

# FINAL ANSWER KEY

Question Paper Code:	2/2017/OL
Category Code:	150/2015
Exam:	Lineman NCA
Medium of Question:	English
Date of Test	16-01-2017
Alphacode	A

Question1:-Kaziranga, the famous sanctuary of Assam is famous for :

- A:-Tigers
- B:-Rhinos
- C:-Lions
- D:-Elephants

Correct Answer:- Option-B

Question2:-In which of the following states is Tungabhadra project of irrigation ?

- A:-Andhra Pradesh
- B:-Bihar
- C:-Tamil Nadu
- D:-Maharashtra

Correct Answer:- Option-A

Question3:-According to census 2011 the sex ratio in India is :

- A:-980
- B:-960
- C:-940
- D:-930

Correct Answer:- Option-C

Question4:-Which of the following project started to ensure integrated development of children upto 6 years ?

- A:-SSA
- B:-RMSA
- C:-NSPS
- D:-ICDS

Correct Answer:- Option-D

Question5:-The nationalist leader who was killed in a police lathicharge in 1928 was :

- A:-Madan Mohan Malaviya
- B:-Lala Lajpat Rai
- C:-Swami Sahajanand
- D:-Suryasen

Correct Answer:- Option-B

Question6:-The Resolution of Non-cooperation Movement was passed in which special session of Indian National Congress.

- A:-Calcutta
- B:-Kanpur
- C:-Nagpur
- D:-Bombay

Correct Answer:- Option-A

Question7:-The Indian National Congress celebrated the Independence Day for the first time on :

- A:-August 15, 1947
- B:-January 26, 1950
- C:-January 1, 1937
- D:-January 26, 1930

Correct Answer:- Option-D

Question8:-Separate electorate for Muslims were first introduced through the following reforms.

- A:-Montague-Chelmsford reforms
- B:-Government India Act of 1935
- C:-Minto-Morley Reforms
- D:-Council Act of 1892

Correct Answer:- Option-C

Question9:-In which part of the Kerala Oranges are grown ?

- A:-Nelliyampathy

- B:-Munnar
- C:-Kasaragod
- D:-Muthanga

Correct Answer:- Option-A

Question10:-Kabani one of the east flowing rivers of Kerala flows into :

- A:-Tamil Nadu
- B:-Karnataka
- C:-Andhra Pradesh
- D:-Maharashtra

Correct Answer:- Option-B

Question11:-Vagbhatananda started the Journal for Propagation of Nationalist ideas.

- A:-Prachina Malayalam
- B:-Akilathirattu
- C:-Atmavidya kahalam
- D:-Deepika

Correct Answer:- Option-C

Question12:-Who formed Nair Samudhaya Bhruthya Jana Sangam in 1914 ?

- A:-K. Kelappan
- B:-K.P. Kesava Menon
- C:-K. Ramakrishna Pillai
- D:-Mannath Padmanabhan

Correct Answer:- Option-D

Question13:-Who put forward the famous teachings "progress through the education, strengthen through Organisation" ?

- A:-Chattampi Swamikal
- B:-Sri Narayana Guru
- C:-Dr. Palpu
- D:-Ayyankali

Correct Answer:- Option-B

Question14:-Who is the author of the work 'Jathikkummi' ?

- A:-K.P. Karuppan
- B:-Sahodaran Ayyappan
- C:-Vaikunda Swamikal
- D:-Chattampi Swamikal

Correct Answer:- Option-A

Question15:-Who was the founder of 'Yogakshema Sabha' ?

- A:-E.M.S. Namboothiripad
- B:-V.T. Bhattathiripad
- C:-K.P. Kesava Menon
- D:-K.P. Padmanabha Menon

Correct Answer:- Option-B

Question16:-Who is the interim President of Brazil declared "South America's first Olympic Games Open" at Rio 2016 ?

- A:-Dilma Rousseff
- B:-Carlos Nuzman
- C:-Michel Temer
- D:-Gisele Bundeheh

Correct Answer:- Option-C

Question17:-Who is the one of the members of NITI Aayog ?

- A:-Arundhati Bhattacharya
- B:-Ashok Khemka
- C:-G.R. Aloria
- D:-Ramesh Chand

Correct Answer:- Option-D

Question18:-Who is the present Chairman of Kerala Sahitya Akademi ?

