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Section : World History and Geography and Indian History and Geography Historical events up to 10th level

Q.1 Which of the following is an artificial lake?

Ans ☒ 1. Didwana

☒ 2. Gobind Sagar

☒ 3. Loktak

☒ 4. Bhimtal

Question Type : MCQ

Question ID : 6306801252742

Status : Answered

Chosen Option : 3

Marks : 0

Q.2 The Arab Spring (2010–2012) led to major political changes in the Middle East and North Africa. Which of the following countries did NOT experience a major government overthrow during this period?

Ans ☒ 1. Saudi Arabia

☒ 2. Egypt

☒ 3. Tunisia

☒ 4. Libya

Question Type : MCQ

Question ID : 6306801390292

Status : Answered

Chosen Option : 2

Marks : 0

Q.3 Where are most of the metallic minerals found in India?

Ans ☒ 1. Peninsular plateau region in the old crystalline rocks

☒ 2. Himalayan region

☒ 3. Coastal plains of India

☒ 4. Indo-Gangetic plain

Question Type : **MCQ**

Question ID : **6306801390802**

Status : **Answered**

Chosen Option : **1**

Marks : **1**

Q.4 Manufacturing industries belong to which category of economic activities?

Ans ☒ 1. Secondary

☒ 2. Quaternary

☒ 3. Primary

☒ 4. Tertiary

Question Type : **MCQ**

Question ID : **6306801387284**

Status : **Answered**

Chosen Option : **3**

Marks : **0**

Q.5 Which of the following countries formed the Triple Entente before World War I?

Ans ☒ 1. Germany, Russia, Britain

☒ 2. France, Russia, Britain

☒ 3. USA, Japan, Italy

☒ 4. Germany, Austria-Hungary, Italy

Question Type : **MCQ**

Question ID : **6306801388742**

Status : **Answered**

Chosen Option : **2**

Marks : **1**

Q.6 What was India's sex ratio in 2011 as per the 2011 Census?

Ans ☒ 1. 940 females per 1000 males

☒ 2. 943 females per 1000 males

☒ 3. 950 females per 1000 males

☒ 4. 940 males per 1000 females

Question Type : **MCQ**

Question ID : **6306801390575**

Status : **Answered**

Chosen Option : **2**

Marks : **1**

Q.7 When did World War II begin?

- Ans ☒ 1. 1 December 1939
- ☒ 2. 1 September 1939
- ☒ 3. 10 September 1939
- ☒ 4. 1 October 1939

Question Type : MCQ
Question ID : 6306801390296
Status : Answered
Chosen Option : 2
Marks : 1

Q.8 1995 में विश्व व्यापार संगठन (WTO) के निर्माण का उद्देश्य क्या था?

- Ans ☒ 1. समाजवादी अर्थव्यवस्थाओं के हितों को बढ़ावा देना
- ☒ 2. व्यापार बाधाओं को कम करना, देशों के बीच विवादों को सुलझाना, तथा वैश्विक स्तर पर अधिक स्वतंत्र और निष्पक्ष व्यापार को बढ़ावा देना
- ☒ 3. अंतर्राष्ट्रीय मुद्रा कोष की जगह लेना
- ☒ 4. वैश्विक राजनीतिक विवादों को सुलझाना

Question Type : MCQ
Question ID : 6306801390293
Status : Answered
Chosen Option : 2
Marks : 1

Q.9 Which of the following industries is classified as a mineral-based industry?

- Ans ☒ 1. Jute textiles
- ☒ 2. Cotton textiles
- ☒ 3. Sugar
- ☒ 4. Iron and steel

Question Type : MCQ
Question ID : 6306801391407
Status : Answered
Chosen Option : 4
Marks : 1

Q.10 The Santhal Rebellion of 1855-56 was led by which two brothers?

- Ans ☒ 1. Nana Saheb and Tatyia Tope
- ☒ 2. Birsa Munda and Jagannath Prasad
- ☒ 3. Raghunath Mahato and Manik Prabhu
- ☒ 4. Sidhu and Kanhu Manjhi

Question Type : MCQ
Question ID : 6306801388705
Status : Answered
Chosen Option : 1
Marks : 0

Q.1 What does CPU stand for?

