

PROVISIONAL ANSWER KEY

Question Paper Code:	39/2023/OL
Category Code:	253/2021
Exam:	Technician Grade II (Operator Grade II)
Medium of Question:	English
Date of Test	25-02-2023
Department	Kerala State Bamboo Corporation Ltd
Alphacode	A

Question1:-Morse test is used for a

- A:-Petrol Engine
- B:-Diesel Engine
- C:-Multi Cylinder Engine
- D:-All of these

Correct Answer:- Option-C

Question2:-Which types of Engine has a good balancing and high parallel torque?

- A:-Opposed Engine
- B:-V engine
- C:-Radial engine
- D:-In line engine

Correct Answer:- Option-D

Question3:-A two stroke cycle engine gives - thermal efficiency than a four stroke cycle engine

- A:-Higher
- B:-Lower
- C:-Same
- D:-None of these

Correct Answer:- Option-B

Question4:-The basic part of the engine to which the other engine parts are attached or assembled is the

- A:-Cylinder Head
- B:-Crank Shaft
- C:-Cylinder Block
- D:-Oil Pan

Correct Answer:- Option-C

Question5:-The Crank Shaft of a typical inline four cylinder engine has _____ balance weights.

- A:-12
- B:-4
- C:-16
- D:-8

Correct Answer:- Option-D

Question6:-Scavenging is done for the following reason

- A:-Fuel Consumption
- B:-Power Supply
- C:-Speed
- D:-Oil Pressure

Correct Answer:- Option-B

Question7:-If Clearance Volume of IC engine is increased the compression ratio will

- A:-Increase
- B:-Decrease
- C:-Remain constant
- D:-Be doubled

Correct Answer:- Option-B

Question8:-If the temperature of intake air in internal combustion engine is increased then its efficiency will

- A:-Remain same
- B:-Decrease
- C:-Increase
- D:-None of these

Correct Answer:- Option-B

Question9:-Oxygen Sensor is mounted on

- A:-Exhaust Manifold
- B:-Intake Manifold
- C:-Both 1 and 2
- D:-None of these

Correct Answer:- Option-A

Question10:-Which type of gear drive changes rotary movement to linear movement?

- A:-Hypoid
- B:-Herring bone
- C:-Rack and Pinion
- D:-Helical gear

Correct Answer:- Option-C

Question11:-Which type of belt is used if the distance between the shafts are too short?

- A:-V Belt
- B:-Flat Belt
- C:-Link Belt
- D:-Ribbed Belt

Correct Answer:- Option-A

Question12:-Which chain drive provide noiseless and uniform drive?

- A:-Duplex Chain
- B:-Toothed Chain
- C:-Simplex Chain
- D:-Triple roller type Chain

Correct Answer:- Option-B

Question13:-Which type of drive is used for shortest distance and for large amount of power transmission?

- A:-Belt drive
- B:-Gear drive
- C:-Rope drive
- D:-Chain drive

Correct Answer:- Option-B

Question14:-Which gear run more silently?

- A:-Spur gear
- B:-Mitre gear
- C:-Bevel gear
- D:-Helical gear

Correct Answer:- Option-D

Question15:-Which belt slip less in power transmission?

- A:-V Belt
- B:-Flat Belt
- C:-Link Belt
- D:-Ribbed Belt

Correct Answer:- Option-A

Question16:-Which Pulley can transmit the Power to shaft different heights and varying distance?

- A:-Flat Pulleys
- B:-Rope Pulleys
- C:-V Groove Pulleys
- D:-Fast and Loose Pulleys

Correct Answer:- Option-B

Question17:-What is the purpose of using Lubricant?

- A:-Prevent wear
- B:-Increase friction
- C:-Increase loading capacity
- D:-Increase the speed of moving elements

Correct Answer:- Option-A

Question18:-What is the term used for the relationship exist between two making parts?

- A:-Fit
- B:-Limit
- C:-Tolerance
- D:-Allowance

Correct Answer:- Option-D

Question19:-Which terms indicates the difference between the maximum limit of size and minimum limit of size?

- A:-Deviation
- B:-Tolerance
- C:-Actual size
- D:-Upper deviation

Correct Answer:- Option-B

Question20:-The measured size of dimension of a component is called

- A:-Basic size
- B:-Allowed size
- C:-Nominal size
- D:-Actual size

Correct Answer:- Option-D

Question21:-What is the definition of fits?