- A:-KPAC Lalitha
- B:-Beena Paul
- C:-Lenin Rajendran
- D:-Vaishaken

Correct Answer:- Option-D

Question19:-Who won the men's singles title in the 2016 Wimbledon Tennis ?

- A:-Andy Murray
- B:-Novak Djokovic
- C:-Rafel Nadal
- D:-Wavarinka

Correct Answer:- Option-A

Question20:-Which among the following was not the important works of Mahasweta Devi ?

- A:-Rudali
- B:-Jansir Rani
- C:-India Another Millennium
- D:-Aranyer Adhikar

Correct Answer:- Option-C

Question21:-Which type of motor is generally used in a portable drilling machine ?

- A:-Repulsion motor
- B:-Universal motor
- C:-Capacitor run motor
- D:-Shaded pole motor

Correct Answer:- Option-B

Question22:-Lead is prepared from the ore of :

- A:-Bauxite
- B:-Blast
- C:-Hematite
- D:-Galena

Correct Answer:- Option-D

Question23:-Which of the material is used to fix the screw on concrete wall and ceiling ?

- A:-Link clips
- B:-Bushings
- C:-Rowl plug
- D:-Saddles

Correct Answer:- Option-C

Question24:-Insulation resistance is measured in :

- A:-Kilo ohms
- B:-Mega ohms
- C:-Megawatts
- D:-Kilowatts

Correct Answer:- Option-B

Question25:-In an energy meter the holes on the aluminum disc helps to :

- A:-Reduce the friction
- B:-Reduce the weight of the disc
- C:-Prevent creeping
- D:-Reduce the resistance

Correct Answer:- Option-C

Question26:-Watt hour meter is classified as a :

- A:-Integrating Instrument
- B:-Deflecting Instrument
- C:-Recording Instrument
- D:-Indicating Instrument

Correct Answer:- Option-A

Question27:-Efficiency of a Secondary cell is :

- A:-Impedance hour efficiency
- B:-Ampere hour efficiency
- C:-Resistance hour efficiency
- D:-Volt hour efficiency

Correct Answer:- Option-B

Question28:-Which class of insulator is Mica ?

- A:-Class F
- B:-Class A
- C:-Class B
- D:-Class C

Correct Answer:- Option-D

Question29:-The slip rings are made of :

- A:-Aluminium
- B:-Silver
- C:-Copper
- D:-Cast iron

Correct Answer:- Option-C

Question30:-The operating temperature of a gas filled lamp is about \_\_\_\_\_.

- A:-2500° C
- B:-3000° C
- C:-2000° C
- D:-2700° C

Correct Answer:- Option-D

Question31:-If the speed of DC shunt motor increases the back emf :

- A:-Decreases
- B:-Constant
- C:-Decreases and then increases
- D:-Increases

Correct Answer:- Option-D

Question32:-To check the Internal and External radius of work pieces which tool is used ?

- A:-Radius gauges
- B:-Centre punch
- C:-Scriber
- D:-Callipers

Correct Answer:- Option-A

Question33:-Universal Motor requires :

- A:-AC only
- B:-DC only
- C:-AC and DC
- D:-DC and shunt type

Correct Answer:- Option-C

Question34:-All the sides of parallelogram are equal is called \_\_\_\_\_.

- A:-Trapezium
- B:-Rhombus
- C:-Polygon
- D:-Rectangle

Correct Answer:- Option-B

Question35:-Gun Metal is an alloy of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

- A:-Copper, Aluminium, Zinc
- B:-Copper, Tin, Zinc
- C:-Iron, Copper, Tin
- D:-Iron, Tin, Zinc

Correct Answer:- Option-B

Question36:-1 kg weight = \_\_\_\_\_.

- A:-9 Newtons
- B:-10.8 Newtons
- C:-9.8 Newtons
- D:-8.5 Newtons

Correct Answer:- Option-C

Question37:-Torque = \_\_\_\_\_

- A:-Force  $\times$  Acceleration
- B:-Force  $\times$  Distance
- C:-Force  $\times$  Radius
- D:-Force  $\times$  Speed

Correct Answer:- Option-C

Question38:-Aluminium ore is \_\_\_\_\_.

