

PROVISIONAL ANSWER KEY

Question Paper Code:	30/2017/OL
Category Code:	274/2015
Exam:	Overseer/Draftsman Gr II
Medium of Question:	English
Date of Test	17-04-2017
Department	Public Works Irrigation
Alphacode	A

Question1:-The Chairman of the fourteenth Finance Commission of India is

- A:-Dr.Y.V. Reddy
- B:-Urjit Patel
- C:-Dr.S.R. Reddy
- D:-L.N. Reddy

Correct Answer:- Option-A

Question2:-The book 'Poverty and Progress' is authored by

- A:-Proudhon
- B:-Karl Marx
- C:-Deepak Chandra
- D:-Deepak Lal

Correct Answer:- Option-D

Question3:-"They may call me Hitler, they may call me a Supper-Hitler" Whose words are this

- A:-Subhash Chandra Bose
- B:-Vallabhai Patel
- C:-Mussolini
- D:-Indira Gandhi

Correct Answer:- Option-B

Question4:-The total number of domestic passengers handled at the Indian airports during 2014 - 15 was

- A:-125.53 Million
- B:-201.43 Million
- C:-101.34 Million
- D:-151.34 Million

Correct Answer:- Option-C

Question5:-The total number of Post Offices in India is about

- A:-200050
- B:-155015
- C:-300000
- D:-100012

Correct Answer:- Option-B

Question6:-Who called 'Volga' as "The Queen of our rivers"

- A:-Alexandre Dumas
- B:-Stalin
- C:-Lenin
- D:-Maxim Gorky

Correct Answer:- Option-A

Question7:-"His spirit will always prevail in India" was a famous remark made on `15^(th)` December, 1950 at London by

- A:-Lord Mountbatten
- B:-Jawaharlal Nehru
- C:-Winston Churchill
- D:-Dr. Rajendra Prasad

Correct Answer:- Option-A

Question8:-The famous remark that John F. Kennedy and Richard M. Nixon lacked 'Political brains' was made in a speech delivered at United Nations by

- A:-Fulgencio Batista
- B:-Khrushchev
- C:-Jawaharlal Nehru
- D:-Fidel Castro

Correct Answer:- Option-D

Question9:-Jati Nasini Sabha was founded by

- A:-Brahmananda Sivayogi
 - B:-Swami Ananda Theerthan
 - C:-Vagbhadananda
 - D:-Sree Narayana Guru
- Correct Answer:- Option-B

Question10:-The boook, Of Fortunes and War : Clare Hollingworth is authored by

- A:-Clare Hollingworth
 - B:-Jim Mc Curry
 - C:-Pessy Hull
 - D:-Patrick Garret
- Correct Answer:- Option-D

Question11:-The first Secretary of the Punjab Naujawan Bharat Sabha was

- A:-Bhagat Singh
 - B:-Chandrashekar Azad
 - C:-Sury Sen
 - D:-Jatin Das
- Correct Answer:- Option-A

Question12:-"A day will come when India also remember her and cherish her" was the words of Jawaharlal Nehru about

- A:-Kamala Nehru
 - B:-Sarojin Naidu
 - C:-Rani Gaidilieu
 - D:-Captain Lakshmi
- Correct Answer:- Option-C

Question13:-Who declared that "Political freedom is the life breath of a Nation" ?

- A:-Aurobindo Ghosh
 - B:-Subhash Chandra Bose
 - C:-Sury Sen
 - D:-Bhagat Singh
- Correct Answer:- Option-A

Question14:-Mangal Pande was hanged to death on

- A:-20, March 1858
 - B:-20, March 1857
 - C:-29, March 1857
 - D:-29, March 1858
- Correct Answer:- Option-C

Question15:-Lord Dufferin ridiculed the Congress as "a microscopic minority of the people" in a public speech delivered in

- A:-1885
 - B:-1887
 - C:-1888
 - D:-1886
- Correct Answer:- Option-B

Question16:-The newspaper Al Hilal was started in

- A:-1910
 - B:-1912
 - C:-1920
 - D:-1940
- Correct Answer:- Option-B

Question17:-The present Chairman of Kerala Public Service Commission is

- A:-Dr. K.S. Radhakrishnan
 - B:-M.K. Sakeer
 - C:-K. Radhakrishnan
 - D:-Salahuddin
- Correct Answer:- Option-B

