chosen Option : 1



Q.3 Which of the following working circuit is not related to thermal power plant?

- Ans
1. Feed Water and Steam Circuit
  2. Air and Gas Circuit
  - ✓ 3. Dam and Reservoir Circuit
  4. Coal and Ash Circuit

Question ID : 1841224645  
 Status : Answered  
 Chosen Option : 3

Q.4 In induction motor, the three phases of the stator are connected in series across either a single AC or DC source that type of connection braking is known as \_\_\_\_\_.

- Ans
1. AC Dynamic Braking
  2. Self-Excited Braking Using Capacitor
  3. DC Dynamic Braking
  - ✓ 4. Zero Sequence Braking

Question ID : 1841224703  
 Status : Answered  
 Chosen Option : 4

Q.5 Which component reduces ripples from rectifier DC output that is fed to DC traction motor?

- Ans
1. Protective equipments
  - ✓ 2. Choke
  3. On-load tap changer
  4. ARNO converter

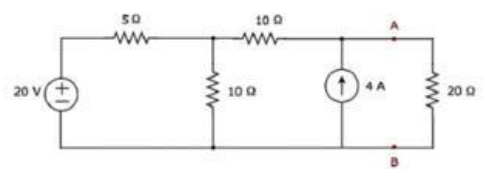
Question ID : 1841224724  
 Status : Answered  
 Chosen Option : 2

Q.6 Which type of batteries are the most efficient and preferred for electrical vehicle?

- Ans
1. Solid state batteries
  - ✓ 2. Lithium-ion batteries
  3. Lead-Acid Batteries
  4. Nickel-Metal Hydride Batteries

Question ID : 1841224721  
 Status : Answered  
 Chosen Option : 2

Q.7 What is the thevenin's equivalent resistance across the 20 Ω in given circuit?



- Ans
1. 50/3 Ω
  2. 20/7 Ω
  3. 10/7 Ω
  - ✓ 4. 40/3 Ω

Question ID : 1841224651  
 Status : Answered  
 Chosen Option : 4

Q.8 Which is end point of power system structure?

- Ans  1. Service mains  
2. Distribution line  
3. Generating station  
4. Grid sub station

Question ID : 1841224671  
Status : Answered  
Chosen Option : 1

Q.9 In \_\_\_\_\_ the primary fuel produce high temperature thermal energy and the heat rejected from the process is used to generate power through a recovery boiler and a turbine generator.

- Ans 1. Recycling  
2. Steam-turbine topping system  
3. Bottoming cycle  
4. Topping cycle

Question ID : 1841224688  
Status : Answered  
Chosen Option : 1

Q.10 The locomotive that uses both, fuel and electricity to run on the road is known as \_\_\_\_\_.

- Ans 1. Electric vehicle  
2. Petrol engines locomotive  
3. CNG operated locomotive  
4. Hybrid electric vehicle

Question ID : 1841224720  
Status : Answered  
Chosen Option : 4

Q.11 Which type of excitation is used to measurement of wave length, spectrum speed and polarization?

- Ans 1. Mechanical  
2. Optic  
3. Thermal  
4. Biological

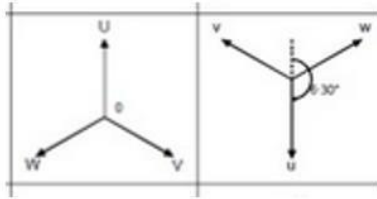
Question ID : 1841224696  
Status : Answered  
Chosen Option : 3

Q.12 Which type of solar collector boiling the boiler up to 80 °C?

- Ans 1. Triangle plate solar collector  
2. Cylindrical parabolic concentrator collector  
3. Flat plate solar collector  
4. Rectangle plate solar collector

Question ID : 1841224662  
Status : Answered  
Chosen Option : 3

Q.13 Which vector group is represented by the following phase diagram of three phase transformer?



- Ans
1. Yy6
  2. Dy6
  3. Yd 5
  4. Yy 0

Question ID : 1841224661  
 Status : Answered  
 Chosen Option : 1

Q.14 Which among statements given is wrong related to modulation in communication system?

- Ans
1. Multiplexing
  2. Mixing up of other signals with main signals
  3. Increasing the communication distance
  4. Its reduce the antenna height

Question ID : 1841224704  
 Status : Answered  
 Chosen Option : 1

Q.15 Which PLC software is supported ladder logic, STL, and structured text type of programming language?

