

TRADESMAN-DIESEL MECHANIC

TECHNICAL EDUCATION DEPARTMENT

EXAM DATE:17-01-2017

**1.Super charging in a diesel engine is also called:**

A.Scavenging

B.Boosting

C.Cleaning

D.Silencing

Ans:B

**2.Thermostat valve strate to open above:**

A.20%

B.50%

C.80%

D.90%

Ans:C

**3.The oil pan in an engine is made of:**

A.Steel or aluminium

B.Steel or cast iron

C.Cast iron or brass

D.Cast iron or zinc

Ans:A

**4.The rate of doing work is called:**

- A.Energy
- B.Power
- C.Torque
- D.Force

Ans:B

**5.Which one of following is an insulator:**

- A.Aluminium
- B.Copper
- C.Iron
- D.Mica

Ans:D

**6.One Newton is equal to:**

- A. $10^9$ dyne
- B. $10^5$ dyne
- C. $10^3$ dyne
- D. $10^7$ dyne

Ans:B

**7.Which part of the piston is subjected two high pressure and temperature?**

- A.Skirt

B.Ring section

C.Hand

D.Crown

Ans:D

**8.Venturi unit and diaphragm unit are the to main parts of the following Governors:**

A.Pneumatic

B.Hydroic

C.Mechanical

D.Servo

Ans:A

**9.The stroke of an engine is:**

A.Length of the connecting rod

B.Distance between T.D.C and B.D.C.

C.Volume of the cylinder

D.Inside diameter of the cylinder

Ans:B

**10.The compression ratio in a diesel engine can be as high as:**

A.18:1

B.12:1

C.14:1

D.25:1

Ans:D

**11.A 12 V lead acid battery consist of:**

- A.Three cells in series
- B.Six cells in series
- C.Three cells in parallel
- D.Six cells in parallel

Ans:B

**12.The diesel engine usually emits excessive smoke during:**

- A.Starting
- B.Idling
- C.Accleration
- D.Decelerating

Ans:C

**13.The thermostat valve starts to open at about:**

- A.20°C
- B.50°C
- C.90°C
- D.80°C

Ans:D

**14.The number of ignition coils a distributorless ignition system for a six cylinder engine is**

A.2

B.3

C.6

D.12

Ans:C

**15.Oil bath air cleaner is serviced:**

A.After every 2000 km

B.After every 3000 km

C.After every 4000 km

D.After every 5000 km

Ans:D

**16.Radiator core should be cleaned by:**

A.Out side the fan side

B.Reverse flushing

C.Top to bottom of core

D.Top hose to bottom house

Ans:B

**17.The minimum graduation of an engineer's steel rule is:**

A.0.25 mm

B.0.50 mm

C.0.75 mm

D.1.00 mm

Ans:B

**18.The Instrument used to measure cylinder bore diameter is:**

A.Out side micrometer

B.Vernier caliper

C.Telescopic gauge

D.Bore dial gauge

Ans:D

**19.C.B.point are generally made of:**

A.Tungsten

B.Steel

C.Copper

D.Plastic

Ans:A

**20.Aluminium cylinder block requires:**

A.Aluminium liners

B.Brass liners

C.Cast iron liners

D.No liners

Ans:B

**21.In a vernier micrometer,vernier scale is gradated on:**

- A.Frame
- B.Spindle
- C.Barrel
- D.Thimble

Ans:C

**22.It has to withstand high pressure and temperature piston is made out of”**

- A.Copper
- B.Cast iron
- C.Steel
- D.Aluminium alloy

Ans:D

**23.The crankshaft transmit torque directly to:**

- A.Flywheel
- B.Propeller shaft
- C.Rod wheel
- D.Differential

Ans:A

**24.Exhaust valve fall angle is generally:**

- A. $30^{\circ}$
- B. $45^{\circ}$

C.60°

D.75°

Ans:B

**25.Which one of the following is not unit of pressure?**

A.Peal

B.Torr

C.Newton

D.Bar

Ans:C

**26.The unit capacitance is:**

A.Ohm

B.Siemens

C.Farrad

D.Mho

Ans:B

**27.One joule is equal to:**

A.107 ergs

B.103 ergs

C.109 ergs

D.105 ergs

Ans:A



**28.Bench vice is normally made of:**

- A.Cast iron
- B.Cast steel
- C.Mild steel
- D.High speed steel

Ans:A

**29.Deposit of carbon in the exhaust system:**

- A.Will reduce back pressure
- B.Will have no effect on back pressure
- C.Will increase back pressure
- D.Will result in pressure

