

## FINAL ANSWER KEY

Question Paper Code: 17/2020/OL  
Category Code: 124/2017  
Exam: Assistant Crane Driver (Electrical)  
Date of Test: 03-11-2020  
Department: Port  
Alphacode: A

Question1:-The tool, which is used for laying large circles

- A:-Trammel
- B:-Jenny Caliper
- C:-Divider
- D:-Scriber

Correct Answer:- Option-A

Question2:-'V' groove of 'V' Block is usually

- A:-60°
- B:-30°
- C:-120°
- D:-90°

Correct Answer:- Option-D

Question3:-The point angle of centre punch is

- A:-120°
- B:-60°
- C:-30°
- D:-90°

Correct Answer:- Option-D

Question4:-'V' Blocks are available in grade of

- A:- $A_1$  and  $A_2$
- B:-A and B
- C:- $B_1$  and  $B_2$
- D:-0 and 1

Correct Answer:- Option-B

Question5:-The least count of Vernier Bevel Protractor is

- A:-1'
- B:-10'
- C:-5'
- D:-15'

Correct Answer:- Option-C

Question6:-Brass is an alloy of

- A:-Copper and Tin
- B:-Copper and Zinc
- C:-Lead and Tin
- D:-Copper and Silver

Correct Answer:- Option-B

Question7:-Galvanised iron, which is coated with

- A:-Zinc
- B:-Lead
- C:-Tin
- D:-Copper

Correct Answer:- Option-A

Question8:-Which one of the following is a part of combination set ?

A:-Stock

B:-Square head

C:-Thimble

D:-Beam

Correct Answer:- Option-B

Question9:-The size of a parallel jaw bench vice indicates

A:-Maximum opening of jaws

B:-Width of the jaw

C:-Length of the body

D:-Weight of the vice

Correct Answer:- Option-B

Question10:-The value of one micron is

A:-1 mm

B:-0.1 mm

C:-0.01 mm

D:-0.001 mm

Correct Answer:- Option-D

Question11:-'Watt' is the unit of

A:-Work

B:-Power

C:-Energy

D:-Force

Correct Answer:- Option-B

Question12:-The least count of a steel rule is

A:-1 mm

B:-2 mm

C:-0.5 mm

D:-0.2 mm

Correct Answer:- Option-C

Question13:-In a metric Vernier Caliper, 25 VSD is equal to 24 MSD. Then the least count will be

A:-0.01 mm

B:-0.02 mm

C:-0.03 mm

D:-0.04 mm

Correct Answer:- Option-D

Question14:-1 cubic meter is equal to

A:-1 Ltr

B:-100 Ltrs

C:-10000 Ltrs

D:-1000 Ltrs

Correct Answer:- Option-D

Question15:-Cupola furnace is used for producing

A:-Pig iron

B:-Mild steel

C:-Cast iron

D:-Stainless steel

Correct Answer:- Option-C

Question16:-Setting of Hacksaw Blade, is done

A:-To prevent breakage of blade

B:-To get straight cutting

C:-To prevent binding when penetrating into the material

D:-To avoid wearing of blade

Correct Answer:- Option-C

Question17:-A twist drill of diameter 'd' mm rotates with an rpm of 'n'. Then the cutting speed of drill in m/min is

A:-  $\frac{\pi dn}{1000}$

B:-  $\pi dn$

C:-  $\frac{\pi d}{n}$

D:-  $\frac{\pi d}{1000n}$

Correct Answer:- Option-A

Question18:-Which one of the following is an artificial abrasive ?

A:-Aluminium oxide

B:-Emery

C:-Sand stone

D:-Corundum

Correct Answer:- Option-A

Question19:-The process of re-conditioning the grinding wheel to make it cut better is known as

A:-Truing

B:-Honing

C:-Dressing

D:-Reaming

Correct Answer:- Option-C

Question20:-Name the forging operation by which the length of workpiece is reduced and cross section area is increased.

A:-Up setting

B:-Drawing

C:-Bending

D:-Twisting

Correct Answer:- Option-A

Question21:-Name the property of a material by which, it can be drawn into thin wires.