- A:-Bauxite
- B:-Antimony
- C:-Graphite
- D:-Galena

Correct Answer:- Option-A

Question39:-Freezing point of mercury is \_\_\_\_\_.

- A:-35°C
- B:-36°C
- C:-38°C
- D:-39°C

Correct Answer:- Option-D

Question40:-The ability of material to deform without breaking is called :

- A:-Plasticity
- B:-Elasticity
- C:-Ductility
- D:-Malleability

Correct Answer:- Option-A

Question41:-Whenever heat is developed in a conductor it is governed by the :

- A:-Lenz's Law
- B:-Ampere's Law
- C:-Joule's Law
- D:-Newton's Law

Correct Answer:- Option-C

Question42:-Squirrel cage induction motor is a :

- A:-High starting torque motor
- B:-Low starting torque motor
- C:-Both (1) and (2)
- D:-None of the above

Correct Answer:- Option-B

Question43:-Which are fundamental units ?

- A:-CGS, FPS and MKS
- B:-MKS, MKSA and CGS
- C:-CGS, FPS and SI
- D:-FPS and MKS

Correct Answer:- Option-A

Question44:-The flux density is the flux divided by :

- A:-Conductivity
- B:-Permeability
- C:-Area of cross section
- D:-Area of the current carrying conductor

Correct Answer:- Option-C

Question45:-A pure resistive circuit in AC follows the :

- A:-Ohm's Law
- B:-Lenz's Law
- C:-Faraday's Law of electrolysis
- D:-Kirchhoff's Law

Correct Answer:- Option-A

Question46:-Which of the following material has a negative temperature co-efficient of resistance ?

- A:-Brass
- B:-Copper
- C:-Carbon
- D:-Aluminium

Correct Answer:- Option-C

Question47:-100 W and 40 W lamps are of the same voltage rating the resistance of 40 W lamp is \_\_\_\_\_.

- A:-Higher
- B:-Lower
- C:-The same
- D:-Lower with AC higher with DC

Correct Answer:- Option-A

Question48:-Metric HP =`

- A:-746 watts
- B:-746.5 watts
- C:-735.5 watts

D:-735 watts

Correct Answer:- Option-C

Question49:-Which lamp will take more current ?

A:-40 watts 200 V

B:-100 watts 24 V

C:-1000 watts 230 V

D:-100 watts 230 V

Correct Answer:- Option-C

Question50:-Star/Delta starter used in a :

A:-DC series

B:-DC Shunt

C:-AC single phase

D:-Three phase Induction Motor

Correct Answer:- Option-D

Question51:-It is difficult to magnetise steel because of its :

A:-Low permeability

B:-High permeability

C:-High density

D:-High retentivity

Correct Answer:- Option-A

Question52:-One Farad is :

A:-One Coulomb per volt

B:-One volt per Coulomb

C:-Joule per volt

D:-Coulomb-Joules

Correct Answer:- Option-A

Question53:-Which of the following acts as depolarizer in a Leclanche cell ?

A:-Zinc Chloride

B:-Carbon Powder

C:-Manganese dioxide

D:-Ammonium Chloride

Correct Answer:- Option-C

Question54:-What is the method of heat transfer accomplished in a hot water boiler ?

A:-Convection

B:-Conduction

C:-Radiation

D:-None of the above

Correct Answer:- Option-A

Question55:-Which motor is suitable for rolling mills ?

A:-DC shunt motor

B:-DC series motor

C:-DC cumulative motor

D:-DC differential motor

Correct Answer:- Option-C

Question56:-Composition of fuse wire :

A:-Lead 40 tin 60

B:-Lead 80 tin 20

C:-Lead 50 tin 50

D:-Lead 60 tin 40

Correct Answer:- Option-D

Question57:-Rated capacities of IC TP 300A switch :

A:-500 V

B:-1000 V

C:-230 V

D:-250 V

Correct Answer:- Option-A

Question58:-XC = ` ` ` `

A:-R-XL

B:-`2pi`FI

C:- $2\pi FC$

D:- $(1)/(2\pi FC)$

Correct Answer:- Option-D

Question59:-The power factor of a purely resistive circuit is :

A:-Zero

B:-Unity

C:-Leading

D:-Lagging

Correct Answer:- Option-B

Question60:-In star connection line current =` ``

A:-Phase current

B:- $\sqrt{3}$  Phase current

C:- $\sqrt{2}$  Phase current

D:-None of the above

Correct Answer:- Option-A

Question61:-Power transformers are designed to have maximum efficiency at :

A:-Half load

B:-No load

C:-Little more than full load

D:-Near full load

Correct Answer:- Option-D

Question62:-1 litre of water \_\_\_\_\_.