- Ans
1. Microladder
  2. I-Trilogi
  3. Winproladder
  4. WPLSoft

Question ID : 1841224698  
 Status : Answered  
 Chosen Option : 3

Q.16 In a three-phase alternator, if one complete revolution produces two complete positive and negative pulses for each cycle, then the number of poles are \_\_\_\_\_.

- Ans
1. 4
  2. 10
  3. 8
  4. 2

Question ID : 1841224680  
 Status : Answered  
 Chosen Option : 4

Q.17 Which part of a three phase induction motor is responsible for the production of a revolving magnetic field?

- Ans
1. Rotor
  2. Slip rings
  3. Stator
  4. Rotor slots

Question ID : 1841224678  
 Status : Answered  
 Chosen Option : 3

Q.18 Which of the following unit is not a part of DC derive?

- Ans
1. Field Supply Unit
  2. Dc supply unit
  3. Speed Regulation unit
  4. Frequency control unit

Question ID : 1841224701  
Status : Answered  
Chosen Option : 4

Q.19 Working principle of which type of analog instrument is based on hall effect?

- Ans
1. Volt meter
  2. Watt meter
  3. AC volt meter
  - ✓ 4. Flux meter

Question ID : 1841224652  
Status : Answered  
Chosen Option : 4

Q.20 Which is used as extensions to screwdrivers and allow these to apply torque to hexagonal fastenings?

- Ans
1. Hex Key
  2. Spanners
  3. Claw Hammer
  4. Chisel

Question ID : 1841224690  
Status : Answered  
Chosen Option : 1

Q.21 Which reactions can producing the combustible gas from biomass solid?

- Ans
1. Electro mechanical extraction
  2. Biological conversion
  3. Electro chemical reaction
  - ✓ 4. Thermo chemical reaction

Question ID : 1841224718  
Status : Answered  
Chosen Option : 2

Q.22 Light is a form of \_\_\_\_\_ radiated from a body and human eye is capable of receiving it.

- Ans
1. Electrochemical energy
  2. Electrostatic energy
  3. Electromagnetic energy
  4. Electromechanical energy

Question ID : 1841224710  
Status : Answered  
Chosen Option : 3



Q.23 નીચેનામાંથી કયું એ જૈવઊર્જા (બાયોએનર્જી) ઉત્પન્ન કરવા માટે વપરાતા દ્રવ્યનું ખોટું ઉદાહરણ છે?

- Ans  1. પશુ ખાતર
2. મ્યુનિસિપલ ધન કચરો
3. સામગ્રીનો કચરો
4. હેતુપૂર્વક ઉગાડવામાં આવેલા પાકો

Question ID : 1841224717  
Status : Answered  
Chosen Option : 2

Q.24 Which type of relay gives an indication of the fault at very early stage, by anticipating the fault and operating the alarm circuit for protection of transformer?

- Ans 1. Impedance relay
2. Over current relay
3. Differential relay
4. Buchholz relay

Question ID : 1841224716  
Status : Answered  
Chosen Option : 4

Q.25 Acetone is a bio mass product that is related to \_\_\_\_\_ category.

- Ans 1. Fuel
2. Detergents and Cleaning Products
3. Cosmetics and Perfumes
4. Food Additives and Nutritional Supplements

Question ID : 1841224666  
Status : Answered  
Chosen Option : 1

Q.26 Thevenin's equivalent circuit resembles a \_\_\_\_\_.

- Ans 1. Ideal voltage source
2. Practical voltage source
3. Variable voltage source
4. Dependent voltage source

Question ID : 1841224650  
Status : Answered  
Chosen Option : 2

Q.27 Which type of wind turbine operation is independent of wind direction?

- Ans 1. Horizontal axis machine
2. Vertical axis machine
3. Direct wind machine
4. Indirect wind machine

Question ID : 1841224663  
Status : Answered  
Chosen Option : 2



Q.28 The luminous intensity of a lamp is 600 CP. Find the flux in the hemisphere containing the source of light and zero above the horizontal.

