## **JDLCCE 2021**

Application Seq No	
Candidate Name	
TC Name	iON Digital Zone iDZ Jamshedpur

Section: General Engineering

Q.1 Which of the following is used to project a point on the ground up to the tape or to project a point on the tape down to the ground?

Ans A. Plum-Bob

✗ B. Ranging poles

X c. Wooden peg

X D. Chain pins

Question ID: 2764946 Status: Answered Chosen Option: B

Q.2 The type of aggregate surface texture/characteristics carried by Pumice and trass is:

Ans

X A. glassy

× B. crystalline

C. honeycombed and porous

🔀 D. granular

Question ID: 27649422 Status: Answered Chosen Option: C

Q.3 The distance between the centre of tensile reinforcement and the bottom edge of the beam is called:

X A. end cover

✓ B. effective cover

X c. nominal cover

X D. clear cover

Question ID: 27649426 Status: Answered Chosen Option: D

Q.4 Which of following is NOT a property of unfinished bolts?

Ans X A. Induced tension is relatively small and unpredictable

✗ c. Minimum tensile strength of 60 ksi

✗ D. Used in light structures

Question ID : 27649429
Status : Answered
Chosen Option : C

Q.5 Determine the distance for which the combined correction (refraction and curvature) is 5 mm.

Ans

X A. 293 m

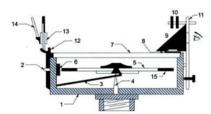
X c. 263 m

**X** D. 283 m

Question ID : 2764948 Status : Not Answered

Chosen Option: --

Q.6 Identify Element 4 as shown in the Schematic diagram of the Prismatic compass.



Ans X A. Mirror

X B. Spring

✓ C. Pivot

× D. Prism

Question ID : 2764947 Status : Answered

Chosen Option : C

Q.7 Which of following is NOT an ill effect of irrigation?

Ans X A. Formation of marshy land

✗ B. Dampness in weather

X D. Loss of valuable lands

Question ID : 27649413 Status : Answered Chosen Option : C

Q.8 For residential plot area from 500 to 1000 m<sup>2</sup>, what is the minimum area to be reserved for parking?

Ans X A. Three-fourth of the open area

X B. One-eight of the open area

X c. One-half of the open area

✓ D. One-fourth of the open area

Question ID : 27649416 Status : Not Answered

Chosen Option: --

Q.9 A rectangular beam of width 100 mm is subjected to a maximum shear force of 60 KN. The corresponding maximum shear stress in the cross section is 4 N/mm². What is the depth of the beam?

Ans X A. 150 mm

X B. 200 mm

✓ C. 225 mm

X D. 100 mm

Question ID: 27649421 Status: Answered Chosen Option: C

Q.10 Which of the following are NOT the main requirements for the success of well irrigation?

Ans XA Well distributed demand for irrigation throughout the year

✓ B.

Absence of a suitable aquifer which can yield good quality water in sufficient quantity

X C

Suitable configuration of command area with the highest ground around the centre of the command area

X D. Availability of energy, preferably electric power, for pumps

Question ID : 27649415 Status : Answered

Chosen Option :  $\boldsymbol{B}$ 

Q.11 White cement manufacturing needs higher firing temperature up to: Ans ✓ A. 1650°C X B. 1850°C X c. 1950°C X D. 1750°C Question ID: 27649423 Status: Answered Chosen Option: B Q.12 The point of intersection between the axis of a floating body and a vertical line passing through the new centre of buoyancy obtained when the floating body is slightly tilled or it undergoes a small angular displacement (or angle of heel)  $\theta$  is known as: Ans X A. centre of gravity X B. centre of buoyancy X c. centroid D. metacentre Question ID: 27649412 Status: Answered Chosen Option: D Q.13 Which of the following factors does NOT influence the achieved degree of compaction in the laboratory? X A. Water content B. Compactive effort X c. Temperature X D. Plasticity of the soil Question ID: 27649410 Status: Answered Chosen Option : C Q.14 A pumping set with a motor has been installed in a building at a cost of ₹2,500. Assuming the life of the pump is 15 years, find the annual instalment of the sinking fund required to be deposited to accumulate the whole amount of 4% compound interest. Ans **X** A. ₹130 X B. ₹135 X c. ₹145 ✓ D. ₹125 Question ID: 2764945 Status: Not Answered Chosen Option: --

Q.15 Which of the following paints are essentially a dispersion of rubber-like resin polystyrene and polyvinyl acetate in water and are prepared by grinding suitable pigments (titanium oxide) in an emulsion of water and film forming driver e.g. Co and Mn?

Ans

- X A. Cellulose paint
- X B. Cement based paint
- C. Rubber based paint
- ✓ D. Plastic emulsion paint

Question ID : 2764941
Status : Answered
Chosen Option : C

Q.16 Which of the following factors is NOT responsible for restricting the length of a rail?

Ans

- A. Heavy external thermal stresses in long rails
- **X** B.

Difficulties in acquiring bigger expansion joints for long rails

- X c. Difficulties in manufacturing very long rails
- X D.

Lack of facilities for transport of longer rails, particularly on curves

Question ID : 27649417 Status : Answered Chosen Option : B

Q.17 Which of the following areas is taken as a reduction of the net area to account for stress concentrations at holes and shear lag effects where NOT all the cross-sectional elements are connected to transmit the load?

Ans

- A. Effective net area
- B. Gross cross-sectional area
- C. Nominal cross-sectional area
- Net cross-sectional area

Question ID : 27649430 Status : Answered Chosen Option : A

**Q.18** In which of the following sections will the position of actual neutral axis (n) shift above the critical neutral axis ( $n_c$ ) i.e.  $n < n_c$  and steel is fully stressed and concrete is under stressed?

Ans

- A. Under-reinforced section
- X B. Over-reinforced section
- ✗ c. Average section
- X D. Balanced section

Question ID : 27649425
Status : Answered

Chosen Option : A

Q.19 What should be the percentage of Alumina in Good Brick Earth?