Question18:-Mahatma Gandhi founded the All India Harijan Sangh in

- A:-1930
- B:-1931
- C:-1932
- D:-1940

Correct Answer:- Option-C

Question19:-C. Kesavan was arrested and jailed on account his seditious speech delivered at Kozhenchery on

A:-11, May 1935

B:-11, June 1936

C:-20, May 1936

D:-25, March 193

Correct Answer:- Option-A

Question20:-Mokshapradipam is a famous work of

A:-Brahmananda Sivayogi

B:-Chattampi Swamikal

C:-Vaikunda Swamikal

D:-Neelakantan Namboothiripad

Correct Answer:- Option-A

Question21:-In a safety sign, It's shape is circular, red border and cross bar black signal in white background the sign is

A:-Prohibition sign

B:-Mandatory sign

C:-Warning sign

D:-Information sign

Correct Answer:- Option-A

Question22:-Three phase two element watt meter method is best suited for the measurement of power in

A:-Three phase balanced load

B:-Three phase unbalanced load

C:-Three phase balanced and unbalanced load

D:-None of the above

Correct Answer:- Option-C

Question23:-Polarisation is the problem of _____ type of cell.

A:-Lead acid cell

B:-Nickel iron cell

C:-Dry cell

D:-Voltaic cell

Correct Answer:- Option-D

Question24:-Fusing factor of HRC fuse is

A:-1.4

B:-1.2

C:-1.1

D:-1.3

Correct Answer:- Option-C

Question25:-The yoke of large DC machine is made of

A:-cast iron

B:-wrought iron

C:-cast steel

D:-soft iron

Correct Answer:- Option-C

Question26:-The process by which isolate the supply of oxygen to the fire is known as

A:-smothering

B:-cooling

C:-starving

D:-extinguishing

Correct Answer:- Option-A

Question27:-Valancy of aluminum atom is

A:-3

B:-4

C:-2

D:-1

Correct Answer:- Option-A

Question28:-When capacitor testing with ohm meter, the ohm meter shows infinite resistance, the capacitor is

A:-Good

B:-Open

C:-Leakey

D:-Shorted

Correct Answer:- Option-B

Question29:-Among them which motor has highest starting torque

A:-Shaded pole motor

B:-Universal motor

C:-Capacitor start induction run motor

D:-Permanent capacitor motor

Correct Answer:- Option-B

Question30:-The cells of 2 volt and each having an internal resistance of 0.2Ω are jointed in series. If 10Ω external resistance is connected across the circuit, what will be the current flowing through the

A:-1.5A

B:-1.8A

C:-2A

D:-1.67A

Correct Answer:- Option-D

Question31:-Composition of plumbers solder is _____ % Tin and _____ % Lead.

A:-35 and 65

B:-60 and 40

C:-65 and 35

D:-50 and 60

Correct Answer:- Option-A

Question32:-The speed control method used in domestic mixer grinder is

A:-voltage control method

B:-tapped field control method

C:-adding series resistance

D:-all of the above

Correct Answer:- Option-B

Question33:-A moving coil volt meter shows 220 volt when it is connected across an AC supply. What will be the voltage shows when it is measured using CRO ?

A:-220 V

B:-380 V

C:-244 V

D:-311 V

Correct Answer:- Option-D

Question34:-Copper loss of a transformer is 120 watt at it's $1/4$ th load watt will be the copper loss $1/8$ th full load

A:-30 watt

B:-64 watt

C:-240 watt

D:-192 watt

Correct Answer:- Option-A

Question35:-To change DOR of Repulsion motor

A:-change the supply terminal of motor

B:-change the brush position of motor

C:-change the motor terminals

D:-all of the above

Correct Answer:- Option-B

Question36:-The type DC generator used for electroplating is

A:-series generator

B:-long shunt compound generator

C:-shunt generator

D:-cumulative compound generator

Correct Answer:- Option-C

Question37:-The type of DC compound generator used for arc welding is

A:-Over compound generator

B:-Under compound generator

C:-Differential compound generator

D:-Level compound generator

Correct Answer:- Option-C

Question38:-A circuit contain R and L in series, $R = 8 \Omega$ and $L = 0.02$ henry, what will be the power factor of the circuit when is connected across 50 Hz, 50 volt ac supply

A:-0.821

B:-0.752

C:-0.886

D:-0.786

Correct Answer:- Option-D

Question39:-Over load coil of 3 point DC motor starter is connected

A:-in series with shunt field

B:-in parallel with shunt field

C:-in series with armature coil

D:-in parallel with series field

Correct Answer:- Option-C

Question40:-The speed of DC shunt motor is drops slightly from no load to full load is due to

A:-Increase in back emf

B:-Decrease in field flux

C:-IaRa drop in armature

D:-Increase in field flux

Correct Answer:- Option-C

Question41:-Resistance above _____ Ω is called high resistance.