- Ans
1. 4486.85 lumens
  2. 2130.92 lumens
  - ✓ 3. 3769.91 lumens
  4. 4835.78 lumens

Question ID : 1841224713  
Status : Answered  
Chosen Option : 3

Q.29 With reference to HVDC system which statement below is incorrect?

- Ans
- ✗ 1. Power transmission and stabilization between unsynchronized AC distribution systems
  - ✗ 2. Endpoint-to-endpoint long-haul bulk power transmission without intermediate.
  3. Synchronize AC produced by renewable energy sources.
  - ✓ 4. Circuit breaking is easy in D.C circuits, therefore the cost of dc circuit is low.

Question ID : 1841224674  
Status : Answered  
Chosen Option : 4

Q.30 The art of determining per unit cost of production of electrical energy is known as \_\_\_\_\_.

- Ans
1. Rate of power production
  2. Economics of power generation
  3. Lowest rate of power generation
  4. Maximum rate of power production

Question ID : 1841224649  
Status : Answered  
Chosen Option : 2

Q.31 How many bits of RISC multicore processor designs are offered by ARM?

- Ans
1. 64 bit only
  - ✓ 2. 32 bit and 64 bit both
  3. 16 bit only
  4. 16 bit and 32 bit both

Question ID : 1841224685  
Status : Answered  
Chosen Option : 2

Q.32 In dc distribution which parameter is considered for voltage drop in distribution line?

- Ans
1. Resistance, inductance and capacitance
  2. Capacitance and inductance
  3. Resistance only
  4. Resistance and capacitance

Question ID : 1841224675  
Status : Answered  
Chosen Option : 3

Q.33 \_\_\_\_\_ is employed only when power is generated at low voltage and the substation is located at the centre of the load?

- Ans
1. Ring system
  2. Loop system
  3. Interconnected system
  4. Radial system

Question ID : 1841224677  
Status : Answered  
Chosen Option : 1

Q.34 Which type of turn on method is used to radiation intensity?

- Ans
1. Temperature triggering
  2. Light triggering
  3. Forward voltage triggering
  4. Gate triggering

Question ID : 1841224669  
Status : Answered  
Chosen Option : 2

Q.35 The EMF equation of a DC generator is  $E_g = P\phi ZN/60A$  Where A is represent as \_\_\_\_\_.

- Ans
1. Armature conductor
  2. Armature winding slots on core
  3. Number of parallel lanes within the armature
  4. Armature rotor speed

Question ID : 1841224658  
Status : Answered  
Chosen Option : 3

Q.36 Which is not a type of energy audits?

- Ans
1. Detailed energy audits
  2. Target energy audits
  3. Short type energy audits
  4. Walk through energy audits

Question ID : 1841224689  
Status : Answered  
Chosen Option : 4

Q.37 સ્ટીમ જેટ ડ્રાફ્ટ (steam jet draught)ના સંદર્ભમાં કયું વિધાન સાચું છે?

- Ans
1. નીચા ગ્રેડના ઇંધણનો ઉપયોગ કરવાની ક્ષમતા
  2. ઓછી જગ્યાની જરૂરિયાત
  3. ઉચ્ચ ડ્રાફ્ટ ઉત્પાદન
  4. સાદી અને સસ્તી પ્રણાલી

Question ID : 1841224646  
Status : Answered  
Chosen Option : 2

Q.38 Which type of protection is ensured by protective devices in electrical installation in buildings?

- Ans
1. Open circuit protection
  2. Light dim problem protection
  3. Low current protection
  4. High current protection

Question ID : 1841224693  
Status : Answered  
Chosen Option : 4

Q.39 Which among the following is wrong feature of single phase induction motor?

- Ans
1. Reliable
  2. Simple construction
  - ✓ 3. Self-start motor
  4. Cheaper

Question ID : 1841224679  
Status : Answered  
Chosen Option : 3

Q.40 Which is correct formula for finding the number of poles in low voltage line?

- Ans
1.  $\text{Span/length} + 1$
  2.  $1/\text{span} + \text{length}$
  3.  $1/\text{length} + \text{span}$
  4.  $\text{Length/Span} + 1$

Question ID : 1841224692  
Status : Answered  
Chosen Option : 4

Q.41 Which of the following argument is not true with reference to a wind energy conversion system?