Ans X A. 45% - 50%

X B. 40% - 45%

√ C. 20% - 30%

X D. 25% - 35%

Question ID : 2764942 Status : Answered

Chosen Option : D

Q.20 What is the Unit Of Payment for earthwork Excavation work?

Ans X A. Per m

✓ B. Per m<sup>3</sup>

**×** c. Per m<sup>2</sup>

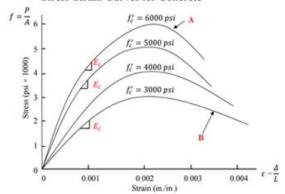
X D. Per Quintal

Question ID : 2764944 Status : Answered

Chosen Option :  $\boldsymbol{\mathsf{B}}$ 

Q.21 Identify Point A in the given figure for stress strain curves for concrete.





Ans X A. Higher strength (more ductile)

➤ B. Low strength (more brittle)

✓ C. Higher strength (more brittle)

➤ D. Low strength (more ductile)

Question ID : 27649427 Status : Answered

Chosen Option: C

Q.22 Filler rods and wires for gas welding shall conform to:

Ans X A. IS 1378

X B. IS 1478

✓ C. IS 1278

X D. IS 1578

Question ID : 27649428 Status : Not Answered

Chosen Option: --

Q.23 The pile capacity determined is from SPT. SPT stands for:

Ans X A. Skin Penetration Test

✓ B. Standard Penetration Test

🗙 c. Spatial Penetration Test

X D. Special Penetration Test

Question ID : 2764949

Status : **Answered** Chosen Option : **B** 

Q.24 Consider the following methods of preservation of timber.

- 1 Pressure Application
- 2 Brush Application
- 3 Dipping
- 4 Open Tank

The correct sequence of these methods in the increasing order of their effectiveness is:

Ans  $\times$  A. 4,2,1,3

XB. 3,4,2,1

✓ C. 2, 3, 4, 1

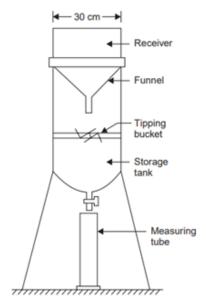
X D. 1,3,4,2

Question ID: 2764943

Status: Answered

Chosen Option : C

 $^{Q.25}$  Identify the type of rain gauge shown in the figure.



Ans

X A. Symon's rain gauge

X B. Siphon rain gauge

★ c. Weighing bucket rain gauge

✓ D. Tipping bucket rain gauge

Question ID : 27649414 Status : Answered Chosen Option : D

Q.26 What is the standard slump cone size used for slump tests for concrete?

Ans X A

100 mm top diameter  $\times$  250 mm bottom diameter  $\times$  250 mm high

**X** B

100 mm top diameter × 150 mm bottom diameter × 300 mm high

**X** C.

100 mm top diameter × 200 mm bottom diameter × 200 mm high

√ D.

100 mm top diameter × 200 mm bottom diameter × 300 mm high

Question ID : 27649424 Status : Answered

Chosen Option: D

Q.27 The shearing force (S.F.) at the section is defined as:

Ans 🥪

the algebraic sum of the forces taken on one side of the section

**X** B.

the algebraic product of the forces taken on one side of the section

X C

the algebraic difference of the forces taken on one side of the section

X D

the algebraic ratio of the forces taken on one side of the section

Question ID : 27649419
Status : Answered
Chosen Option : A

Q.28 A hydraulic lift consists of a small diameter piston of radius 5 cm, and a large diameter piston of radius 15 cm. How much force must be exerted on the small diameter piston in order to support the weight of a car at 13,300 N?

Ans

 $\times$  A. 3.48 × 10<sup>3</sup> N

 $\times$  B.  $4.48 \times 10^3 \text{ N}$ 

 $\times$  c. 2.48  $\times$  10<sup>3</sup> N

 $\checkmark$  D. 1.48 × 10<sup>3</sup> N

Question ID : 27649411 Status : Answered Chosen Option : D

**Q.29** A steel rod 5 m long and of 40 mm diameter is used as a column, with on end fixed and the other free. Determine the crippling load by Euler's formula. Take E as  $200 \times 10^3 \text{ N/mm}^2$ 

Ans

✓ A. 2.48 kN

X B. 5.48 kN

X c. 3.48 kN

X D. 7.48 kN

Question ID : 27649420 Status : Answered Chosen Option : A Q.30 Which of the following is NOT a step for the construction of sewer or procedure for laying sewer?

Ans >

**X** A.

The sewer pipes are then lowered down in to the trench either manually or with the help of machines for bigger pipe diameters.

**X** B.

After bedding concrete is laid in required alignment and levels.

√ C.

For firm grounds, sewer pipes are to be embedded in concrete.

**X** D.

In ordinary or softer grounds, sewers are laid embedded in concrete.

Question ID : 27649418 Status : Answered Chosen Option : C

Q.31 Which of the following is NOT a FACT device?

Ans

X A. Series compensator

✗ B. Shunt compensator

✓ C. Distribution transformer

X D. UPFC

Question ID : 27649448
Status : Not Answered

Chosen Option: --

Q.32 The equivalent resistance of four resistors joined in parallel is 20 ohms. The current flowing through them are 0.6, 0.3, 0.2 and 0.1 ampere. The value of each resistor is:

Ans

X A. 240 ohms, 240 ohms, 240 ohms

**★** B. 4 ohms, 8 ohms, 12 ohms, 24 ohms

✓ C. 40 ohms, 80 ohms, 120 ohms, 240 ohms

X D. 40 ohms, 40 ohms, 40 ohms

Question ID: 27649434
Status: Answered
Chosen Option: C

Q.33 Which of the following techniques is very commonly used in speed control of a three-phase induction motor?