- Ans ☒ 1. Central Processing Unit
- ☐ 2. Central Power Unit
- ☐ 3. Core Processing Unit
- ☐ 4. Computer Processing Unit

Question Type : MCQ
Question ID : 6306801391780
Status : Answered
Chosen Option : 1
Marks : 1

Q.2 What is the shortcut key to rename a file or a folder in Windows 10?

- Ans ☐ 1. Ctrl + X
- ☐ 2. Ctrl + V
- ☐ 3. Ctrl + C
- ☒ 4. F2 key

Question Type : MCQ
Question ID : 6306801392354
Status : Answered
Chosen Option : 4
Marks : 1

Q.3 Under which Article of the Indian Constitution is the Council of Ministers in a state formed to aid and advise the Governor?

- Ans ☐ 1. Article 324
- ☒ 2. Article 163
- ☐ 3. Article 153
- ☐ 4. Article 171

Question Type : MCQ
Question ID : 6306801390150
Status : Answered
Chosen Option : 1
Marks : 0

Q.4 What is the main purpose of the ITTO (International Tropical Timber Organization)?

- Ans ☒ 1. To conserve forests through sustainable management
- ☐ 2. To ban deforestation worldwide
- ☐ 3. To promote trade in tropical timber
- ☐ 4. To encourage afforestation in temperate regions

Question Type : MCQ
Question ID : 6306801390034
Status : Answered
Chosen Option : 1
Marks : 1

Q.5 Which of the following is NOT a feature of the Government of India Act, 1935?

- Ans ☒ 1. Introduction of separate electorates for minorities
- ☐ 2. Introduction of provincial autonomy
- ☐ 3. Establishment of a federal court
- ☐ 4. Bicameral legislature in some provinces

Question Type : MCQ
Question ID : 6306801389464
Status : Answered
Chosen Option : 1
Marks : 1

Q.6 Which of the following international agreements focuses primarily on the conservation and sustainable use of wetlands?

- Ans ☐ 1. World Heritage Convention
- ☒ 2. Ramsar Convention
- ☐ 3. Convention on Migratory Species (CMS)
- ☐ 4. Convention on Biological Diversity (CBD)

Question Type : MCQ
Question ID : 6306801390019
Status : Answered
Chosen Option : 2
Marks : 1

Q.7 The term 'non-attainment area' in the Indian context refers to regions that do not meet which standard?

- Ans ☒ 1. Ambient air quality standards
- ☐ 2. Renewable energy production targets
- ☐ 3. Water quality norms
- ☐ 4. Noise pollution limits

Question Type : MCQ
Question ID : 6306801390704
Status : Answered
Chosen Option : 1
Marks : 1

Q.8 What is the purpose of the Flash Fill feature in Microsoft Excel 2021?

- Ans ☐ 1. To automatically fill a range of cells with a formula
- ☐ 2. To automatically create a chart or graph
- ☒ 3. To automatically fill a range of cells with a pattern or value
- ☐ 4. To automatically revoke a range of cells

Question Type : MCQ
Question ID : 6306801397991
Status : Answered
Chosen Option : 4
Marks : 0

Q.9 Which Act established the Supreme Court of Judicature at Fort William (Calcutta)?

- Ans ☒ 1. Indian Councils Act of 1861
- ☒ 2. Regulating Act of 1773
- ☒ 3. Government of India Act of 1858
- ☒ 4. Charter Act of 1833

Question Type : MCQ
Question ID : 6306801390146
Status : Answered
Chosen Option : 2
Marks : 1

Q.10 Which of the following bodies is a statutory body?

- Ans ☒ 1. Supreme Court of India
- ☒ 2. National Human Rights Commission (NHRC)
- ☒ 3. Union Public Service Commission (UPSC)
- ☒ 4. Election Commission of India (ECI)

Question Type : MCQ
Question ID : 6306801390135
Status : Answered
Chosen Option : 1
Marks : 0

Section : Current affairs and Madhya Pradesh General Knowledge up to 10th level

Q.1 Which district in Madhya Pradesh received the '5th National Water Award' for being the best district in the western zone for water conservation efforts?