- Ans
1. Wind energy is fluctuating in nature
  2. Produces ample noise.
  - ✓ 3. Wind energy conversion system does not need storage devices
  4. No fuel and its transport is required

Question ID : 1841224648  
Status : Answered  
Chosen Option : 3

Q.42 Which of the following quantity or parameter of transformer can be found by conducting short circuit test alone?

- Ans
1. Equivalent reactance of transformer
  2. No load current
  3. Magnetizing current
  4. No load resistance

Question ID : 1841224659  
Status : Answered  
Chosen Option : 1

Q.43 Which of the following safety tip is correct while working with or near electricity?

- Ans
- ✗ 1. Make sure that exposed receptacle boxes are made of conductive materials.
  - ✗ 2. Don't inspect portable cord-and-plug connected equipment, extension cords, power bars, and electrical fittings for damage or wear
  - 3. Use outlets or cords that have exposed wiring.
  - ✓ 4. Use extension cords or equipment that is rated for the level of amperage or wattage that you are using.

Question ID : 1841224709  
 Status : Answered  
 Chosen Option : 4

Q.44 Among the following, which AC track electrification is not used in traction system in railway?

- Ans
- 1. AC single phase 20/25 kV, 50/60 Hz
  - 2. AC single phase 15/16kV, 16.1/25 Hz
  - 3. AC 3 phase 4 wire 33 kV
  - 4. AC 3 phase 3.7 KV system

Question ID : 1841224723  
 Status : Answered  
 Chosen Option : 4

Q.45 Which equipment is used for opening or closing a circuit under normal as well as abnormal (faulty) conditions in power system?

- Ans
- ✓ 1. Circuit breaker
  - 2. Power transformer
  - 3. Lightening arrester
  - 4. Isolator

Question ID : 1841224672  
 Status : Answered  
 Chosen Option : 1

Q.46 Which design specification is not required to be considered for AC drives?

- Ans
- 1. Frequency range
  - 2. continues current
  - 3. Operating temperature
  - ✓ 4. Rectifier controller

Question ID : 1841224700  
 Status : Answered  
 Chosen Option : 4

Q.47 Which system of induction type energy meter consists of two electro-magnets?

- Ans
- 1. Driving System
  - 2. Braking System
  - 3. Moving System
  - 4. Registering System

Question ID : 1841224654  
 Status : Answered  
 Chosen Option : 1



Q.48 Which among the following is the dynamic characteristics of an instrument?

- Ans
1. Resolution
  2. Drift
  3. Linearity
  4. Frequency response

Question ID : 1841224694  
Status : Answered  
Chosen Option : 4

Q.49 What is the time between the instant of occurrence of the fault to the instant at which the relay contacts open?

- Ans
1. The Relay Time
  2. Selectivity time
  3. The Breaker Time
  4. Time graded systems

Question ID : 1841224714  
Status : Answered  
Chosen Option : 2

Q.50 How many timer interrupts are present in 8051 microcontroller?

- Ans
1. 3
  2. 1
  3. 4
  - ✓ 4. 2

Question ID : 1841224683  
Status : Answered  
Chosen Option : 1

Q.51 Exciting current for DC generator is correctly described by the which of the following current?

- Ans
1. Current carried by the field winding
  2. Current carried by the commutator segment
  3. Current carried by the carbon brushes
  4. Current carried by the Armature winding

Question ID : 1841224655  
Status : Answered  
Chosen Option : 1

Q.52 Which is defined as the ratio of initial illumination to the ultimate maintained illumination on the working plane?

- Ans
1. Depreciation factor
  2. Absorption factor
  3. Waste light factor
  4. Maintenance factor

Question ID : 1841224712  
Status : Answered  
Chosen Option : 1



Q.53 Which of the following is an INCORRECT statement for digital modulation compared with analog modulation in communication?

- Ans
1. Better noise immunity
  2. Becomes simpler and cheaper as compared
  3. It requires a lesser channel bandwidth
  4. Repeaters can be used between transmitters and receivers

Question ID : 1841224705  
Status : Answered  
Chosen Option : 2

Q.54 Which type of fibers are used for short-distance transmission of signals?

- Ans
1. Single-Mode Fibres
  2. Plastic Optical Fibres
  - ✓ 3. Multimode Fibres
  4. Glass Fibres

Question ID : 1841224706  
Status : Answered  
Chosen Option : 2

Q.55 A \_\_\_\_\_ is a conductor which connects localized generating station to the area where power is to be distributed.