A:-980 gm

B:-1000 gm

C:-930 gm

D:-910 gm

Correct Answer:- Option-B

Question63:-Melting point of copper is \_\_\_\_\_.

A:-1230°C

B:-1085°C

C:-1088°C

D:-1083°C

Correct Answer:- Option-D

Question64:-In H.S.S. 18 : 4 : 1 Means \_\_\_\_\_.

A:-Tungsten : Vanadium : Chromium

B:-Tungsten : Chromium : Vanadium

C:-Vanadium : Tungsten : Chromium

D:-Chromium : Vanadium : Tungsten

Correct Answer:- Option-B

Question65:-Which colour wire is recommended for earth connection as per ISI Code ?

A:-Red

B:-Black

C:-Blue

D:-Green

Correct Answer:- Option-D

Question66:-What is the value of  $\cos 0^\circ$  ?

A:-1

B:-0

C:- $\sqrt{2}$

D:- $\sqrt{3}$

Correct Answer:- Option-A

Question67:-On which factors the frequency depends ?

A:-Directly proportional to speed and no. of poles

B:-Inversely proportional to speed and no. of poles

C:-Directly proportional to back emf

D:-Directly proportional to applied voltage and back emf

Correct Answer:- Option-A

Question68:-What is the complete formula for frequency ?

A:- $F=(P \times N)/(60)$

B:-  $F = (N_s - N) / (60)$

C:-  $F = (P \times E) / (120)$

D:-  $F = (P \times N_s) / (120)$

Correct Answer:- Option-D

Question69:-Where the Damper winding is placed in synchronous motor ?

A:-Shaft

B:-Poles

C:-Pole shoes

D:-All of the above

Correct Answer:- Option-C

Question70:-Capacity of a capacitor fitted in table fan or ceiling fan :

A:-1 to 1.5  $\mu$ f

B:-3 to 3.5  $\mu$ f

C:-2.5 to 3  $\mu$ f

D:-2 to 2.5  $\mu$ f

Correct Answer:- Option-D

Question71:-How the current coils and pressure coils are connected in megger ?

A:-At 90° to each other

B:-At 60° to each other

C:-At 45° to each other

D:-At 35° to each other

Correct Answer:- Option-A

Question72:-Supertension cables from :

A:-33000 Volt to 66000 Volt

B:-1000 Volt to 11000 Volt

C:-11000 Volt to 22000 Volt

D:-22000 Volt to 33000 Volt

Correct Answer:- Option-D

Question73:-The distance between two adjacent line poles is called :

A:-Sag

B:-Span

C:-HSL

D:-Guarding

Correct Answer:- Option-B

Question74:-The distance that must be provided between line conductors for 440 V :

A:-50 cm - 60 cm

B:-45 cm - 60 cm

C:-45 cm - 50 cm

D:-30 cm - 45 cm

Correct Answer:- Option-D

Question75:-Rotary converter runs at :

A:-Below synchronous speed

B:-Synchronous speed

C:-Above synchronous speed

D:-All of the above

Correct Answer:- Option-B

Question76:-A series RL circuit has a resistance of 30  $\Omega$  and inductive reactance of 40  $\Omega$ . The impedance is \_\_\_\_\_.

A:-70  $\Omega$

B:-50  $\Omega$

C:-10  $\Omega$

D:-35  $\Omega$

Correct Answer:- Option-B

Question77:-The magnetic field produced in the stator of a three phase induction motor rotates at \_\_\_\_\_.