Ans

X A. Voltage control

× c. Pole changing

X D. Rotor resistance control

Question ID : 27649442
Status : Answered
Chosen Option : B

Q.34 Load factor is the ratio of:

Ans

✓ A. Average load/maximum demand

➤ B. Maximum load/average load

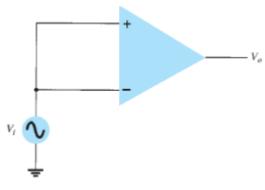
★ c. Connected load/maximum demand

X D. Average load/connected load

Question ID: 27649447 Status: Not Answered

Chosen Option: --

Q.35 The given connection of OPAMP is known as:



Ans

✓ A. common mode operation

**X** B. single mode operation

★ c. ground mode operation

**X** D. thermal mode operation

Question ID: 27649455

Status: Not Answered

Chosen Option: --

Q.36 The synchronous speed of a motor with 6 poles and operating at 50 Hz frequency is:

Ans X A. 750

**X** B. 3000

√ C. 1000

X D. 1500

Question ID: 27649440

Status: Not Answered

Chosen Option: --

Q.37 Which of the following is NOT a utility treated in energy audit system? Ans X A. Electricity X c. Chilled water X D. Steam Question ID: 27649452 Status: Not Answered Chosen Option: --Q.38 The symbol shown in the given figure denotes: X A. connector X c. synchro ground X D. hand ground Question ID: 27649431 Status: Not Answered Chosen Option: --Q.39 For selecting the method of generation of electricity, which of the following factors is NOT considered? Ans X A. Cost ✓ B. Distance from ocean × c. Limitation × D. Perpetuity Ouestion ID: 27649449 Status: Answered Chosen Option: B Q.40 The parameter used to measure the use of energy for its manufacturing process with previous usage is known as: Ans X A. plant audit × c. plant efficiency X D. plant safety

> Question ID : 27649451 Status : Not Answered

Chosen Option : --

Q.41 Which of the following is used for voltage regulation? Ans X A. IGBT X B. Transistor X C. Diode ✓ D. Zener diode Question ID: 27649453 Status: Answered Chosen Option: B Q.42 The slip of a three-phase induction motor is 1.0. What is the state of motor? X A. Running at variable speed X B. Running at half speed X c. Running at full speed ✓ D. Standstill Question ID: 27649441 Status: Not Answered Chosen Option: --Q.43 The leading power factor is caused when the net load is: Ans X A. resistive **×** B. motor load × c. inductive ✓ D. capacitive Question ID: 27649446 Status: Answered Chosen Option: D Q.44 Which type of current signal shape has average value of zero? Ans X A. Pulsed ✓ B. Sinusoidal X c. Straight line X D. Exponential Question ID: 27649433 Status: Answered Chosen Option: B

Q.45 Which of the following schemes is NOT used in power system protection?

Ans

✗ C. Balanced voltage scheme

X A. Circulating current scheme

X D. Transley scheme

Question ID : **27649444**Status : **Not Answered** 

Chosen Option: --

Q.46 The damping provided in moving iron type of instruments is of type:

Ans X A. eddy current

**×** <sup>B.</sup> oil friction

**×** c. spring

✓ D. air friction

Question ID : 27649438
Status : Answered
Chosen Option : C

 $^{Q.47}$  In a single-phase split phase induction motor, the main winding has:

Ans X A. high resistance and high inductive reactance

X B. low resistance and low inductive reactance

× c. high resistance and low inductive reactance

✓ D. low resistance and high inductive reactance

Question ID : 27649443 Status : Not Answered

Chosen Option: --

Q.48 The instrument used to measure the frequency of AC signals is called a/an:

Ans X A. AC meter

✗ c. dynamometer

X D. DC meter

Question ID : 27649439
Status : Answered
Chosen Option : B

**Q.49** How is the paramagnetic susceptibility related to the absolute temperature for ordinary fields and temperatures?

Ans



The paramagnetic susceptibility is inversely proportional to the absolute temperature.

XE

The paramagnetic susceptibility is directly proportional to square of the absolute temperature.

X C

The paramagnetic susceptibility is directly proportional to the absolute temperature.

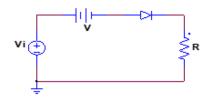
X D

The paramagnetic susceptibility is inversely proportional to square of the absolute temperature.

Question ID : 27649437 Status : Not Answered

Chosen Option: --

Q.50 The given circuit is:



Ans X A. series clamper with DC supply

X B. parallel clamper with DC supply

X D. parallel clipper with DC supply

Question ID: 27649454

Status: Not Answered

Chosen Option: --

Q.51 The voltage across a terminal pair is a measure of \_\_\_\_\_ required to move charge through the element.

Ans

🗙 A. energy

X B. temperature

**X** C. light

✓ D. work

Question ID : 27649435 Status : Answered

Chosen Option: D

Q.52 The effective energy use for maximising profit and market position is known as: Ans ✗ B. conservation of energy X c. audit of energy X D. energy policy Ouestion ID: 27649450 Status: Not Answered Chosen Option: -- $^{Q.53}$  Illumination is measured using a/an: ✓ A. lux meter X B. ammeter X C. leak detector X D. multimeter Question ID: 27649432 Status: Answered Chosen Option: A Power factor correction capacitors have an internal loss called: X A. tan zeta loss X B. tan gamma loss ✓ C. tan delta loss X D. tan beta loss Question ID: 27649445 Status: Not Answered Chosen Option: --Q.55 An electric circuit is supplied with +10 V DC and it takes input current of -10 A. Which of the following is the correct statement about the power of the element of electric circuit? Ans X A. The power cannot be computed. B. It generated 100 W of power. **★** c. The power loss is 100 W. ➤ D. It consumes 100 W of power. Question ID: 27649436 Status: Answered Chosen Option: B

Q.56 A cold chisel is made up of which type of steel?