- Ans ☒ 1. Gwalior
- ☒ 2. Bhopal
- ☒ 3. Ujjain
- ☒ 4. Indore

Question Type : MCQ
Question ID : 6306801390689
Status : Answered
Chosen Option : 4
Marks : 1

Q.2 Which film is among those to receive honours at the 70th National Film Awards?

- Ans ☒ 1. Gully Boy
- ☒ 2. 3 Idiots
- ☒ 3. Dangal
- ☒ 4. Aattam

Question Type : MCQ
Question ID : 6306801390641
Status : Answered
Chosen Option : 3
Marks : 0

Q.3 What is the range of annual rainfall in the Malwa Plateau?

- Ans ☐ 1. 1200 to 1500 mm
☐ 2. 800 to 1000 mm
☐ 3. 500 to 700 mm
☒ 4. 1000 to 1200 mm

Question Type : MCQ
Question ID : 6306801390487
Status : Answered
Chosen Option : 2
Marks : 0

Q.4 Which of the following is considered a source of human capital formation?

- Ans ☐ 1. Investment in land and factories
☐ 2. Investment in machinery and equipment
☒ 3. Investment in education and healthcare
☐ 4. Investment in physical infrastructure

Question Type : MCQ
Question ID : 6306801390879
Status : Answered
Chosen Option : 1
Marks : 0

Q.5 The 'Jungle Satyagraha' in Madhya Pradesh was a unique form of protest during which of the following movements?

- Ans ☒ 1. Civil Disobedience Movement
☐ 2. Quit India Movement
☐ 3. Non-Cooperation Movement
☐ 4. Swadeshi Movement

Question Type : MCQ
Question ID : 6306801390350
Status : Answered
Chosen Option : 1
Marks : 1

Q.6 In January 2025, Russia signed a treaty with which country to enhance cooperation in trade, transport, and energy, including joint military exercises?

- Ans ☒ 1. Iran
☐ 2. India
☐ 3. Japan
☐ 4. Brazil

Question Type : MCQ
Question ID : 6306801390715
Status : Answered
Chosen Option : 2
Marks : 0

Q.7 What is the new percentage of reservation for women in Madhya Pradesh state government jobs after the recent increase?

- Ans ☐ 1. 33%
- ☒ 2. 35%
- ☐ 3. 40%
- ☐ 4. 30%

Question Type : MCQ
Question ID : 6306801390688
Status : Answered
Chosen Option : 3
Marks : 0

Q.8 Where did the 70th National Film Awards ceremony take place?

- Ans ☐ 1. Lucknow
- ☐ 2. Pune
- ☐ 3. Hyderabad
- ☒ 4. New Delhi

Question Type : MCQ
Question ID : 6306801390642
Status : Answered
Chosen Option : 2
Marks : 0

Q.9 Which organisation was re-established in 1935 to fight for responsible government in Indore?

- Ans ☐ 1. Swaraj Party
- ☒ 2. Praja Mandal
- ☐ 3. Indian National Congress
- ☐ 4. Azad Hind Fauj

Question Type : MCQ
Question ID : 6306801390366
Status : Answered
Chosen Option : 2
Marks : 1

Q.10 Which of the following regions in Madhya Pradesh receives the least rainfall, generally below 80 cm?

- Ans ☐ 1. North-eastern Madhya Pradesh
- ☐ 2. Eastern Madhya Pradesh
- ☒ 3. Western Madhya Pradesh
- ☐ 4. Southern Madhya Pradesh

Question Type : MCQ
Question ID : 6306801390466
Status : Answered
Chosen Option : 4
Marks : 0

Q.1 In a certain code language, 'boys are playing' is coded as 'ov we kc' and 'let boys leave' is coded as 'kc jk hu'. How is 'boys' coded in the given language?