- A:-Maximum size of a dimension
- B:-Minimum size of a dimension
- C:-Permissible deviation of a dimension
- D:-Relationship that exist between two mating parts

Correct Answer:- Option-D

Question22:-What is the name of system if the size of the hole is kept constant : Shaft is varied?

- A:-Bilateral system
- B:-Unilateral system
- C:-Hole basis system
- D:-Shaft basis system

Correct Answer:- Option-C

Question23:-What is the difference between the basic size of the job and the high limit is?

- A:-Deviation
- B:-Tolerance
- C:-Actual Deviation
- D:-Upper Deviation

Correct Answer:- Option-D

Question24:-The bench vice spindle has

- A:-V - Thread
- B:-Acme Thread
- C:-Square Thread
- D:-Knuckle Thread

Correct Answer:- Option-C

Question25:-BSF Thread are used for

- A:-Aero parts
- B:-Ordinary nut bolt
- C:-Lathe screw
- D:-Electrical good

Correct Answer:- Option-B

Question26:-The smallest particle of a substance that has the properties of the substance is called

- A:-Nucleus
- B:-Atom
- C:-Neutron
- D:-Molecule

Correct Answer:- Option-D

Question27:-The equation to find out the potential difference at the terminal of a source of supply is

- A:- $V(T) = EMF - IR$
- B:- $V(T) = EMF + IR$
- C:- $V(T) = EMF + I^2 R$
- D:- $V(T) = EMF - I^2 R$

Correct Answer:- Option-A

Question28:-What is the conductivity of Aluminium when compared with copper?

- A:-40.60%
- B:-50.60%
- C:-60.60%
- D:-66.60%

Correct Answer:- Option-C

Question29:-The potential difference in a circuit is measured in

- A:-watts
- B:-volts
- C:-ampere
- D:-ohms

Correct Answer:- Option-B

Question30:-How many electrons are there in the valance shell of semiconductor materials?

- A:-2
- B:-8
- C:-6
- D:-4

Correct Answer:- Option-D

Question31:-What is the unit of conductance?

- A:-Ampere
- B:-Mho
- C:-Volt
- D:-Ohm

Correct Answer:- Option-B

Question32:-1 ampere second = 1 _____?

- A:-Coulomb
- B:-Joule
- C:-Watt
- D:-Ohm

Correct Answer:- Option-A

Question33:-Which effect of electric current is utilized in battery?

- A:-Magnetic effect
- B:-Heating effect
- C:-Chemical effect
- D:-Gas ionization effect

Correct Answer:- Option-C

Question34:-What is the value of current flowing through a 10 Ω resistor when a potential difference of 15 volt is applied across it?

- A:-0.5 - A
- B:-0.75 - A
- C:-1 - A
- D:-1.5 - A

Correct Answer:- Option-D

Question35:-NTC resistors are also called as

- A:-Varistors
- B:-Thermistors
- C:-LDR
- D:-Sensistors

Correct Answer:- Option-B

Question36:-What is the resistance value of a carbon resistor having a colour band of orange, orange, red and silver?

- A:-33000 Ω \pm 10%
- B:-3 k Ω \pm 10%
- C:-33 k Ω \pm 10%
- D:-330 k Ω \pm 10%

Correct Answer:- Option-B

Question37:-Resistance value above 1 ohm up to 100000 ohms are classified as _____?

- A:-Low resistance
- B:-High resistance
- C:-Medium resistance
- D:-Very high resistance

Correct Answer:- Option-C

Question38:-What is the resistivity of mica insulation at 20°C?

- A:- $10^{(10)}$ ohm metre
- B:- $10^{(16)}$ ohm metre

C:- 10^{18} ohm metre

D:- 10^{15} ohm metre

Correct Answer:- Option-D

Question39:-What is the total resistance when two 1.5 Ω resistors are connected in parallel?

A:-0.75 Ω

B:-0.5 Ω

C:-1 Ω

D:-1.5 Ω

Correct Answer:- Option-A

Question40:-In some resistors, as the temperature increases, the resistance increases non linearly. Such resistors are called _____?

A:-LDR

B:-Varistors

C:-Sensistors

D:-Thermistors

Correct Answer:- Option-C

Question41:-Wheatstone bridge method is used to measure _____ resistance.