Ans X A. Low carbon steel

**X** B. Mild steel

★ c. Medium carbon steel

✓ D. High carbon steel

Question ID : 27649460 Status : Answered Chosen Option : D

Q.57 Which of the following turbines is named 'Curtis stages' turbine?

Ans X A. Pressure-Velocity compounded impulse turbine.

X B. Pressure compounded reaction turbine.

C. Pressure compounded impulse turbine.

✓ D. Velocity compounded impulse turbine.

Question ID: 27649466 Status: Not Answered

Chosen Option: --

Q.58 Which of the following conditions would satisfy a stable equilibrium for a floating body?

Ans XA. Centre of buoyancy is above the centre of gravity.

X B. Meta centre is below the centre of gravity.

X c. Centre of buoyancy is below the centre of gravity.

✓ D. Meta centre is above the centre of gravity.

Question ID : 27649468 Status : Answered Chosen Option : D

Q.59 When the elements in a kinematic pair have surface contact during the motion, the pair is known as:

Ans X A. higher pair

B. lower pair

X c. closed pair

🔀 D. open pair

Question ID : 27649461 Status : Answered Chosen Option : A Q.60 In the centrifugal pump, the slip factor occurs under which condition/angle?

Ans 🕜 A.

When fluid leaving the impeller is not the same as the actual blade angle.

✗ B. When the fluid velocity is less than the calculated one.

X C.

When fluid leaving the impeller is not the same as the actual nozzle angle.

X D. When the fluid discharge is less than the calculated one.

Question ID : 27649474 Status : Not Answered

Chosen Option: --

Q.61 Which of the following boilers is a fire tube, internally fired and a natural circulation boiler?

Ans X A. Benson boiler

X B. Babcock boiler

X c. La mount boiler

✓ D. Lancashire boiler

Question ID: 27649479

Status : **Answered** 

Chosen Option :  ${\bf A}$ 

Q.62 Which of the following is a vapour power cycle?

Ans

A. Rankine cycle

X B. Otto cycle

★ c. Dual combustion cycle

X D. Gas turbine cycle

Question ID: 27649478

Status: Not Answered

Chosen Option : --

Q.63 The Pelton wheel turbine is which type of turbine?

Ans X A. Pressure compounded turbine

B. Hydraulic impulse turbine

C. Hydraulic reaction turbine

➤ D. Velocity compounded turbine

Question ID: 27649473

Status: Answered

Chosen Option: C

 $^{Q.64}$  The form of liquid that is about to vaporise is called as: Ans ✓ A. saturated liquid X B. saturated vapour X c. subcooled liquid X D. superheated vapour Question ID: 27649456 Status: Answered Chosen Option: A Q.65 Which of the following is the purpose of using a fusible plug? X A. Removing of impurities ★ c. Reducing steam pressure X D. Stopping the steam supply Question ID: 27649480 Status: Not Answered Chosen Option: --Q.66 Which of the following components is dispensed in an Electrolux refrigerator? Ans X A. Condenser X B. Generator ★ c. Evaporator ✓ D. Pump Question ID: 27649458 Status: Not Answered Chosen Option: --The power developed by an engine at the output shaft is called: X A. specific power output B. brake power **×** c. indicated power X D. frictional power

> Question ID: 27649476 Status: Answered Chosen Option: C

Q.68 In fluid kinematics, the approach of the Lagrangian method for analysis is:

Ans

- X A. by tracing only inlet particles' behaviour
- X B. by tracing only outlet particles' behaviour

✓ C.

tracing the behaviour of each and every particle of the flow

X D.

tracing the simultaneous behaviour of all particles through a section

Question ID : 27649471 Status : Answered Chosen Option : D

Q.69 On which standard cycle do petrol, gas and other oil engines work?

Ans

- X A. Diesel cycle
- X c. Carnot cycle
- X D. Dual cycle

Question ID : 27649475 Status : Answered Chosen Option : B

Q.70 A gauge reads vacuum pressure of 700 mm of Hg with an atmospheric pressure of 760 mm of hg. What will be the value of absolute pressure?

Ans

- X A. 640 mm of Hg
- **№** B. 700 mm of Hg
- X D. 760 mm of Hg

Question ID : 27649470 Status : Answered Chosen Option : C

Q.71 Under the action of which set of forces will a body be in equilibrium?

Ans

- X A Two unequal and parallel forces
- X B. Two equal and parallel forces
- × c. Two unequal and opposite forces
- D. Two equal and opposite forces

Question ID : 27649465 Status : Answered Chosen Option : D Q.72 In which of the following components of a refrigeration plant is the flow of the refrigerant controlled? Ans ✓ A. Expansion valve ✗ B. Evaporator X c. Receiver tank X D. Condenser Question ID: 27649457 Status: Not Answered Chosen Option: --Q.73 Which main alloying element is used to increase the corrosion resistance in steel? Ans ✓ A. Chromium **X** B. Sulphur X C. Silicon X D. Carbon Question ID: 27649459 Status: Answered Chosen Option: A Q.74 Which flow rate measuring instrument does not work on Bernoulli's equation principle? X A. Venturimeter X B. Orifice meter ✓ C. U-tube differential manometer X D. Flow nozzle Question ID: 27649472 Status: Answered Chosen Option : C Q.75 The value of Mach number 'M' in the case of a subsonic nozzle will be: Ans  $\times$  A. M=1 $\checkmark$  B. M < 1 $\times$  C. M > 5 $\times$  D. M > 1Question ID: 27649467

Status: Answered Chosen Option: B

Q.76 The transmission angle in a linkage is defined as the angle between:

Ans X A. fixed link and input link

X B. input link and coupler

★ c. fixed link and output link

✓ D. output link and coupler

Question ID : 27649462 Status : Not Answered

Chosen Option: --

Q.77 Which type of friction occurs between the layers of lubricating oil film?