- Ans
- ☒ 1. ov
 - ☒ 2. we
 - ☒ 3. kc
 - ☒ 4. jk

Question Type : MCQ

Question ID : 630680814188

Status : Answered

Chosen Option : 3

Marks : 1

Q.2 Two pipes A and B can fill a tank in 27 hours and 19 hours, respectively. If both the pipes are opened simultaneously, then the time taken to fill the tank is:

- Ans
- ☒ 1. $11\frac{7}{46}$ hours
 - ☒ 2. $7\frac{7}{46}$ hours
 - ☒ 3. $6\frac{7}{46}$ hours
 - ☒ 4. $20\frac{7}{46}$ hours

Question Type : MCQ

Question ID : 6306801224050

Status : Answered

Chosen Option : 1

Marks : 1

Q.3 Evaluate: $51 - [25 - \{21 - (13 - 10 + 6)\}]$

- Ans
- ☒ 1. 35
 - ☒ 2. 38
 - ☒ 3. 36
 - ☒ 4. 37

Question Type : MCQ

Question ID : 630680687686

Status : Answered

Chosen Option : 2

Marks : 1

Q.4 The simple interest on a certain sum for $6\frac{2}{7}$ years at the rate of 3.2%



- Ans
- ☒ 1. ₹29662
 - ☒ 2. ₹29653
 - ☒ 3. ₹29661
 - ☒ 4. ₹29641

Question Type : MCQ
Question ID : 630680962949
Status : Answered
Chosen Option : 2
Marks : 1

Q.5 Priya and Ayushi together invested ₹24500 in a business. At the end of the year, out of a total profit of ₹6500, Priya's share was ₹2600. What was the investment of Ayushi?

- Ans
- ☒ 1. ₹12925
 - ☒ 2. ₹14700
 - ☒ 3. ₹15070
 - ☒ 4. ₹14575

Question Type : MCQ
Question ID : 6306801076061
Status : Answered
Chosen Option : 2
Marks : 1

Q.6 Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which letter-cluster DOES NOT belong to that group?

(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster.)

- Ans
- ☒ 1. KSM
 - ☒ 2. QYS
 - ☒ 3. NVP
 - ☒ 4. HPI

Question Type : MCQ
Question ID : 630680721628
Status : Answered
Chosen Option : 4
Marks : 1

Q.7 Seven people, C, D, E, F, I, J and K, are sitting in a row, facing the north. Only three people sit between D and E. K sits to the immediate left of E. No one sits to the right of F. Only two people sit between F and K. C sits to the immediate right of J. How many people sit between I and C?

- Ans
- ☐ 1. One
 - ☐ 2. Four
 - ☐ 3. Three
 - ☒ 4. Two

Question Type : MCQ
Question ID : 630680626222
Status : Answered
Chosen Option : 4
Marks : 1

Q.8 What should come in place of the question mark (?) in the given series in order to make it logically complete?

CJU66, GMS60, KPQ54, ?

- Ans
- ☐ 1. NTN48
 - ☒ 2. OSO48
 - ☐ 3. OSN47
 - ☐ 4. NTO47

Question Type : MCQ
Question ID : 630680164160
Status : Answered
Chosen Option : 2
Marks : 1

Q.9 Refer to the following number and symbol series and answer the question that follows. Counting to be done from left to right only.

(Left) € # 8 % € # # @ 4 7 3 & 5 @ * @ 2 4 © 5 8 * (Right)

How many such symbols are there that are immediately preceded by a number and also immediately followed by a number?

- Ans
- ☐ 1. 1
 - ☒ 2. 2
 - ☐ 3. 4
 - ☐ 4. 3

Question Type : MCQ
Question ID : 6306801073970
Status : Answered
Chosen Option : 2
Marks : 1

Q.10 A manufacturer sells a product to a wholesaler at a profit of 40%. The wholesaler, in turn, sells it to a retailer at a profit of 50%, and the retailer sells it to a customer at a profit of 25%. If the customer pays ₹609, find the cost price (in ₹) for the manufacturer.

Ans ☒ 1. 229

☒ 2. 230

☒ 3. 235

☒ 4. 232

Question Type : MCQ

Question ID : 6306801232504

Status : Answered

Chosen Option : 4

Marks : 1

Section : Subject related questions

Q.1 Calculate the inductance of an air core solenoid of length 40 cm, area of cross-section $\left(\frac{1}{\pi}\right) \text{ m}^2$ and 600 turns.

Ans ☒ 1. 0.36 H

☒ 2. 0 H

☒ 3. 3.6 H

☒ 4. 36 H

Question Type : MCQ

Question ID : 630680504281

Status : Answered

Chosen Option : 1

Marks : 1

Q.2 Which of the following is one of the properties of fibrous insulating materials?