A:-Rotating speed

B:-Synchronous speed

C:-Asynchronous speed

D:-Slip speed

Correct Answer:- Option-B

Question78:-The meter used to measure the temperature of furnace is :



A:-Hydrometer

B:-Hygrometer

C:-Pyrometer

D:-Tachometer

Correct Answer:- Option-C

Question79:-The conduction in a JFET is always by the :

A:-Minority carriers

B:-Majority carriers

C:-Holes

D:-Electrons

Correct Answer:- Option-B

Question80:-FET is :

A:-Unipolar device

B:-Bipolar device

C:-Half Power device

D:-All of the above

Correct Answer:- Option-A

Question81:-The Binary number system has a radix of :

A:-10

B:-2

C:-16

D:-8

Correct Answer:- Option-B

Question82:-Class Y insulation temperature assigned \_\_\_\_\_ Range.

A:-105°C

B:-120°C

C:-90°C

D:-130°C

Correct Answer:- Option-C

Question83:-In an Inductive load power factor :

A:-Zero

B:-Leading

C:-Lagging

D:-Both

Correct Answer:- Option-C

Question84:-Form factor of an Electric Current :

A:-2

B:-1.11

C:-1.44

D:-1.732

Correct Answer:- Option-B

Question85:-Intermediate switches are used to control :

A:-One lamp two places

B:-One lamp one place

C:-2 lamp one place

D:-More lamp from different places

Correct Answer:- Option-D

Question86:-What is used for making guide holes drilling in metals ?

A:-Centre punch

B:-Ratchet Brace

C:-Auger-bit

D:-Hand Drill

Correct Answer:- Option-A

Question87:-Upto how much voltage is medium ?

A:-Upto 250 V

B:-Upto 560 V

C:-Upto 11000 V

D:-Upto 440 V

Correct Answer:- Option-B

Question88:-Nichrome is widely used for :

- A:-Transformer winding
- B:-Circuit connections
- C:-Heater coils
- D:-Lamp filaments

Correct Answer:- Option-C

Question89:-The resistance of a conductor on increasing the temperature :

- A:-Increases
- B:-Decreases
- C:-Constant
- D:-Varies

Correct Answer:- Option-A

Question90:-The unit for flux density is :

- A:-Henry/ $m^2$
- B:-Newton/ $m^2$
- C:-Webers/ $m^2$
- D:-None of the above

Correct Answer:- Option-C

Question91:-The magnetic potential in a magnetic circuit can be measured in terms of :

- A:-Farads
- B:-Coulombs
- C:-EMF
- D:-MMF

Correct Answer:- Option-D

Question92:-Which one of the following capacitors is only suitable for direct voltage ?

- A:-Aluminium foil capacitor
- B:-Metalic paper capacitor
- C:-Unpoled aluminium elctrolyte capacitor
- D:-Poled aluminium electrolyte capacitor

Correct Answer:- Option-D

Question93:-Which resistor is commonly used for general purpose application ?

- A:-Wire-wound resistors
- B:-Carbon resistors
- C:-Metal film resistors
- D:-Carbon film resistors

Correct Answer:- Option-B

Question94:-To solder resistors on a PCB the soldering iron wattage should be :

- A:-25
- B:-60
- C:-150
- D:-240

Correct Answer:- Option-A

Question95:-Intermediate frequency transformers use :

- A:-Iron core
- B:-Ferrite core
- C:-Air core
- D:-Both Iron core and Air core

Correct Answer:- Option-B

Question96:-In a DC circuit capacitor acts like a :

- A:-Open Circuit
- B:-Inductance
- C:-Short Circuit
- D:-Resistance whose value depends on the dielectric material

Correct Answer:- Option-A

Question97:-Which one of them is not a semiconductor ?

- A:-Silicon
- B:-Germanium
- C:-Carbon
- D:-Galium arsenide

Correct Answer:- Option-D

Question98:-The process of adding impurities to a pure semiconductors is known as :

A:-Diffusion

B:-Forming

C:-Doping

D:-Etching

Correct Answer:- Option-C

Question99:-When a germanium diode is connected in forward biased mode the voltage across the diode will be :

A:-Zero

B:-0.7 Volt

C:-Equal to applied voltage

D:-0.3 Volt

Correct Answer:- Option-D

Question100:-The function of a diode can be compared with a :

A:-Replay

B:-Switch

C:-Inductor

D:-Fuse

Correct Answer:- Option-B