Ans A. Viscous friction

✗ B. Boundary friction

X c. Greasy friction

X D. Dry friction

Question ID : 27649477
Status : Answered
Chosen Option : A

Q.78 How is a Joule Thomson coefficient defined?

Ans X A.

It is ratio of pressure difference and enthalpy difference at constant volume.

✗ c. It is slope of an isobaric curve.

➤ D. It is the slope of an isentropic curve.

Question ID : 27649463 Status : Not Answered

Chosen Option: --

Q.79 When supplied to the system, what is the conventional sign indication for work (W) and heat (Q)?

Ans  $\times$  A. W (+)ive and Q (-)ive

X c. W (+)ive and Q (+)ive

X D. W (-)ive and Q (-)ive

Question ID : 27649464 Status : Answered Chosen Option : B Q.80 Which tube is called the piezometer tube? Ans ✓ A. Sufficient length tube and open to atmosphere Sufficient length tube and closed to atmosphere and containing mercury X c. Sufficient length tube and closed to atmosphere X D. Sufficient length tube with bends and open to atmosphere Question ID: 27649469 Status: Answered Chosen Option: A Section : General Knowledge Q.81 In August 2022, who won India's first-ever medal in Judo World Championships? ✓ A. Linthoi Chanambam ✗ B. Avtar Singh ★ C. Shushila Devi Likmabam X D. Tombi Devi Ouestion ID: 27649482 Status: Not Answered Chosen Option: --Q.82 A religious movement among the Oraons was initiated by Jatra Oraon of Bishunpur police station in: Ans X A. 1910 **№** B. 1923 √ C. 1914 X D. 1920 Question ID: 27649489 Status: Not Answered Chosen Option: --Q.83 The Cheruthoni Dam and Mettur Dam are located in the states of \_\_\_\_\_\_, respectively. X A. Maharashtra and Odisha ★ B. Karnataka and Andhra Pradesh C. Kerala and Tamil Nadu ➤ D. West Bengal and Telangana

> Question ID: 27649492 Status: Not Answered

Chosen Option: --

Q.84 During which five-year plan was the Drought Prone Area Programme launched in India?

Ans X A. Fifth Five-Year Plan

X B. Third Five-Year Plan

✓ C. Fourth Five-Year Plan

X D. Sixth Five-Year Plan

Question ID : 27649485 Status : Not Answered

Chosen Option: --

Q.85 In the Indian Parliamentary system, the first Estimates Committee of Lok Sabha was adopted by the Provisional Parliament on:

Ans X A. 21 June 1954

X B. 8 March 1948

✓ C. 3 April 1950

X D. 15 October 1951

Question ID : 27649494 Status : Not Answered

Chosen Option: --

Q.86 Which of the following institutions has developed India's first 3D-printed Human Cornea with L V Prasad Eye Institute (LVPEI) and the Centre for Cellular and Molecular Biology (CCMB)?

Ans

A. Indian Institute of Technology-Hyderabad

✗ B. Indian Institute of Technology-Kanpur

X c. Indian Institute of Technology-Delhi

D. Indian Institute of Technology-Bombay

Question ID : 27649481 Status : Answered

Chosen Option : A

Q.87 In which year was the Deoband movement started by Mohammad Qasim Nanautavi and Rashid Ahmad Gangohi?

Ans >

X A. 1870

X B. 1876

X c. 1874

√ D. 1866

Question ID: 27649483

Status: Not Answered

Chosen Option: --

 $\textbf{Q.88} \quad \text{Which of the following religious reform movements was launched by Haji Shariatullah in 19$^{th}$ century?}$ Ans X A. Ahmadiyya Movement ✗ B. Aligarh Movement ✓ C. Faraizi Movement X D. Wahabi Movement Question ID: 27649491 Status: Not Answered Chosen Option: --Q.89 In which of the following states is the 'Lotia' folk song sung in the Chaitra month during the festival of 'Lotia'? Ans X A. West Bengal X B. Andhra Pradesh X C. Maharashtra ✓ D. Rajasthan Question ID: 27649484 Status: Answered Chosen Option : D Q.90 Deepika Kumari, the Gold Medallist in 2010 Commonwealth Games, is a professional player of \_\_\_\_\_. X A. wrestling X B. boxing X c. long jump ✓ D. archery Question ID: 27649490 Status: Answered Chosen Option: D Q.91 Which of the following Articles of the Indian Constitution is related to the appellate jurisdiction of Supreme Court in regard to criminal matters? Ans X A. Article 142 X B. Article 139 ✓ C. Article 134 X D. Article 143 Question ID: 27649487 Status: Not Answered Chosen Option: --

Q.92 Who among the following are the author of the book "Kaidi ki Patni" and "Aranyer Adhikar" respectively? Civil Junction

Ans

- A. Ramavriksha Benipuri and Mahasweta Devi
- ✗ B. Ram Narayan Singh and Mahasweta Devi
- X c. Ram Narayan Singh and Sakharam Ganesh
- X D. Ramavriksha Benipuri and Sakharam Ganesh

Question ID : 27649495 Status : Not Answered

Chosen Option: --

Q.93 In which of the following Parts of the Indian Constitution is the Article 32 mentioned?

Ans

- X A. PART IV
- ✓ B. PART III
- C. PART II
- X D. PART V

Question ID : 27649493 Status : Not Answered

Chosen Option: --

Q.94 Which of the following Fundamental Duties was included in the Indian Constitution by the 86<sup>th</sup> Constitutional Amendment Act, 2002?

Ans

**X** A.

To protect and improve the natural environment including forests, lakes, rivers and wildlife

**⋖**// B

To provide opportunities for education the child between the age of six and fourteen years

X C.