Ans:C

**30.The boiling point of the coolant is increased in the cooling system which of the following makes it possible to increase the boiling point:**

- A.Pressure radiator cap
- B.Vacuum valve
- C.Water jackets
- D.Radiator core

Ans:A

**31.A governor,which provided perfect speed regulation with**

**zero speed drop is called:**

- A.Isobar governor
- B.Isotherm governor
- C.Isochronous governor
- D.Isocline governor

Ans:D

**32.Much of the heat in the exhaust gases may be recovered by the use of:**

- A.Heat exchanged
- B.Muffler
- C.Manifold
- D.Tail pipe

Ans:A

**33.A noise produced in the cylinder of a diesel engine during combustion usually when the fuel oil has a low ignition quality is called:**

- A.Fuel burst
- B.Fuel explosion
- C.Fuel knock
- D.Fuel thrust

Ans:C

**34.In starting of diesel engine by electric starting,what is used**

**to supply power to the power motor?**

- A.Dynamo
- B.Generator
- C.Rectifier
- D.Battery

Ans:D

**35.What is the pitch of a fine hacksaw blade?**

- A.1.8 mm
- B.1.0 mm
- C.0.8 mm
- D.1.4 mm

Ans:C

**36.The resistance in an open circuit is:**

- A.Zero
- B.Very low
- C.Very high
- D.Infinite

Ans:D

**37.The fuel injection timing in a distributor type pump is controlled by:**

- A.Changing plunger stroke

- B.Changing speed of rotor
- C.Rotating the cam ring
- D.Changing the number of cams on the ring

Ans:C

**38.The special feature of pintle type nozzle is that it:**

- A.Has a single hole
- B.Has an extended stem to form a pin
- C.It is suitable for cold weather
- D.Is designed for easy starting

Ans:B

**39.Top portion of liner does not come in contact with piston.Ring forms ridge in the cylinder bore.The tool used to remove ridge.**

- A.Milling cutter
- B.End mill cutter
- C.Ridge cutter
- D.Seat cutter

Ans:D

**40.Identify the type of floating of gudgeon pin proved with circlip:**

- A.Semifloating
- B.Full-floating

C.Three-quarter floating

D.Non-floating type

Ans:D

**41.The most important characteristic of a lubricating oil is its:**

A.Viscosity

B.Physical stability

C.Chemical stability

D.Resistance against corrosion

Ans:A

**42.In the phasing operation the time the fuel injection in each cylinder in relation to the pump camshaft.Which one of the following is to be adjusted?**

A.Control sleeve

B.Tappets

C.Toothed quadrant

D.Control rack

Ans:D

**43.A four cylinder engine has a capacity of 2.4 litres.The swept volume of one cylinder is:**

A.400 cm<sup>3</sup>

B.600 cm<sup>3</sup>

C.1200 cm<sup>3</sup>

D.2400 cm<sup>3</sup>

Ans:B

**44.What is likely to happen if the thermostat valve remains closed?**

A.Over heating of engine

B.Rough idling

C.Slow warming up of engine

D.Difficulty in starting of engine

Ans:A

**45.A Rough file is used:**

A.On non irregular jobs

B.To reduce the metal rapidly

C.On wood

D.If smooth file is not suitable

Ans:B

**46.In order to ensure effective cooling of each cylinder of the engine is surrounded by:**

A.Radiator

B.Water tube

C.Water ring

D.Water jacket

Ans:D

**47.The main purpose of lead acid battery is to store electrical in the form of:**

- A.Kinetic energy
- B.Potential energy
- C.Chemical energy
- D.Mechanical energy