Ans ☒ 1. Dielectric loss is high

☒ 2. High insulation resistivity

☒ 3. Dielectric constant is 0.5 to 2

☒ 4. Highly hygroscopic in nature

Question Type : MCQ

Question ID : 630680376445

Status : Answered

Chosen Option : 2

Marks : 1

Q.3 The HRC fuse characteristics that help in the determination of the maximum amount of energy that the fuse will pass to appliances under protection are known as:

- Ans ☒ 1. I^2t characteristics
☒ 2. non-deteriorating characteristics
☒ 3. time and current characteristics
☒ 4. cut-off current characteristics

Question Type : **MCQ**
 Question ID : **630680218615**
 Status : **Answered**
 Chosen Option : **2**
 Marks : **0**

Q.4 In a DC compound generator, if series field opposes the shunt field, then the generator is said to be _____.

- Ans ☒ 1. a differentially compound wound DC generator
☒ 2. a cumulatively compound wound DC motor
☒ 3. a shunt wound DC generator
☒ 4. a separately excited DC generator

Question Type : **MCQ**
 Question ID : **630680227768**
 Status : **Answered**
 Chosen Option : **1**
 Marks : **1**

Q.5 The safety factor of an insulator is the ratio of _____.

- Ans ☒ 1. strength to the flash over voltage
☒ 2. puncture strength to the flash over voltage
☒ 3. flash over voltage to the puncture strength
☒ 4. none of the above

Question Type : **MCQ**
 Question ID : **630680401943**
 Status : **Answered**
 Chosen Option : **3**
 Marks : **0**

Q.6 Find the value of the sag in an overhead line with the following data.

Span length = 120 m.

Conductor diameter = 2 cm.

Weight per unit length of the conductor = 0.8 kg/m.

Working Tension = 600 kg/m.

Weight of wind = 0.6 kg/m.

Factor of safety = 5.

Ans ☒ 1. 3 m

☐ 2. 6 m

☐ 3. 8 m

☐ 4. 2 m

Question Type : MCQ

Question ID : 630680396775

Status : Answered

Chosen Option : 1

Marks : 1

Q.7 The turn-off time of IGBT consists of:

Ans ☒ 1. delay time and fall time only

☐ 2. delay time, fall time and rise time

☐ 3. fall time and rise time only

☐ 4. delay time and rise time only

Question Type : MCQ

Question ID : 6306801391600

Status : Answered

Chosen Option : 1

Marks : 1

Q.8 What is the current flowing through a pure inductor of 3 H when shifted step voltage $2u(t - 3)$ is applied?

Ans ☐ 1. $i(t) = \frac{2}{3}u(t - 3)$

☐ 2. $i(t) = 2r(t - 3)$

☒ 3. $i(t) = \frac{2}{3}r(t - 3)$

☐ 4. $i(t) = 6r(t - 3)$

Question Type : MCQ

Question ID : 630680386986

Status : Answered

Chosen Option : 3

Marks : 1

Q.9 The effect of introducing external resistance in the rotor circuit of three-phase induction machines is _____.

- Ans
- ☒ 1. increase in output power, rotor ohmic losses and efficiency
 - ☒ 2. increase in output power and efficiency and decrease in rotor ohmic losses
 - ☒ 3. decrease in output power, rotor ohmic losses and efficiency
 - ☒ 4. decrease in output power and efficiency and increase in rotor ohmic losses

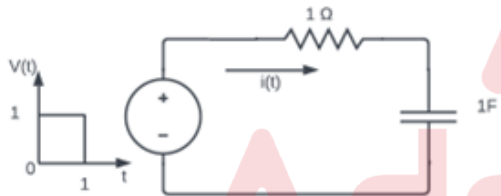
Question Type : MCQ
Question ID : 630680337206
Status : Answered
Chosen Option : 4
Marks : 1

Q.10 Which of the following does NOT affect the resistance of a conductor?