To defend the country and render national service when called upon to do so

X D. To safeguard public property and to abjure violence

Question ID : 27649486 Status : Not Answered

Chosen Option: --

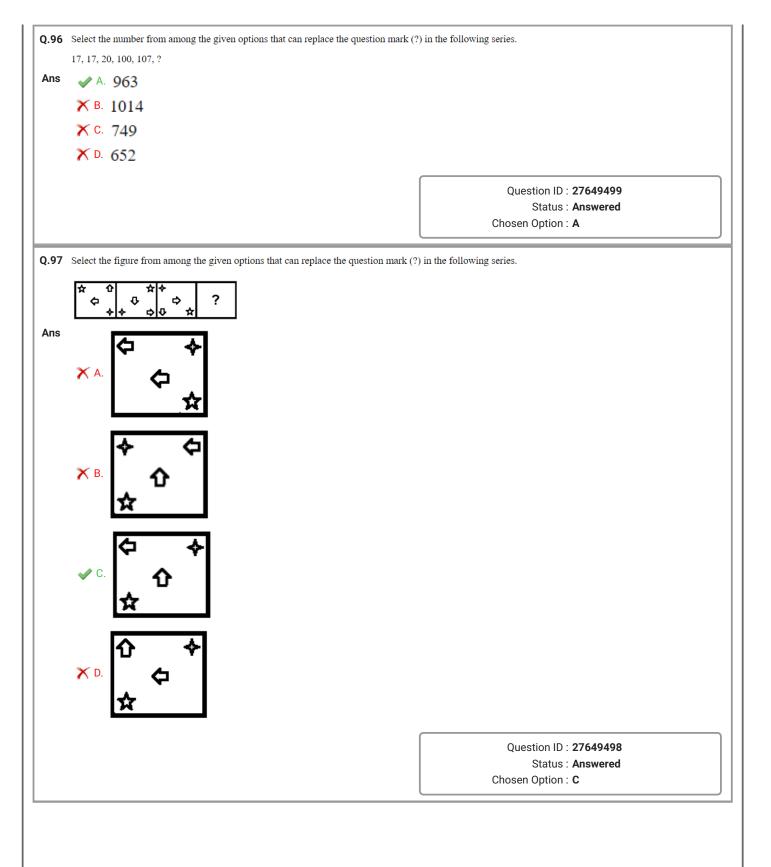
Q.95 Which of the following is a semi-classical Indian dance with tribal and folk tradition found in the state of Jharkhand?

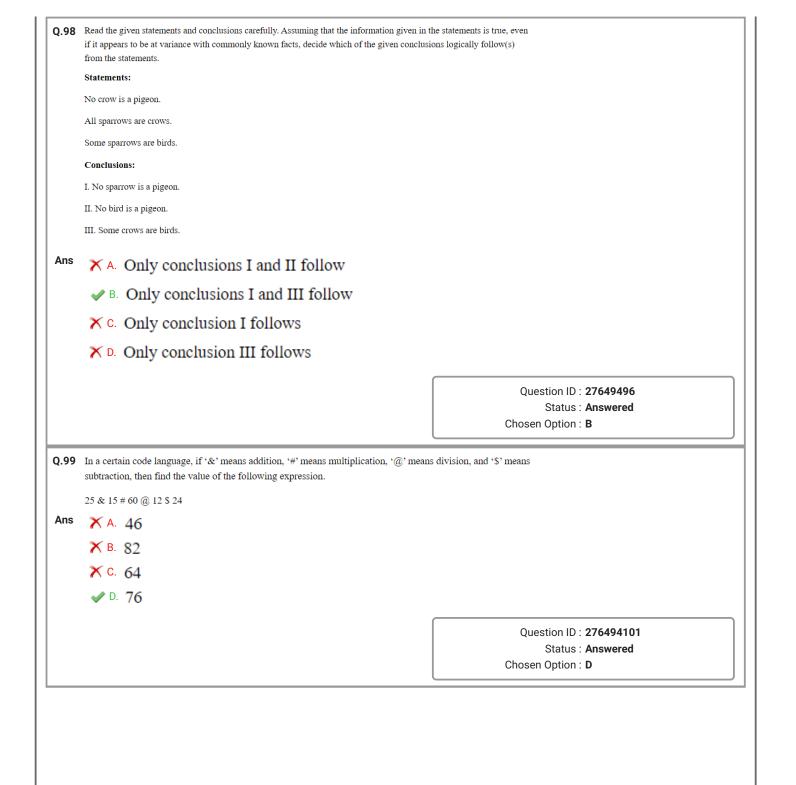
Ans

- X A. Kachhi Ghodi
- X B. Gair
- ✓ C. Chhau
- X D. Bihu

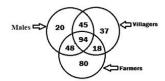
Question ID : 27649488 Status : Answered

Chosen Option : C





Q.100 Study the given diagram carefully and answer the question that follows. The numbers in different sections indicate the number of persons.



How many farmers are also villagers but are NOT males?

Ans

✓ A. 18

X B. 94

X c. 98

X D. 45

Question ID: 276494104

Status: Answered

Chosen Option: A

Q.101 In a certain code language, 'SOUR' is coded as '146'. How will 'FOCUS' be coded in that language?

Ans

X A. 140

X B. 148

X c. 120

✓ D. 128

Question ID: 276494100

Status: Answered

Chosen Option: D

Q.102 In a class of 58 students, Amit scored less marks than only 25 students, and Sarthak scored more marks than only 22 students. How many students scored less marks than Amit but more marks than Sarthak?

Ans X A. 11

**X** B. 8

X C. 10

✓ D. 9

Question ID: 276494103

Status: Answered

Chosen Option :  ${\bf D}$ 

Q.103 Six persons P, Q, R, S, T and U are sitting in a straight line facing north. P is third to the left of Q. T is third to the right of R. U is second to the left of R. Who is sitting second to the right of P?

Ans

**X** A. **T** 

**X** C. **Q** 

**X** D. **R** 

Question ID: 276494102

Status: Answered

Chosen Option: B

Q.104 Select the letter-cluster from among the given options that can replace the question mark (?) in the following series. Civil Junction

CUTMN, EXXRT, GABWZ, IDFBF, ?