Ans:C

**48.A grinding wheel is marked:51A46 L5V-23.Here what does 5 denote?**

- A.Kind of bond
- B.Structure
- C.Kind of abrasive
- D.Grain size

Ans:B

**49.India's position in terms of its size is:**

- A.3
- B.4
- C.6
- D.7

Ans:D

**50.Who designed our National Flag?**

A.Pingali Vengayya

B.Udaya Kumar

C.Rabindranath Tagore

D.Robert Bristo

Ans:A

**51.Which Political leader is known as Lion of Punjab?**

A.Bhagat Singh

B.Sukhdev Singh

C.Lala Lajpath Rai

D.Raj Guru

Ans:C

**52.Nagarjuna Sagar Project is situated across which river?**

A.Godavari

B.Krishna

C.Kaveri

D.Thungabhadra

Ans:B

**53.Largest island among Lakshadweep island group:**

A.Minicoy

B.Kavarathi

C.Androth



D.Kalpeni

Ans:A

**54.In which year was ICDS project launched in India?**

A.1970

B.1973

C.1975

D.1980

Ans:C

**55.Who was Political Guru of Mahatma Gandhi?**

A.S.N.Banerji

B.Gopala Krishna Gokhale

C.M.G.Ranade

D.Dadabhai Naoroji

Ans:B

**56.In which congress session was Poornaswaraj resolution passed?**

A.Mumbai

B.Tripura

C.Lucknow

D.Lahore

Ans:D

**57.District in which the Kayyur Struggle 1941 took place**

- A.Kannur
- B.Kasarkode
- C.Kozhikode
- D.Wayanad

Ans:B

**58.Which is the largest beach in Kerala?**

- A.Muzhuppilangad
- B.Cheraï
- C.Sankumugham
- D.Payyambalam

Ans:A

**59.Which is the birth place of social reformer Vagbadanandha?**

- A.Kollangode
- B.Kannanmoola
- C.Patyam
- D.Thalassery

Ans:C

**60.Name the Social reformer who formed the Cultural Organisation 'Vidyaposhini'?**

- A.Pandit Karuppan

B.Sahodaran Ayyappan

C.Velukutty Arayan

D.Arattupuzha Velayudha Panikkar

Ans:B

**61.In which year was 'Sadhujana Paripalana Sangham'formed under the leadership of Ayyankali?**

A.1903

B.1907

C.1918

D.1924

Ans:B

**62.Name the Social reformer who participated in the Kakkinada Congress Session in 1923**

A.T.K.Madhavan

B.Mannath Padmanabhan

C.C.Keshavan

D.K.Kelappan

Ans:A

**63.'God is omnipresent.I don't go to temple in search of God.Temple is the largest institution that protects untouchability.'Who said this comment?**