- Ans
- ☒ 1. Length
 - ☒ 2. Cross sectional area
 - ☒ 3. Temperature
 - ☒ 4. Wind speed

Question Type : MCQ
Question ID : 630680340745
Status : Answered
Chosen Option : 4
Marks : 1

Q.11 What is the value of current $i(t)$ flowing through the circuit?



- Ans
- ☒ 1. $i(t) = -0.5e^{-500(t-1)}u(t-1)$
 - ☒ 2. $i(t) = -0.5e^{-500(t)}u(t)$
 - ☒ 3. $i(t) = 0.5e^{-500t}u(t)$
 - ☒ 4. $i(t) = 0.5e^{-500t}u(t) - 0.5e^{-500(t-1)}u(t-1)$

Question Type : MCQ
Question ID : 630680383133
Status : Answered
Chosen Option : 4
Marks : 1

Q.12 What is the total ampere turns for a parallel magnetic circuit?

- Ans ☒ 1. It is equal to the ampere turn of only one longest part.
- ☒ 2. It is the difference in the ampere turn of each path.
- ☒ 3. It is the sum of the ampere turn of each path.
- ☒ 4. It is equal to the ampere turn of only one smallest part.

Question Type : MCQ
Question ID : 630680392926
Status : Answered
Chosen Option : 3
Marks : 1

Q.13 What is the main principle used in Mesh Analysis?

- Ans ☒ 1. Faraday's law
- ☒ 2. Kirchhoff's Voltage Law (KVL)
- ☒ 3. Kirchhoff's Current Law (KCL)
- ☒ 4. Ohm's Law

Question Type : MCQ
Question ID : 6306801394701
Status : Answered
Chosen Option : 2
Marks : 1

Q.14 Which of the following statements are correct about reluctance motors?

- I. Reluctance motors can run at synchronous speed.
- II. Reluctance motor rotor requires a DC excitation.
- III. Reluctance motors are self starting.
- IV. Reluctance motor rotors do not require external excitation.

- Ans ☒ 1. Only Statements II and III
- ☒ 2. Only Statements I and IV
- ☒ 3. Only Statements III and IV
- ☒ 4. Only Statements I and III

Question Type : MCQ
Question ID : 630680703455
Status : Answered
Chosen Option : 2
Marks : 1

Q.15 Pole mounted sub stations are used for _____ distribution system.

- Ans ☒ 1. primary
- ☒ 2. primary and secondary
- ☒ 3. secondary
- ☒ 4. central

Question Type : MCQ
Question ID : 630680344275
Status : Answered
Chosen Option : 3
Marks : 1

Q.16 Operating induction motor below its rated load can lead to _____.

- Ans
- ☐ 1. improved energy efficiency
 - ☐ 2. higher power factor
 - ☐ 3. optimal voltage regulation
 - ☒ 4. lower efficiency and increased losses

Question Type : MCQ
Question ID : 630680373447
Status : Answered
Chosen Option : 4
Marks : 1

Q.17 What is the purpose of voltage divider bias in a transistor circuit?

- Ans
- ☐ 1. To decrease the collector current
 - ☐ 2. To reduce the emitter voltage
 - ☐ 3. To increase the base current
 - ☒ 4. To provide a stable operating point (Q-point)

Question Type : MCQ
Question ID : 6306801395993
Status : Answered
Chosen Option : 2
Marks : 0

Q.18 In a DC motor, which torque is transmitted from the armature to the mechanical load through the motor's shaft?

- Ans
- ☐ 1. Magnetic torque
 - ☐ 2. Commutation torque
 - ☒ 3. Induced torque
 - ☐ 4. Reactance torque

Question Type : MCQ
Question ID : 630680426266
Status : Answered
Chosen Option : 2
Marks : 0

Q.19 Which of the following correctly defines a dead zone in a measuring instrument?

- Ans
- ☐ 1. The maximum deviation in measurement before correction is applied
 - ☐ 2. The time delay between input and output response
 - ☐ 3. The time taken by a system to stabilize
 - ☒ 4. The largest change of input quantity for which there is no output change occurs

Question Type : MCQ
Question ID : 6306801393227
Status : Answered
Chosen Option : 4
Marks : 1

Q.20 Which of the following statements is/are correct regarding stranded conductor?