Ans X A. KGJGM

X B. KGKHL

X C. KHIGL

✓ D. KGJGL

Question ID: 27649497

Status: Answered

Chosen Option : D

Q.105 Which two numbers should be interchanged to make the following equation correct?

 $40 + 24 \div 6 \times 12 - 36 = 44$ 

Ans X A. 24 and 36

X B. 6 and 12

X c. 12 and 40

✓ D. 36 and 40

Question ID: 276494105

Status: Answered

Chosen Option :  ${\bf D}$ 

Q.106 Electric bulb filament is made up of:

Ans X A. lead

★ B. copper

X c. aluminium

Question ID: 276494108

Status: Answered

Chosen Option :  $\boldsymbol{\mathsf{D}}$ 

Q.107 Which part of the banana plant is NOT used as food?

Ans X A. Flower

**×** B. Stem

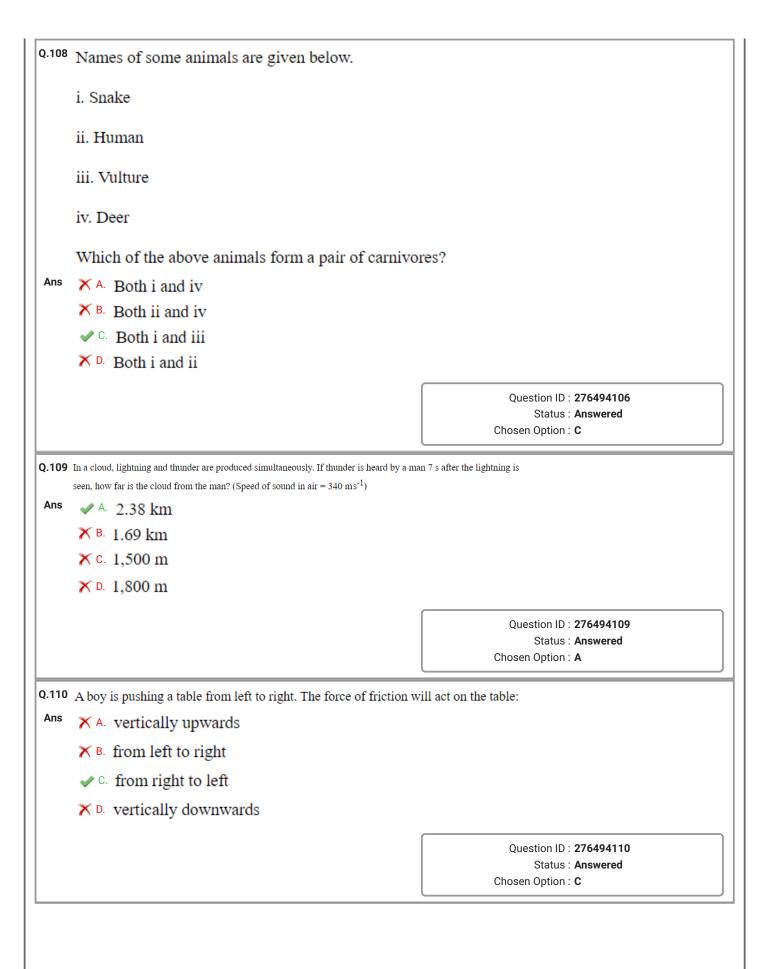
✓ C. Root

× D. Fruit

Question ID : 276494107

Status: Answered

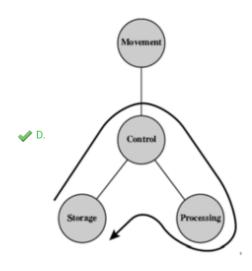
Chosen Option: C



Q.111 The marked price of a watch is ₹1250 and it is sold for ₹1200. The percentage discount is Ans X A. 5% X B. 3% X C. 6% ✓ D. 4% Question ID: 276494111 Status: Answered Chosen Option : D Q.112 A man completes his journey by a cycle. If he covered 60% of the distance at 40 km/h, 30% of the distance at 20 km/h and the remaining distance at 10 km/h, then his average speed is Ans X A. 15.92 km/h X c. 30.51 km/h X D. 20.68 km/h Question ID: 276494112 Status: Answered Chosen Option: B Q.113 In a computer game, a builder can build a wall in 20 hours while a destroyer can demolish such a wall completely in 40 hours. Both the builder and the destroyer were initially set to work together on level ground. After 30 hours, the destroyer was taken out. What was the total time taken to build the wall? Ans X A. 33 hours 30 minutes X B. 35 hours 15 minutes × c. 32 hours 45 minutes ✓ D. 35 hours Question ID: 276494113 Status: Answered Chosen Option: D Q.114 Two metallic right circular cones with heights 3.1 cm and 5.3 cm and radii of their bases 2.1 cm each, have been melted together and recast into a sphere. Then the diameter of the sphere is Ans X A. 4.1 cm **×** B. 4.4 cm X c. 4.6 cm √ D. 4.2 cm Question ID: 276494115 Status: Answered Chosen Option: D

Q.115 How many tiles whose length and breadth are 16 cm and 5 cm, respectively will be needed to fit in a rectangular region whose length and breadth are respectively 256 cm and 100 cm? Ans ✓ A. 320 **X** B. 325 **X** c. 350 X D. 380 Question ID: 276494114 Status: Answered Chosen Option : A Q.116 Which of the following is NOT an output device? X A. Audio speaker X B. Daisy wheel printer ✓ C. Scanner X D. LCD Projector Question ID: 276494119 Status: Answered Chosen Option :  ${\bf C}$ 

Q.117 Which of the following diagrams shows data flow for processing 'from and to' to storage? Ans Movement **X** A. Control Storage Processing **X** B. Control Storage Processing **X** C. Control Processing



Question ID : 276494118
Status : Not Answered

Chosen Option: --

Q.118 The \_\_\_\_\_\_ brought the fourth generation of computers, as thousands of integrated circuits were built onto a single silicon chip.