A:-100000 Ω

B:-10000 Ω

C:-10000000 Ω

D:-1000000 Ω

Correct Answer:- Option-A

Question42:-Regenerative braking is possible when the speed of the motor is

A:-Bellow synchronous speed

B:-Above synchronous speed

C:-Same as synchronous speed

D:-All of the above

Correct Answer:- Option-B

Question43:-V-curve of a synchronous motor is the relation between

A:-supply voltage and current

B:-armature current and field current

C:-armature voltage and armature current

D:-field voltage and field current

Correct Answer:- Option-B

Question44:-Series type ohm meter is best suited for measuring

A:-medium resistance

B:-high resistance

C:-low resistance

D:-all of the above

Correct Answer:- Option-A

Question45:-Fourth colour band of a resistance is brown in four colour band system, the tolerance of the resistance is

A:-2%

B:-5%

C:-1%

D:-3%

Correct Answer:- Option-C

Question46:-A semiconducting material numbered as BC 149, the device is

A:-Germanium transistor

B:-Silicon diode

C:-Silicon transistor

D:-Silicon photo diode

Correct Answer:- Option-C

Question47:-The capacity of cells are usually expressed in

A:-Watt-hour

B:-Kilo volt ampere

C:- Kilo watt hour

D:-Ampere hour

Correct Answer:- Option-D

Question48:-Melting point of copper is

- A:-1083° C
- B:-660° C
- C:-2200° C
- D:-490° C

Correct Answer:- Option-A

Question49:-Efficiency of full wave rectifier is about

- A:-40.80 %
- B:-82.10 %
- C:-81.20 %
- D:-83.10 %

Correct Answer:- Option-C

Question50:-The maximum safe temperature can with stand class H insulating material is

- A:-200° C
- B:-180° C
- C:-155° C
- D:-120° C

Correct Answer:- Option-B

Question51:-Pitch factor of a winding is the ratio of

- A:-No of slote/pole pitch
- B:-Winding pitch/pole pitch
- C:-Pole pitch/winding pitch
- D:-None of the above

Correct Answer:- Option-B

Question52:-The type of motor used in vacuum cleaner is

- A:-Capacitor start induction run motor
- B:-Capacitor start capacitor run motor
- C:-Induction run motor
- D:-Universal motor

Correct Answer:- Option-D

Question53:-Fluorescent lamp is a

- A:-High pressure sodium vapour lamp
- B:-Low pressure mercury vapour lamp
- C:-Arc lamp
- D:-High pressure mercury vapour lamp

Correct Answer:- Option-B

Question54:-G series MCB's are used for protecting

- A:-Inductive load
- B:-Resistive load
- C:-Capacitive load
- D:-All of the above

Correct Answer:- Option-A

Question55:-Nickel iron cell is also known as

- A:-Primary cell
- B:-Junger cell
- C:-Voltaic cell
- D:-Edison cell

Correct Answer:- Option-D

Question56:-Nickel Iron cell are widly used in Aircraft engineering because of its

- A:-Heavy rate discharging capacity
- B:-High voltage
- C:-High efficiency
- D:-Good mechanical strength

Correct Answer:- Option-A

Question57:-Widly used semiconducting material is

- A:-Carbon
- B:-Germanium
- C:-Bismuth
- D:-Silicon

Correct Answer:- Option-D

Question58:-The out put of harmonic oscillators is

- A:-Square wave
- B:-Triangular wave
- C:-Sine wave
- D:-All of the above

Correct Answer:- Option-C

Question59:-In a winding the number of coils/pole/phase is one, the winding is called

- A:-Distributed winding
- B:-Concentrated winding
- C:-Whole coil winding
- D:-Balanced winding

Correct Answer:- Option-B

Question60:-The type of file used in ordinary filing purpose is

- A:-Bastard
- B:-Rough
- C:-Smooth
- D:-Second cut

Correct Answer:- Option-A

Question61:-The joint used in over head line where for increasing the length of conductor where considerable tensile stress acted is