A:-Medium resistance

B:-High resistance

C:-Low resistance

D:-Earth resistance

Correct Answer:- Option-A

Question42:-An open circuit has _____ resistance.

A:-10000 Ω

B:-1 Ω

C:-zero

D:-infinite

Correct Answer:- Option-D

Question43:-The cleanest power plant is

A:-diesel power plant

B:-nuclear power plant

C:-hydro electric power plant

D:-bio gas power plant

Correct Answer:- Option-C

Question44:-Give an example for impulse turbine.

A:-Francis Turbine

B:-Reaction turbine

C:-Kaplan turbine

D:-Pelton wheel turbine

Correct Answer:- Option-D

Question45:-The device which heats the feed water on its way to boiler by deriving heat from the flue gases is called

A:-Condenser

B:-Economiser

C:-Super heater

D:-Gas heater

Correct Answer:- Option-B

Question46:-Which one given below is an example for class "B" fire?

A:-Fire on flammable liquid

B:-Metal fire

C:-Fire on paper

D:-Fire on electrical equipment

Correct Answer:- Option-A

Question47:-In which classification fire, the fire on liquified gas will belong?

A:-Class "A" fire

B:-Class "B" fire

C:-Class "C" fire

D:-Class "D" fire

Correct Answer:- Option-C

Question48:-The minimum diameter of earth pipe is

- A:-32 mm
- B:-28 mm
- C:-24 mm
- D:-38 mm

Correct Answer:- Option-D

Question49:-_____ is a switch with an actuator which is operated by the motion of a machine part or object.

- A:-Isolator
- B:-Limit switch
- C:-ICTP
- D:-MCB

Correct Answer:- Option-B

Question50:-Which type of pliers are used for holding small objects in place where fingers cannot reach?

- A:-Flat nose pliers
- B:-Round nose pliers
- C:-Long nose pliers
- D:-Combination pliers

Correct Answer:- Option-C

Question51:-Wear safety shoes or boots is comes under which safety

- A:-Personal safety
- B:-General safety
- C:-Machine safety
- D:-Environment safety

Correct Answer:- Option-A

Question52:-According to Personal Protective Equipment, the eyes and face protection is comes under

- A:-PPE 1
- B:-PPE 3
- C:-PPE 5
- D:-PPE 7

Correct Answer:- Option-C

Question53:-After establishing that the victim is breathing and has a pulse, next priority should be

- A:-preventing shock
- B:-control any bleeding
- C:-choking
- D:-artificial respiration

Correct Answer:- Option-B

Question54:-The fuel like wood, paper, cloth, solid materials etc. are comes under which class of fire

- A:-Class A fire
- B:-Class B fire
- C:-Class C fire
- D:-Class D fire

Correct Answer:- Option-A

Question55:-The colour code of bin for waste segregation of plastic

- A:-Blue
- B:-Red
- C:-Yellow
- D:-Green

Correct Answer:- Option-C

Question56:-Which one of the following is not include the benefits of 5S system?

- A:-Increasing in productivity
- B:-Reduction of Scrap
- C:-Increase in quality
- D:-Reduction in cost

Correct Answer:- Option-B

Question57:-1 Micrometer is equal to

- A:-0.01 mm
- B:-0.001 mm
- C:-0.0001 mm
- D:-0.1 mm

Correct Answer:- Option-B

Question58:-The least count of metric vernier caliper is

- A:-0.01 mm
- B:-0.02 mm
- C:-0.001 mm
- D:-0.05 mm

Correct Answer:- Option-B

Question59:-The smallest division graduated on barrel of outside micrometer is

- A:-0.01 mm
- B:-0.05 mm
- C:-0.02 mm
- D:-0.5 mm

Correct Answer:- Option-D

Question60:-On which part of the vernier height gauge are the main scale divisions graduated

- A:-Vernier Slide
- B:-Beam
- C:-Fine adjusting unit
- D:-Base

Correct Answer:- Option-B

Question61:-The part of the vernier bevel protractor which comes in contact with the inclined surface while measuring is the

- A:-Blade
- B:-Stock
- C:-Disc
- D:-Dial

Correct Answer:- Option-D

Question62:-Which side of the right angled triangle is built up with slip gauges to make the trigonometrical function for the use of sine bar

- A:-Opposite side
- B:-Adjacent side
- C:-Hypotenuse
- D:-Sine angle side

Correct Answer:- Option-A

Question63:-The accuracy of metric dial test indicator is

- A:-0.1 mm
- B:-0.01 mm
- C:-0.001 mm
- D:-0.05 mm

Correct Answer:- Option-B

Question64:-Why double cut file should be used for filing on the metal tin?