A:-Malleability

B:-Hardness

C:-Stiffness

D:-Ductility

Correct Answer:- Option-D

Question22:-Carburising is a process of

A:-Normalising

B:-Case hardening

C:-Annealing

D:-Tempering

Correct Answer:- Option-B

Question23:-The process of removing metal from the surface around a drilled hole to form a seat for a bolt head or nut is

A:-Counter sinking

B:-Counter boring

C:-Spot facing

D:-Tapping

Correct Answer:- Option-C

Question24:-The tool used to remove the taper shank drill from the machine spindle is

A:-Sleeve

B:-Socket

C:-Punch

D:-Drift

Correct Answer:- Option-D

Question25:-As per BIS, a grinding wheel is specified as '51 A 46 L 5 V 23'. The term 'V' denotes

A:-Type of Abrasive

B:-Type of Bond

C:-Grain size

D:-Grade

Correct Answer:- Option-B

Question26:-Which one of the following term is related to slip gauge ?

A:-Glazing

B:-Wringing

C:-Second cut

D:-Loading

Correct Answer:- Option-B

Question27:-As per Indian Standard, there are four grades of slip gauge. They are

A:-Grade 1, 2, 3, 4

B:-Grade 0, 1, 2, 3

C:-Grade A, B, C, D

D:-Grade 00, 0, 1, 2

Correct Answer:- Option-D

Question28:-The size based on which all the dimensional deviations are given

A:-Basic size

B:-Actual size

C:-Upper deviation

D:-Lower deviation

Correct Answer:- Option-A

Question29:-The size of a component is given as  $25 \pm^{0.08}_{-0.05}$  in a drawing. The tolerance of the component is

A:-0.13

B:-25.08

C:-0.03

D:-24.95

Correct Answer:- Option-A

Question30:-Which one of the following is a solid lubricant ?

A:-Grease

B:-Graphite

C:-Castor oil

D:-Lard oil

Correct Answer:- Option-B

Question31:-In a single start thread, the lead is equal to

A:-Half of pitch

B:-Double the pitch

C:-Pitch

D:-None of the above

Correct Answer:- Option-C

Question32:-The angle of acme thread is

- A:-55°
- B:-29°
- C:-60°
- D:-47°

Correct Answer:- Option-B

Question33:-Which one of the following tool angle is provided to avoid rubbing of the body of the tool with the workpiece ?

- A:-Clearance angle
- B:-Helix angle
- C:-Rake angle
- D:-Lip angle

Correct Answer:- Option-A

Question34:-For good gripping and appearance, which one of the lathe operation is performed ?

- A:-Step turning
- B:-Finishing
- C:-Knurling
- D:-Taper turning

Correct Answer:- Option-C

Question35:-TPI of a thread is 10. Then pitch is

- A:-1 inch
- B:-1.1 inch
- C:-0.01 inch
- D:-0.1 inch

Correct Answer:- Option-D

Question36:-The 'change gears' for cutting single start thread on a lathe is given by

A:-  $\frac{\text{Pitch to be cut}}{\text{Pitch of lead screw}} = \frac{\text{Driver}}{\text{Driven}}$

B:-  $\frac{\text{Pitch of lead screw}}{\text{Pitch to be cut}} = \frac{\text{Driver}}{\text{Driven}}$

C:-  $\frac{\text{Depth of lead screw thread}}{\text{Depth of thread to be cut}} = \frac{\text{Driver}}{\text{Driven}}$

D:-  $\frac{\text{Depth of thread to be cut}}{\text{Depth of lead screw thread}} = \frac{\text{Driver}}{\text{Driven}}$

Correct Answer:- Option-A

Question37:-A device which holds and locate a workpiece and guides the cutting tool is called

- A:-Fixture
- B:-Clamps
- C:-Jig
- D:-Vice

Correct Answer:- Option-C

Question38:-To provide protective coating on Aluminium, which one of the following is suitable ?