- A:-T-Joint
- B:-Brittania Joint
- C:-Married Joint
- D:-Western Union Joint

Correct Answer:- Option-D

Question62:-Double squirrel cage Induction rotors are used in Induction motors for getting

- A:-High starting torque
- B:-Smooth operation
- C:-High power
- D:-Avoid magnetic locking

Correct Answer:- Option-A

Question63:-The main purpose Twin Tube connections in a industries to

- A:-Avoid glare
- B:-Avoid stroboscopic effect
- C:-Get more light
- D:-All of the above

Correct Answer:- Option-B

Question64:-The frequency equation of Hartley oscillator is

- A:- $\frac{1}{2} \pi \sqrt{LC(T)}$
- B:- $\frac{1}{2} \pi \sqrt{CL(T)}$
- C:- $\frac{1}{2} \pi \sqrt{6RC}$
- D:- $\frac{1}{2} \pi \sqrt{L(T)C(T)}$

Correct Answer:- Option-B

Question65:-Buchholz relay is a

- A:-Thermal relay
- B:-Electronic relay
- C:-Gas operated relay
- D:-Pneumatic relay

Correct Answer:- Option-C

Question66:-In semi direct lighting system _____ % of light reaches to the working plane.

- A:-90 - 100 %
- B:-50 - 90 %
- C:-10 - 40 %
- D:-60 - 90 %

Correct Answer:- Option-D

Question67:-In EHT line the maximum permissible voltage drop is

- A:-5 %
- B:-3 %

C:-12.50 %

D:-10 %

Correct Answer:- Option-C

Question68:-Solar cell is a

A:-Photo resistor

B:-Photo diode

C:-Varactor diode

D:-Thermister

Correct Answer:- Option-B

Question69:-To get different colour in same LED different fixed voltage want to be applied across it. To get red colour in LED the fixed voltage want to applied across it is

A:-2.1 V

B:-2 V

C:-2.2 V

D:-1.8 V

Correct Answer:- Option-D

Question70:-XLPE cable is a type of cable. XLPE stands for

A:-Cross-Linked Poly Ester Cable

B:-Cross-Linked Poly Ethylene Cable

C:-Cable-Linked Poly Ester Cable

D:-Cable-Linked Poly Ethylene Cable

Correct Answer:- Option-B

Question71:-When Induction motor are started with star-delta starter the voltage applied across the winding when put in star position is

A:-57.70 %

B:-50 %

C:-67.70 %

D:-75 %

Correct Answer:- Option-A

Question72:-The minimum horizontal clearance between when the line passing through adjesent building is

A:-1.112 M

B:-1.713 M

C:-1.219 M

D:-3.962 M

Correct Answer:- Option-C

Question73:-Unit of inductive reactance is

A:-Coloumb

B:-Fared

C:-Henry

D:-Ohm

Correct Answer:- Option-D

Question74:-The type of capacitor used in capacitor start induction run motor is

A:-Paper Capacitor

B:-Mica Capacitor

C:-Ceramic Capacitor

D:-Air Capacitor

Correct Answer:- Option-A

Question75:-The commercial method of making Permanent Magnet is

A:-Induction method

B:-Single touch method

C:-Double touch method

D:-Divider touch method

Correct Answer:- Option-A

Question76:-Most efficient and effective damping method is

A:-Air friction damping

B:-Eddy current damping

C:-Fluid friction damping

D:-All of the above

Correct Answer:- Option-B

Question77:-The purpose of bedding provided in cable is

- A:-Protect the cable from mechanical injury
- B:-Protect the cable from atmosphere
- C:-Protect metallic sheet from mechanical injury
- D:-Prevent entering moisture to the cable

Correct Answer:- Option-C

Question78:-Silver plated mica capacitors are best suited for _____ application.