Ans

× A. microcontroller

× B. processor

X D. semi-controller

Question ID : 276494116 Status : Answered

Chosen Option :  $\boldsymbol{C}$ 

Q.119 Select the option that best describes the truthfulness of the following statements.

i. Application software is a type of computer program that performs specific functions.

ii. Graphical user interface is also referred as 'WIMP' interface.

iii. MS-office is one of the utility software by Microsoft.

Anc

X A. i-False, ii-True, iii-False

★ c. i-False, ii-True, iii-True

🔀 D. i-True, ii-True, iii-True

Question ID : 276494120 Status : Answered

Chosen Option : **D** 

Q.120 Match the column Units with column Activities.

Units	Activities
a) Control	i) This unit is responsible for performing
Unit	logical operations like, AND, OR, Equal
	to, Less than.
b) Memory	ii) This unit coordinates the tasks inside
Unit	the computer in sync with the input and
	output units.
c) ALU	iii) This unit acts as a hub of all the data.

Ans

✓ A. a-ii, b-iii, c-i

🗙 B. a-iii, b-ii, c-i

🗙 c. a-ii, b-i, c-iii

🗙 D. a-i, b-ii, c-iii

Question ID: 276494117

Status : Answered

Chosen Option :  $\boldsymbol{\mathsf{A}}$ 

## झारखण्ड कर्मचारी चयन आयोग

चाय बगान, कालीनगर, नामकोम, राँची-834010.

## झारखण्ड डिप्लोमा स्तर संयुक्त प्रतियोगिता परीक्षा आवश्यक सूचना

दिनांक-09.12.2022

झारखण्ड कर्मचारी चयन आयोग के विज्ञापन संख्या 06/2021 (नियमित रिक्ति) एवं 02/2022 (बैंकलॉग रिक्ति) के आलोक में दिनांक 23.10.2022 से दिनांक 07.11.2022 तक सम्पन्न झारखण्ड डिप्लोमा स्तर संयुक्त प्रतियोगिता परीक्षा—2021 के अधीन सभी विषयों की औपबंधिक उत्तर कुंजी दिनांक 11.11.2022 को प्रकाशित की गई थी। औपबंधिक उत्तर कुंजी के विरुद्ध दिनांक 12.11.2022 से दिनांक 18.11.2022 बजे तक ऑन लाईन आपत्तियाँ प्राप्त की गई।

2. औपबंधिक उत्तर कुँजी पर अभ्यर्थियों से प्राप्त आपित्तयों पर विशेषज्ञों की समिति द्वारा सम्यक विचारोपरान्त उक्त परीक्षा के अधीन निम्नलिखित प्रश्नों के उत्तर को संशोधित करते हुए अंतिम उत्तर कुँजी प्रकाशित की जाती है:—

क्रमांक	Question Id	औपबंधिक उत्तर	अंतिम उत्तर		
1	2	3	4		
	Subject/ Post : Mechanical Engineering				
1	2764942767	23.5 N/mm <sup>2</sup>	х		
2	2764942779	16%	4%		
3	2764942875	-40°C, 357°C	Х		
4	2764941598	For same maximum pressure and temperature the cycle efficiency of Diesel cycle is more than Otto cycle	For same maximum pressure and temperature the heat supplied in Otto cycle is more than Diesel cycle		
5	2764941602	The MEP can be used as parameter to compare the performance of reciprocating engines of equal size	х		
6	2764941608	The mechanical efficiency increase	х		
7	2764941658	to increase the effective head of water	х		
Subject/ Post : Electrical Engineering					
1	2764942615	1.25 m	3.75		
2	2764941104	7.95	х		

क्रमांक	Question Id	औपबंधिक उत्तर	अंतिम उत्तर		
1	2	3	4		
	Subject/ Post : Civil Engineering				
1	2764941997	Ground level ozone	х		
2	276494853	300	х		
3	276494904	S 49°E	S 55°E		
4	276494933	E = 2C (1+ μ)	Х		
5	2764941820	30.04 cm	Х		
6	2764941849	Vertical Fall	х		
7	2764941892	Maximum free moment ordinate for AB= 170 kNm and BC= 330 kNm	Maximum free moment ordinate for AB=180 kNm and BC=320 kNm		
8	2764941898	5 mm	х		
9	2764941907	160mm	х		
	Subject/ Post:	General Engineering and General Studie	s		
1	276494156	0.125 W	х		
2	276494166	Super heater	х		
3	276494225	А	х		
4	2764942489	Binod Bihari Mahto	х		
5	2764942508	Its radius increase	х		
6	2764941712	1.5 A	Х		
7	2764941715	I= 5 ang (90°)	I= 5 ang (60°)		
8	2764941725	very high	very small		

क्रमांक	Question Id	औपबंधिक उत्तर	अंतिम उत्तर
1	2	3	4
9	2764941733	Negatively charge	electrically neutral
10	2764941736	saturated vapour state	х
11	2764941745	penetration	Х
12	2764941777	Floor 5	
13	27649410	Compactive effort	Temperature
14	27649475	Otto cycle	х

- 3. उक्त प्रश्नों के अतिरिक्त अन्य सभी प्रश्नों की उत्तर कुंजी वही होगी जो औपबंधिक उत्तर कुंजी के माध्यम से संसूचित है।
- 4. स्तम्भ— 4 में जिन प्रश्नों के विरूद्ध X अंकित हैं, ऐसे प्रश्न रद्द प्रश्न हैं जिसमें उस विषय की परीक्षा में सम्मिलित अभ्यर्थियों को पूर्ण अंक प्रदान किये जायेंगे।
- 5. उक्त अंतिम उत्तर कुंजी के विरूद्ध किसी तरह की आपत्ति / अभ्यावेदन मान्य नहीं होगा।

ह. / – परीक्षा नियंत्रक।