- A:-The file will not cut the metal
- B:-The metal is hard
- C:-The file slide on the metal
- D:-The metal particle will clog on the file

Correct Answer:- Option-D

Question65:-Solid type tap wrench is

- A:-Not suitable for to take different sizes of taps
- B:-Suitable for threading holes in restricted places
- C:-Opening of jaws can be adjusted
- D:-Used for broken taps

Correct Answer:- Option-A

Question66:-V-block 50/5-40 A-IS 2949 means

- A:-50 mm diameter 5-40A mm length grade A Indian Standard on 2949
- B:-50 mm long 5-40 mm diameter grade A Indian Standard on 2949
- C:-50 mm width 5-40 mm length grade A Indian Standard on 2949
- D:-50 mm height 5-40 mm diameter grade A Indian Standard on 2949

Correct Answer:- Option-B

Question67:-The gap between two mating parts is measured

- A:-snap gauge
- B:-limit gauge
- C:-feeler gauge

D:-radius gauge

Correct Answer:- Option-C

Question68:-What is the use of screw pitch gauge?

A:-To determine the pitch

B:-To measure pitch

C:-To measure pitch diameter

D:-To measure major diameter

Correct Answer:- Option-A

Question69:-Where is the rocker arm fixed in universal surface gauge?

A:-On the spindle

B:-On the base

C:-On the snug

D:-Along with scriber

Correct Answer:- Option-B

Question70:-Which among the following is not the physical property of the metal?

A:-Conductivity

B:-Fusibility

C:-Elasticity

D:-Magnetic property

Correct Answer:- Option-C

Question71:-The ore of Aluminium is

A:-Hematite

B:-Bauxite

C:-Lignite

D:-Pyrate

Correct Answer:- Option-B

Question72:-Soldering Iron are normally made of

A:-Iron

B:-Lead

C:-Copper

D:-Stainless Steel

Correct Answer:- Option-C

Question73:-The purpose of tempering a hardened steel component is

A:-Increasing its hardness

B:-Reducing its brittleness

C:-Increasing its ductility

D:-Increasing its elasticity

Correct Answer:- Option-B

Question74:-Arc blow is caused by

A:-Electronic disturbance

B:-Magnetic disturbance

C:-Electric disturbance

D:-Radio disturbance

Correct Answer:- Option-B

Question75:-In Carburizing flame, the Oxygen, Acetylene ratio is

A:-Oxygen more and Acetylene less

B:-Oxygen and Acetylene are equal

C:-Oxygen less and Acetylene more

D:-Only Acetylene

Correct Answer:- Option-C

Question76:-A closed vessel is termed as a steam boiler if

A:-Its pressure exceeds 10 bar

B:-Its volume exceeds 4.54 liters

C:-Its volume exceeds 22.75 liters

D:-Its Pressure exceeds 5 bar

Correct Answer:- Option-C

Question77:-In the fire tube boilers

A:-the water passes through the tubes

B:-the hot combustion gases pass through tubes

C:-fire is produced in the tubes
D:-flue gas surrounds the tubes

Correct Answer:- Option-B

Question78:-Lancashire boiler is

A:-Internally fired boiler
B:-Externally fired boiler
C:-Water tube boiler
D:-Forced circulation boiler

Correct Answer:- Option-A

Question79:-In locomotive boiler produces maximum pressure of

A:-25 bar
B:-10 bar
C:-100 bar
D:-5 bar

Correct Answer:- Option-A

Question80:-The average operating pressure of Benson boiler is

A:-50 bar
B:-100 bar
C:-250 bar
D:-150 bar

Correct Answer:- Option-C

Question81:-Which one of the following is used in boiler to extinguish fire in the furnace of boiler when the water level falls to unsafe limit?