- A:-High frequency application
- B:-High voltage application
- C:-Radio frequency application
- D:-Power factor correction

Correct Answer:- Option-A

Question79:-When Dynamo meter type meters are used as watt meters, the fixed and movable coils are

- A:-Fixed coil is pressure coil and moving coil is current coil
- B:-Fixed coil is current coil and moving coil is pressure coil
- C:-Both coils are movable
- D:-Can be arranged as either current coil is fixed and pressure coil movable and vice-versa

Correct Answer:- Option-B

Question80:-A 50 volt meter want to be extend to measure 250 volt meter. The resistance of the meter is 5000 Ω , what will be the value of multiplier required

- A:-40000 Ω
- B:-20000 Ω
- C:-50000 Ω
- D:-25000 Ω

Correct Answer:- Option-B

Question81:-The instrument used for measuring insulation resistance of equipments is

- A:-Contact resistance meter
- B:-Earth tester
- C:-Ohm meter
- D:-Megger

Correct Answer:- Option-D

Question82:-Among the following which cable is used for Railway signaling purpose

- A:-PVC cable
- B:-Lead sheet cable
- C:-Torpodure cable
- D:-Armed cable

Correct Answer:- Option-C

Question83:-In Geyser the type of insulation provided in between the inner and outer chamber is

- A:-Mica
- B:-Rubber
- C:-Glass wool
- D:-Asbestose

Correct Answer:- Option-C

Question84:-Among them which material is shows strong Dia magnetism

- A:-Copper
- B:-Silver
- C:-Bismuth
- D:-Aluminum

Correct Answer:- Option-C

Question85:-Ear to Ear resistance of wet human body is about

- A:-100 ohm
- B:-150 ohm
- C:-400 ohm
- D:-300 ohm

Correct Answer:- Option-A

Question86:-The major cause of creeping error in induct in type energy meter is

- A:-Over voltage
- B:-Over compensation friction
- C:-Stray magnetic field

D:-Vibration

Correct Answer:- Option-B

Question87:-The frequency of electricity supply in India is

A:-60 Hz

B:-45 Hz

C:-55 Hz

D:-50 Hz

Correct Answer:- Option-D

Question88:-The size of copper plate used in plate earthing system is

A:-60 cm × 60 cm × 3.15 mm

B:-60 cm × 60 cm × 6.3 mm

C:-30 cm × 30 cm × 3.15 mm

D:-60 cm × 60 cm × 3.3 mm

Correct Answer:- Option-A

Question89:-One Webber is equal to _____ Maxwell.

A:-10000

B:-100000

C:-10000000

D:-1000000

Correct Answer:- Option-C

Question90:-The standard secondary out put of a current transformer is

A:-10A

B:-5A

C:-7A

D:-3A

Correct Answer:- Option-B

Question91:-In two watt meter method of power measurement one watt meter shows negative reading the power factor of the load is

A:-unity

B:-bellow 0.5 lagging

C:-0.8 lagging

D:-in between 0.5 and 0.8 lagging

Correct Answer:- Option-B

Question92:-The working principle of earth tester is

A:-Fall of potential method

B:-Wheatstone bridge principle

C:-Voltage divider method

D:-Meter bridge principle

Correct Answer:- Option-A

Question93:-The polarity of interpole is in the case of DC generator and motor is

A:-same as next main pole ahead in the case of motor and generator in the direction of rotation

B:-same as the next main pole behind in the case of motor and generator in the direction of rotation of motor and generator

C:-same as next main pole behind in the case of generator and next main pole ahead in the motor in the direction of rotation

D:-same as next main pole behind in the case of motor and same as next main pole ahead in the generator in the direction of rotation

Correct Answer:- Option-D

Question94:-The distance between earth electrode and adjacent building should not less than

A:-2 m

B:-1 m

C:-5 m

D:-1.5 m

Correct Answer:- Option-D

Question95:-Type of cooling used in Distribution transformer is

A:-AN

B:-AN, OFN

C:-OB, AB

D:-AN, ON

Correct Answer:- Option-D

Question96:-In a transistor both collector base junction and emitter base junction is reverse bias the transistor is said to be

A:-Saturation state

B:-Active state

C:-Cut off state

D:-None of the above

Correct Answer:- Option-C

Question97:-The most commonly used AC motor is

A:-Slip ring induction motor

B:-Universal motor

C:-Repulsion motor

D:-Squirrelcage induction motor

Correct Answer:- Option-D

Question98:-Barrier voltage of silicon crystal is

A:-0.7 v

B:-0.3 v

C:-1.1 v

D:-0.9 v

Correct Answer:- Option-A

Question99:-FET is a

A:-current controlled device

B:-bipolar device

C:-power control device

D:-voltage control device

Correct Answer:- Option-D

Question100:-For getting maximum efficiency in a sodium vapour lamp the lamp temperature to be maintained about

A:-380'c

B:-320'c

C:-150'c

D:-220'c

Correct Answer:- Option-D