- Ans
1. Transmission
  2. Service main
  3. Distributer
  - ✓ 4. Feeder

Question ID : 1841224676  
Status : Answered  
Chosen Option : 1

Q.56 Which of the following statement is wrong related to micro hydro power plants?

- Ans
1. Energy expansion possible
  2. Environmental impact is minimal
  3. Cost effective energy solution
  4. Possible to integration with the local power grid

Question ID : 1841224664  
Status : Answered  
Chosen Option : 1

Q.57 Which device is considered to be two SCR connected in anti-parallel?

- Ans
- ✓ 1. TRIAC
  2. DIAC
  3. GTO
  4. MOSFET

Question ID : 1841224667  
Status : Answered  
Chosen Option : 1

Q.58 Identify the following electrician tool name?



- Ans
1. Cable cutters
  2. Spanners
  3. Hacksaws
  4. Safety knife

Question ID : 1841224691  
 Status : Answered  
 Chosen Option : 2

Q.59 In \_\_\_\_\_ the gasification agent enters the bed at a relatively fast rate from the bottom of the vessel and exits from the top.

- Ans
1. Fluidized gasifier
  2. Curtly lite gasifier
  3. Fixed bed gasifier
  4. Entrained flow gasifier

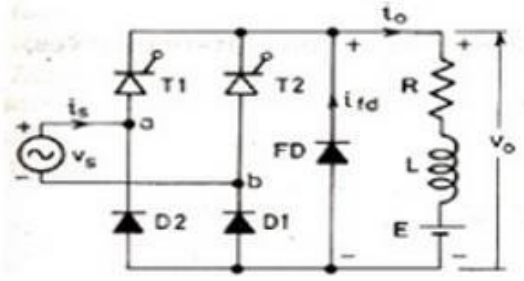
Question ID : 1841224719  
 Status : Answered  
 Chosen Option : 4

Q.60 Which of the following is NOT considered in electromagnetics relay?

- Ans
1. Attracted Armature type relay
  2. Balanced Beam type relay
  3. Induction Cup type relay
  4. Phase comparators relay

Question ID : 1841224715  
 Status : Answered  
 Chosen Option : 4

Q.61 Identify the following type of converter?



- Ans
1. Single phase semi converter with RLE load
  2. Single phase full wave converter with RLE load
  3. Single phase half wave circuit with RLE load
  4. Single phase half wave circuit

Question ID : 1841224670  
 Status : Answered  
 Chosen Option : 1

Q.62 Which type of Arc flash personal protective equipment is correct if arc flash energy level is 25 cal/cm<sup>2</sup>?

- Ans
1. Two layers Fire Resistant clothing, cotton underwear
  2. Fire Resistant (FR) shirt and pants
  3. Fire Resistant shirt and pants, cotton underwear
  4. Non-melting or untreated natural fiber

Question ID : 1841224707  
Status : Answered  
Chosen Option : 1

Q.63 In synchronous motor, inverted V graph can be obtained by variation between \_\_\_\_\_.

- Ans
1. Armature current and field current
  2. Armature voltage and field voltage
  - ✓ 3. Power factor and field current
  4. Power factor and armature current

Question ID : 1841224681  
Status : Answered  
Chosen Option : 3

Q.64 Which is used to protect branch circuit from overloads and short circuits?

- Ans
- ✓ 1. Panel board
  2. Service board
  3. Main switchboard
  4. Distribution board

Question ID : 1841224708  
Status : Answered  
Chosen Option : 3

Q.65 The largest solid angle subtended at the center of a sphere is:

- Ans
1.  $2\pi$  steradians
  - ✓ 2.  $4\pi$  steradians
  3.  $\pi/2$  steradians
  4.  $\pi$  steradians

Question ID : 1841224711  
Status : Answered  
Chosen Option : 2

Q.66 When anode is positive with respect to cathode, with gate circuit open, thyristor is said to be \_\_\_\_\_.

- Ans
1. Forward conduction mode
  2. Reverse biased mode
  3. Reverse blocking mode
  4. Forward blocking mode

Question ID : 1841224668  
Status : Answered  
Chosen Option : 4

Q.67 The main advantage of an electrical drive is that \_\_\_\_\_ can be easily optimized.