A.Swami Chinmayanandha

B.V.T.Battathirippad

C.Swami Anandhatheerthan

D.Swami Agamanandha

Ans:C

**64. Who is the present Human resource minister of India?**

A.Prakash Javedkar

B.Smrithi Irani

C.Menaka Gandhi

D.Uma Bharathi

Ans:A

**65. Who is the present Vice Chairman of Planning Board in Kerala?**

A.Aravindh Panagariya

B.Geetha Gopinath

C.V.R.Ramachandran

D.Sudhakar Prasad

Ans:C

**66. Which is the first digital state in India?**

A.Karnataka

B.Kerala

C.Seemandhra

D.Punjab

Ans:B

**67.Who won the Dadasahib Phalke Award in 2015?**

A.Shashi Kapoor

B.Gulzar

C.Adoor Gopalakrishnan

D.Manoj Kumar

Ans:D

**68.Who is the sports player known as ‘Flying fish’?**

A.Larisa Latynina

B.Michael Phelps

C.Usain Bolt

D.Milkha Singh

Ans:B

**69.Which part of the engine operate the valve?**

A.Connecting Rod

B.Crankshaft

C.Camshaft

D.Timing Gears

Ans:C

**70.Inlet and exhaust ports are situated in the two stroke**

**engine at:**

- A.Oil sump
- B.Inlet manifold
- C.Air filter
- D.Cylinder valves

Ans:D

**71.Piston Rings are commonly made of:**

- A.Cast Iron
- B.Bronze
- C.Zink
- D.Copper

Ans:A

**72.Cutting Tool used to finishing and enlarging a drilled is known as:**

- A.Die
- B.Reamer
- C.Bore gauge
- D.Tap

Ans:B

**73.A petrol engine:**

- A.Is a compression ignition

B.Is an external compression engine

C.Uses gasolian as fuel

D.Is a spark ignition engine

Ans:D

**74.Which instrument used to check the specific gravity of the electrolyte of the battery:**

A.Hygrometer

B.Hydrometer

C.Hydroscope

D.Lactometer

Ans:B

**75.Engine Radiator core is made of:**

A.Braze

B.Cast Iron

C.Plastic

D.Steel

Ans:A

**76.The oil lubricating pump operated by:**

A.Crankshaft

B.Rooker arm

C.Fly wheel

D.Camshaft

Ans:D

**77.Connecting Roid connect the crankshaft and the :**

- A.Camshaft
- B.Oil pump
- C.Piston
- D.Cylinder head

Ans:C

**78.In-take Air-fuel in petrol engine burned in:**

- A.Cylinder
- B.Caburettor
- C.FIP
- D.Air Filter

Ans:A

**79.Which one of the following types of engines has the longest crankshaft?**

- A.Radial engine
- B.Opposite engine
- C.Inline engine
- D.'V'engine

Ans:C

**80.The connecting rod is built of:**



A.Alloy steel

B.Brass

C.Cast iron

D.Aluminium

Ans:A

**81.Which part Indicate the oil level on the engine sump?**

A.Feeler gauge

B.Plastic gauge

C.Pitch gauge

D.Dipstick

Ans:D

**82.The purpose of thermostatic is to keep the engine:**

A.At desired temperature

B.Hot

C.Cool

D.Warm

Ans:A

**83.Which one of the following parts is not a part of engine exhaust system?**

A.Valve

B.Muffer

C.Pressure cap

D.Tail pipe

Ans:C

**84.On the rear end of the crankshaft is mounted:**

A.Fly wheel

B.Counter weight

C.Vibration damper

D.Timing sprocket

Ans:A

**85.The minimum number compression rings in an automotive engine:**

A.Three

B.Five

C.Two

D.One

Ans:C

**86.A Diesel engine:**

A.CI engine

B.SI engine

C.External combustion engine

D.Use gasoline as fuel

Ans:A

**87.During suction stroke the charge drawn in a petrol engine is:**

- A.Petrol only
- B.Air only
- C.Air petrol mixture
- D.None of the above

Ans:C

**88.In a diesel engine feed pump is located on:**

- A.Cylinder head
- B.FIP
- C.Air filter
- D.Injector

Ans:B

**89.Valves are arranged to open before T.D.C. or B.D.C is reached this is called:**

- A.Lag
- B.Lead
- C.Overlap
- D.None of the above

Ans:B

**90.The mostly common used valve in automobile engine:**

- A.Poppet valve
- B.Sleeve valve
- C.Rotary valve
- D.None of these

Ans:A

**91.In diesel engine the fuel ignited by:**

- A.Glow plug
- B.Spark plug
- C.By virtue of temperature of compressed air
- D.Injector

Ans:C

**92.The camshaft controls:**

- A.Valve opening
- B.Valve closing
- C.Valve timing
- D.All of these

Ans:D

**93.Water sludge is formed in the crank due to mixing of:**

- A.Fuel and oil
- B.Water and fuel
- C.Water and oil

D.Water and oil

Ans:C

**94.The exhaust manifold in small diesel engine is made of:**

A.Cast iron

B.Brass

C.Aluminium

D.Copper

Ans:A

**95.Slow seeping of fuel oil from the nozzle tip after cut off the fuel is called:**

A.Clogging

B.Seepage

C.Pouring

D.Dribbing

Ans:D

**96.From the oil pump the oil goes directly to:**

A.Oil gallery

B.Oil strainer

C.Oil filter

D.Pressure switch

Ans:C

**97.The hand priming device is put to use when the engine is:**

- A.Idling
- B.Buring at full speed
- C.Running at full speed
- D.Not working

Ans:D

**98.Which one of the following types of engine has the highest fuel efficiency?**

- A.Opposite engine
- B.Radial engine
- C.Inline engine
- D.'V'engine

Ans:B

**99.If the thermostatic is stuck closed,the engine will:**

- A.Over heat
- B.Warm up slowly
- C.Fail to start
- D.Idle

Ans:A

**100.Which of the following conductors is used as heating elements?**

A.Tungsten

B.Carbon

C.Copper

D.Nichrome

Ans:D