A:-Blow off cock
B:-Steam stop valve
C:-Fusible valve
D:-Feed check valve

Correct Answer:- Option-C

Question82:-Steam in water tube boiler when compared to fire tube boiler

A:-The rate and quantity of steam generation are better
B:-The rate and quantity of steam generation are low
C:-Depending up on design
D:-Not suitable for power generation

Correct Answer:- Option-A

Question83:-Pulverised fuel have

A:-Higher calorific value
B:-More combustion efficiency
C:-Less calorific value
D:-Less combustion efficiency

Correct Answer:- Option-B

Question84:-Which of the following statement is not related to High Pressure boiler?

A:-Minimum scale formation
B:-Require more heat for vaporization
C:-They are compact and require less space
D:-Steam generation is economical

Correct Answer:- Option-B

Question85:-A Cornish boiler is a

A:-Fire tube boiler
B:-Water tube boiler
C:-Multi tubular boiler
D:-Forced circulation boiler

Correct Answer:- Option-A

Question86:-In a bomb calorimeter the calorific value of fuel is determined at

A:-Constant pressure
B:-Constant temperature
C:-Constant entropy
D:-Constant volume

Correct Answer:- Option-D

Question87:-Which of the following statement is wrong in case of liquid fuels?

- A:-Have high calorific value
- B:-The combustion rate can be easily controlled
- C:-Have less Thermal efficiency
- D:-Easy to ignite and easy to shutting of operation

Correct Answer:- Option-C

Question88:-Coal gas is obtained

- A:-By partial combustion of coal
- B:-By carbonization process of coal
- C:-By passing steam over coal
- D:-From the by products of blast furnace

Correct Answer:- Option-B

Question89:-To discharge mud and other sediments the boiler is provided with

- A:-Steam stop valve
- B:-Fusible club
- C:-Blow off cock
- D:-Feed check valve

Correct Answer:- Option-C

Question90:-During super heating of steam

- A:-the pressure remains constant
- B:-volume remains constant
- C:-temperature and volume remains constant
- D:-the pressure and volume remains constant

Correct Answer:- Option-A

Question91:-The steam nozzle converts

- A:-Pressure energy of steam to heat energy
- B:-Heat energy of steam to kinetic energy
- C:-Heat energy of steam to potential energy
- D:-Pressure energy of steam to potential energy

Correct Answer:- Option-B

Question92:-Which of the following part prevents the boiler against excessive pressure?

- A:-Pressure gauge
- B:-Steam stop valve
- C:-Safety valve
- D:-Fusible plug

Correct Answer:- Option-C

Question93:-The instrument used to monitor the temperature of liquids and gases in storage or flowing pipe and ducts is

- A:-Bomb Calorimeter
- B:-Thermometer
- C:-Kelvin meter
- D:-Thermocouple

Correct Answer:- Option-D

Question94:-The pressure exerted by the envelope of air surrounding the earth surface is called

- A:-Absolute pressure
- B:-Atmospheric pressure
- C:-Gauge pressure
- D:-Vacuum pressure

Correct Answer:- Option-B

Question95:-Mercury in a glass thermometer works on the principle of

- A:-Thermo couple effect
- B:-Thermo electric effect
- C:-Bourdon tube principle
- D:-Expansion of fluid

Correct Answer:- Option-D

Question96:-The performance of boiler is measured in terms of

- A:-Evaporative capacity
- B:-Heating capacity
- C:-Mass of steam generated
- D:-Mass of fuel burned

Correct Answer:- Option-A

Question97:-The main constituents of fuel are

- A:-Oxygen and Carbon
 - B:-Hydrogen and Carbon
 - C:-Oxygen and Hydrogen
 - D:-Sulphur and Oxygen
- Correct Answer:- Option-B

Question98:-The pressure which properties of water and steam become identical is

- A:-25.6 kg/sq.cm
 - B:-1 kg/sq.cm
 - C:-225.6 kg/sq.cm
 - D:-100 kg/sq.cm
- Correct Answer:- Option-C

Question99:-The device that drains away the condensed steam and air automatically from the steam pipe is

- A:-Steam separator
 - B:-Steam stop valve
 - C:-Steam injector
 - D:-Steam traps
- Correct Answer:- Option-D

Question100:-The boiler draught obtained by use of chimney is called

- A:-Natural draught
 - B:-Mechanical draught
 - C:-Steam jet draught
 - D:-Artificial draught
- Correct Answer:- Option-A