- A:-Galvanising
- B:-Cladding
- C:-Anodizing
- D:-Bluing

Correct Answer:- Option-C

Question39:-Vice clamps are used to

- A:-Protect the serrated jaws of the vice
- B:-Protect the file
- C:-Hold the job firmly
- D:-Protect the finished surface of the job

Correct Answer:- Option-D

Question40:-Which one of the following indicates the grade of file ?

A:-Second cut

B:-Single cut

C:-Double cut

D:-Rasp cut

Correct Answer:- Option-A

Question41:-Which of the following is an example of linear measuring instrument ?

A:-Straight edge

B:-Steel rule

C:-Spirit level

D:-Bevel protractor

Correct Answer:- Option-B

Question42:-Caliper with one leg is bent and the other leg is straight called

A:-Hermaphrodite caliper

B:-Inside caliper

C:-Outside caliper

D:-Vernier caliper

Correct Answer:- Option-A

Question43:-Any mineral body from which metal can be economically recovered is called

A:-Alloy

B:-Element

C:-Flux

D:-Ore

Correct Answer:- Option-D

Question44:-Furnace used for the production of cast iron is

A:- Blast furnace

B:-Electric furnace

C:-Cupola furnace

D:-Reverberatory furnace

Correct Answer:- Option-C

Question45:-Hand file is also known as

A:-Safe edge file

B:-Square file

C:-Flat file

D:-Needle file

Correct Answer:- Option-A

Question46:-High carbon steel contains

A:-0.15% to 0.45% carbon

B:-0.03% to 0.05% carbon

C:-0.8% to 1.5% carbon

D:-0.03% to 0.10% carbon

Correct Answer:- Option-C

Question47:-Galena is the ore of

A:-Aluminium

B:-Lead

C:-Copper

D:-Tin

Correct Answer:- Option-B

Question48:-Least count of Metric Vernier Caliper

A:-0.02 mm

B:-0.01 mm

C:-0.10 mm

D:-0.20 mm

Correct Answer:- Option-A

Question49:-Centre punch is ground to an angle of

A:-30°

B:-45°

C:-60°

D:-90°

Correct Answer:- Option-D

Question50:-In 18-4-1 H.S.S. tool, 18 represent the part of

A:-Chromium

B:-Molybdenum

C:-Tungsten

D:-Vanadium

Correct Answer:- Option-C

Question51:-Tool used for cutting internal thread into a hole

A:-Reamer

B:-Tap

C:-Die

D:-Stud extractor

Correct Answer:- Option-B

Question52:-A wedge like tool used to remove the taper shank drill from the nose of drilling machine spindle is

A:-Drill chuck key

B:-Chisel

C:-Allen key

D:-Drill drift

Correct Answer:- Option-D

Question53:-The direction of filing stroke is perpendicular to the axis of file in

A:-Straight filing

B:-Cross filing

C:-Draw filing

D:-None of these

Correct Answer:- Option-C

Question54:-The chisel used for cutting oil grooves in bearing is

A:-Round nose chisel

B:-Cross cut chisel

C:-Flat chisel

D:-Cold chisel

Correct Answer:- Option-A

Question55:-Thread usually found in screw jack

A:-V-Thread

B:-Acme thread

C:-Knuckle thread

D:-Square thread

Correct Answer:- Option-D

Question56:-A headless bolt threaded at both end is called

A:-Screw

B:-Stud

C:-Rivet

D:-Thread extractor

Correct Answer:- Option-B

Question57:-Fit adopted in cart wheel fixing

- A:-Shrink fit
- B:-Running fit
- C:-Push fit
- D:-sliding fit

Correct Answer:- Option-A

Question58:-Which file has 100 to 120 teeth per 25 mm ?