- A) Skin effect is less in stranded conductor as compared to solid conductor.
- B) Effective resistance is reduced.
- C) Mechanical strength is more as compared to solid conductor.

- Ans
- ☒ 1. Only A is correct
 - ☒ 2. A, B and C are correct
 - ☒ 3. Only C is correct
 - ☒ 4. Both A and B are correct

Question Type : MCQ
Question ID : 630680344287
Status : Answered
Chosen Option : 2
Marks : 0

Q.21 Which of the following are the advantages of a submerged arc welding?

- I) The submerged arc welding does not require flux.
- II) Deep penetration with high quality weld is possible.
- III) No edge preparation is required.
- IV) Low utilisation of electrode wire.

- Ans
- ☒ 1. Statements I and IV
 - ☒ 2. Statements I and III
 - ☒ 3. Statements II and IV
 - ☒ 4. Statements II and III

Question Type : MCQ
Question ID : 630680389658
Status : Answered
Chosen Option : 3
Marks : 0

Q.22 How is the dynamic braking with polyphase induction motors obtained?

- Ans
- ☒ 1. Reversing the direction of the motor's rotation
 - ☒ 2. Feeding the motor's back EMF to external resistors
 - ☒ 3. Inserting capacitors in parallel with the motor windings
 - ☒ 4. Shorting the motor terminals together

Question Type : MCQ
Question ID : 630680389661
Status : Answered
Chosen Option : 2
Marks : 1

Q.23 Which of the following statements are correct about double cage rotors in induction motors?

- I. Double cage rotors have two layers of rotor bars: an outer cage and an inner cage.
- II. The outer cage has high resistance and low reactance, while the inner cage has low resistance and high reactance.
- III. Double cage rotors are used to improve the starting torque of induction motors.
- IV. The inner cage is designed to handle high starting currents.

- Ans ☒ 1. Statement II, III and IV
- ☒ 2. Statement I, II and IV
- ☒ 3. Statement I, II and III
- ☒ 4. Statement I, III and IV

Question Type : MCQ
Question ID : 6306801395568
Status : Answered
Chosen Option : 3
Marks : 1

Q.24 In which type of tendering process can any interested party submit a bid?

- Ans ☒ 1. Restricted tendering
- ☒ 2. Open tendering
- ☒ 3. Selective tendering
- ☒ 4. Single tendering

Question Type : MCQ
Question ID : 6306801392614
Status : Answered
Chosen Option : 2
Marks : 1

Q.25 In the design of Snubber circuit R, C and load parameter forms a/an _____ circuit so that dv/dt is limited to acceptable value as provided by the SCR rating.

- Ans ☒ 1. zero-damped
- ☒ 2. infinite-damped
- ☒ 3. over-damped
- ☒ 4. under-damped

Question Type : MCQ
Question ID : 630680352161
Status : Answered
Chosen Option : 4
Marks : 1

Q.26 According to the principle of duality, which of the following pairs is a valid dual pair?

- Ans ☒ 1. Conductance and Inductance
- ☒ 2. Mesh and Node
- ☒ 3. Conductance and Capacitance
- ☒ 4. Resistance and Capacitance

Question Type : MCQ
Question ID : 630680334068
Status : Answered
Chosen Option : 2
Marks : 1

Q.27 If K is transformation ratio and W₀ is the weight of copper in ordinary transformer, then saving of copper for same kVA rating autotransformer is _____.

- Ans ☒ 1. KW_0
- ☒ 2. $1 - KW_0$
- ☒ 3. $(1 - K)W_0$
- ☒ 4. $\frac{W_0}{K}$

Question Type : MCQ
Question ID : 630680227811
Status : Answered
Chosen Option : 3
Marks : 0