- Ans
1. heat control
  - ✓ 2. motion control
  3. cost control
  4. current control

Question ID : 1841224699  
Status : Answered  
Chosen Option : 2

Q.68 Which is correct characteristics of transducer in order to avoid loading effects?

- Ans
1. Using by overload protection
  2. Work with corrosive environments
  3. Low input impedance and high output impedance
  4. High input impedance and low output impedance

Question ID : 1841224695  
Status : Answered  
Chosen Option : 4

Q.69 The stall torque represents the point on the characteristics torque and speed graph of a dc motor at which the torque is a \_\_\_\_\_.

- Ans
1. Minimum and the shaft is normal rotating speed.
  2. Maximum, but the shaft is not rotating.
  3. Maximum and the shaft is normal rotating speed.
  4. Minimum, but the shaft is not rotating

Question ID : 1841224657  
Status : Answered  
Chosen Option : 2

Q.70 Which type of energy can be transfer by conduction, convection and radiation?

- Ans
1. Light
  2. Electrical
  3. Heating
  4. Mechanical

Question ID : 1841224686  
Status : Answered  
Chosen Option : 3

Q.71 Which parameter of transmission line is constituted when two conductors separated by an insulating material?

- Ans
1. Inductance
  2. Resistance
  3. Conductance
  4. Capacitance

Question ID : 1841224673  
Status : Answered  
Chosen Option : 4



Q.72 \_\_\_\_\_ is a type of renewable power plant that is environment friendly, easy to be operated and low operation cost.

- Ans
1. Solar thermal plant
  2. Micro-hydro power plant
  3. Tidal power plant
  4. Bio mass thermal plant

Question ID : 1841224647  
Status : Answered  
Chosen Option : 2

Q.73 Reverse current braking is also known as \_\_\_\_\_.

- Ans
1. Field control method
  2. Minimizer
  3. Opposite braking
  4. Plugging

Question ID : 1841224702  
Status : Answered  
Chosen Option : 4

Q.74 In direct current electric system, power can be measured by \_\_\_\_\_.

- Ans
- ✓ 1. Volt meter and Ammeter
  2. Single watt meter
  3. Three watt meter
  4. Two watt meter

Question ID : 1841224653  
Status : Answered  
Chosen Option : 1

Q.75 Which type of fractional motor offers precise control of angular positioning, acceleration and velocity?

- Ans
1. Stepper Motor
  2. Reluctance Motor
  3. Shaded-Pole Motor
  - ✓ 4. Servo motor

Question ID : 1841224682  
Status : Answered  
Chosen Option : 1

Q.76 Which of the following is an INCORRECT statement for electric traction system?

- Ans
1. Full driving torque is available from standstill.
  2. It has a smooth starting without shocks.
  3. It produces high heat to operate the engine.
  4. Engine can be run at its most suitable speed range.

Question ID : 1841224722  
Status : Answered  
Chosen Option : 3



Q.77 Which instruction represents transmission data pin for serial port in UART mode?

- Ans
- 1. RRD
  - 2. TUD
  - 3. RXD
  - 4. TXD

Question ID : 1841224684  
Status : Answered  
Chosen Option : 3

Q.78 Which type of DC motor has two types of field windings?

- Ans
- 1. Permanent magnet wound motor
  - 2. Shunt-wound motor
  - 3. Series-wound motor
  - 4. Compound-wound motor

Question ID : 1841224656  
Status : Answered  
Chosen Option : 4

Q.79 Concentrated Solar Thermal systems has property of \_\_\_\_\_.

- Ans
- 1. Utilization of light energy of solar
  - 2. Utilization of heat energy of solar to produce direct current
  - 3. Utilization of light energy of solar to produce direct current
  - 4. Utilization of heat energy of solar

Question ID : 1841224665  
Status : Answered  
Chosen Option : 3

Q.80 \_\_\_\_\_ is a process of operating machines and other industrial equipment with the help of digital logical programming and reducing human intervention in decision making and manual command process with the help of mechanized equipment.

- Ans
- 1. Industrial technology growth
  - 2. Industrial automation
  - 3. Industrial production
  - 4. Industrialization

Question ID : 1841224697  
Status : Answered  
Chosen Option : 2