- A:-Rough file
- B:-Second cut file
- C:-Dead smooth file
- D:-Bastard file

Correct Answer:- Option-C

Question59:-Liquid carburising is also known as

- A:-Nitriding
- B:-Cyaniding
- C:-Hardening
- D:-Annealing

Correct Answer:- Option-B

Question60:-Temperature at which oil turn into steam and evaporate is called

- A:-Fire point
- B:-Viscosity
- C:-Pour point
- D:-Flash point

Correct Answer:- Option-D

Question61:-Nut used in Hacksaw frame

- A:-Wing nut
- B:-Cap nut
- C:-Castle nut
- D:-Ring nut

Correct Answer:- Option-A

Question62:-A uniform increase or decrease in diameter along the length of a cylinder is called

- A:-Step cut
- B:-Chamfer
- C:-Thread
- D:-Taper

Correct Answer:- Option-D

Question63:-Teeth of similar shapes are cut parallel to shaft in

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

Correct Answer:- Option-B

Question64:-A natural abrasive is

- A:-Aluminium oxide
- B:-Silicon carbide
- C:-Emery
- D:-None of these

Correct Answer:- Option-C

Question65:-Fixtures used for



- A:-Holding and locating workpiece
- B:-Control the machine
- C:-Guide the cutting tool
- D:-Holding the workpiece and guide the cutting tool

Correct Answer:- Option-A

Question66:-The distance from a point on one thread to the corresponding point on the next thread is

- A:-Lead
- B:-Start
- C:-Pitch
- D:-Crest

Correct Answer:- Option-C

Question67:-A tin base alloy containing 88% tin, 8% antimony and 4% copper is called

- A:-Gun metal
- B:-Y-alloy
- C:-Monel metal
- D:-Babbit metal

Correct Answer:- Option-D

Question68:-When rotating a nut over a bolt, if the nut advance axially when rotating the nut in an anticlockwise direction it indicate

- A:-Left hand thread
- B:-Right hand thread
- C:-Multi start thread
- D:-Error in thread

Correct Answer:- Option-A

Question69:-In order to change the properties and characteristics of metals either heated or cooled is known as

- A:-Carburising
- B:-Nitriding
- C:-Heat treatment
- D:-Cyaniding

Correct Answer:- Option-C

Question70:-While filing, the teeth of files are clogged by particles of metal is known as

- A:-Glazing
- B:-Pinning
- C:-Piercing
- D:-Spinning

Correct Answer:- Option-B

Question71:-In which foundation bolt, one side is straight and the other is in taper

- A:-Rag type foundation bolt
- B:-Lewis type foundation bolt
- C:-Eye type foundation bolt
- D:-Cotter foundation bolt

Correct Answer:- Option-B

Question72:-The property of a metal by virtue of which they can be drawn into wires is known as

- A:-Toughness
- B:-Malleability
- C:-Brittleness
- D:-Ductility

Correct Answer:- Option-D

Question73:-The act of joining the slip gauges together while building up to size is known

- A:-Wringing
- B:-Honing

C:-Setting

D:-Lapping

Correct Answer:- Option-A

Question74:-The taper generally used on taper shank of drills and reamers is

A:-Jarno taper

B:-Brown and sharp taper

C:-Morse taper

D:-Metric taper

Correct Answer:- Option-C

Question75:-A neutral flame have

A:-Excess of oxygen than acetylene

B:-Equal volume of oxygen and acetylene

C:-Excess of acetylene than oxygen

D:-No oxygen

Correct Answer:- Option-B

Question76:-The process of finishing round holes by bonded abrasive stone is called

A:-Lapping

B:-Reaming

C:-Boring

D:-Honing

Correct Answer:- Option-D

Question77:-A Vernier metric micrometer shows the reading 6.214 mm. In this reading the number of Vernier scale coincide with thimble division

A:-4

B:-6

C:-21

D:-14

Correct Answer:- Option-A

Question78:-Gauge used to check the outside diameter of shaft

A:-Plug gauge

B:-Feeler gauge

C:-Snap gauge

D:-Depth gauge

Correct Answer:- Option-C

Question79:-To locate pulleys or gears on a shaft and prevent relative movement between them, we use

A:-Nuts

B:-Keys

C:-Washers

D:-Couplings

Correct Answer:- Option-B

Question80:-A hole is to be drilled in an M. S. plate with a drill of size 15 mm, R.P.M. is 700. Find the cutting speed.

A:-23 meter/minute

B:-30 meter/minute

C:-15 meter/minute

D:-33 meter/minute

Correct Answer:- Option-D

Question81:-The typical forward voltage of a yellow colour LED is

A:-2.1 V

B:-1.8 V

C:-2.2 V

D:-2.4 V

Correct Answer:- Option-A

Question82:-The light of Mercury Vapour Lamp is

- A:-Redish orange
- B:-Greenish
- C:-Redish blue
- D:-White with bluish green

Correct Answer:- Option-D

Question83:-To get pink colour in Neon sign Lamp \_\_\_\_\_ chemical powder coated in the inner side of the tube.

- A:-Cadmium silicate
- B:-Zinc silicate
- C:-Cadmium borate
- D:-Calcium silicate

Correct Answer:- Option-C

Question84:-Drop test of an armature is used for testing

- A:-Number of turns
- B:-Correct resistance
- C:-Short and open circuits
- D:-All of the above

Correct Answer:- Option-D

Question85:-Humming sound produced by a motor is due to

- A:-Low voltage
- B:-Shorted field or armature winding
- C:-Dirty conductor
- D:-Open field conductor

Correct Answer:- Option-B

Question86:-Current sensing single phasing preventers are suitable for

- A:-Constant voltage application motor
- B:-Constant load motors
- C:-Variable voltage application motors
- D:-All of the above

Correct Answer:- Option-B

Question87:-The Terminals of a GTO are

- A:-Anode, Cathode, Gate
- B:-Collector, Emitter, Gate
- C:-Source, Drain, Gate
- D:-Collector, Base, Emitter

Correct Answer:- Option-A

Question88:-In DC generator metal graphite brushes are used for

- A:-High current and high voltage application
- B:-Low current and low voltage application
- C:-High current and low voltage application
- D:-Low current and high voltage application

Correct Answer:- Option-C

Question89:-Which of the following is not a standard accuracy class of potential transformers ?

- A:-0.6
- B:-0.1
- C:-0.5
- D:-1.0

Correct Answer:- Option-A

Question90:-In Electrician Solder the percentage of Tin and Lead is

- A:-60% Lead 40% Tin
- B:-40% Tin 60% Copper
- C:-60% Tin 40% Lead
- D:-40% Zinc 60% Tin

Correct Answer:- Option-C

Question91:-The instrument used for measuring speed is

- A:-Tong Tester
- B:-Tachometer
- C:-Hydrometer
- D:-Growler

Correct Answer:- Option-B

Question92:-The armature current in DC motor is maximum when

- A:-When motor has picked up maximum speed
- B:-The motor has intermediate stage
- C:-The motor has just switched off
- D:-The motor has just started moving

Correct Answer:- Option-D

Question93:-A series RL circuits has a  $R = 30 \Omega$  and  $L = 40 \Omega$  the Z is

- A:-70  $\Omega$
- B:-10  $\Omega$
- C:-20  $\Omega$
- D:-50  $\Omega$

Correct Answer:- Option-D

Question94:-The Magnetic field produced in the stator of a three phase induction motor is at

- A:-Slip speed
- B:-Synchronous speed
- C:-Asynchronous speed
- D:-Rotor speed

Correct Answer:- Option-B

Question95:-The heat proof insulating material used for heater base is

- A:-Mica
- B:-Glass wool
- C:-Cotton
- D:-Porcelain

Correct Answer:- Option-A

Question96:-A 4 Pole 1200 rpm alternator will generate emf at the frequency of

- A:-25 Hz
- B:-50 Hz
- C:-40 Hz
- D:-60 Hz

Correct Answer:- Option-C

Question97:-Conductivity of copper is approximately

- A:-90%
- B:-98%
- C:-89%
- D:-85%

Correct Answer:- Option-A

Question98:-Nichrome is an alloy of

- A:-Nickel and cobalt
- B:-Nickel and Carbon

C:-Nickel and chromium

D:-Nickel and copper

Correct Answer:- Option-C

Question99:-The unit of Magneto Motive Force (MMF) is

A:-Weber

B:-Henry

C:-At/Wb

D:-Ampere turns

Correct Answer:- Option-D

Question100:-The charging of a cell at high rate is called

A:-Trickle charging

B:-Boost charging

C:-Potential charging

D:-Current charging

Correct Answer:- Option-B