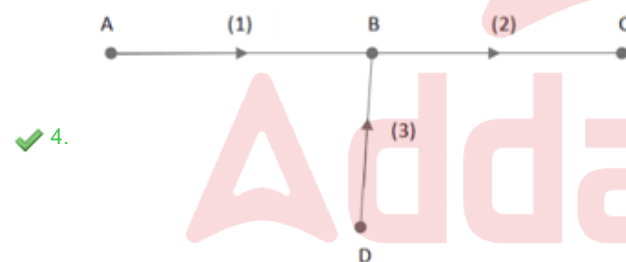
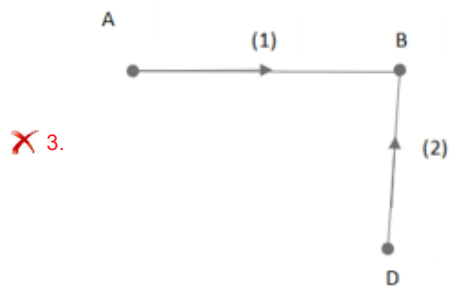
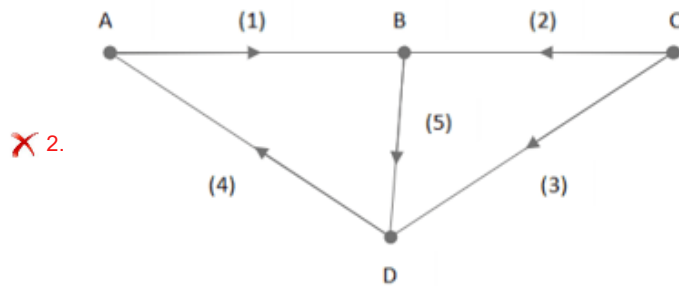
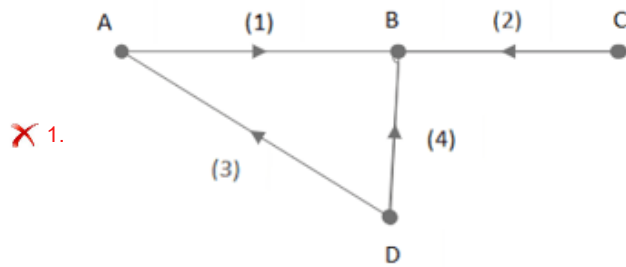
Q.28 What is the primary purpose of evaporators in a steam power plant?

- Ans ☒ 1. To generate electricity
- ☒ 2. To produce steam
- ☒ 3. To supply distilled water
- ☒ 4. To remove impurities from raw water

Question Type : MCQ
Question ID : 630680426263
Status : Answered
Chosen Option : 4
Marks : 0

Q.29 Which of the following is the correct representation of a tree?

Ans



Question Type : MCQ

Question ID : 630680386958

Status : Answered

Chosen Option : 2

Marks : 0

Q.30 Which of the following cables are NOT suitable for outdoor public lighting due to their lack of durability and protection?

- Ans ☒ 1. Low-voltage cables without protection
- ☒ 2. PVC conduit cables
- ☒ 3. Armoured cables
- ☒ 4. Steel Wire Armoured (SWA) cables

Question Type : MCQ
Question ID : 6306801392629
Status : Answered
Chosen Option : 1
Marks : 1

Q.31 Which of the following statements is true regarding sensor less control in a brushless DC motor?

- Ans ☒ 1. By using a digital signal processor (DSP) to estimate rotor position based on current and voltage measurements.
- ☒ 2. By utilising a position sensor on the motor shaft for feedback.
- ☒ 3. By employing optical encoders to determine rotor position.
- ☒ 4. Through the use of back electromotive force (EMF) detection in the windings.

Question Type : MCQ
Question ID : 630680429378
Status : Answered
Chosen Option : 1
Marks : 1

Q.32 Which of the following statements are correct about grinder-mixer-juicer?

- I)The universal motors are commonly used in grinder-mixer-juicers.
- II)Squirrel cage induction motors are commonly used in grinder-mixer-juicers.
- III)The pulse function in it allows users to manually control the motor in short bursts or pulses.
- IV)The pulse function in it allows user to operate the machine remotely.

- Ans ☒ 1. Statements I and III are correct
- ☒ 2. Statements I and IV are correct
- ☒ 3. Statements II and IV are correct
- ☒ 4. Statements II and III are correct

Question Type : MCQ
Question ID : 630680381585
Status : Answered
Chosen Option : 1
Marks : 1

Q.33 Which of the following conditions is NOT valid for Ohm's law?

- Ans
- ☒ 1. Resistance must be wire wound type
 - ☒ 2. Current should be proportional to voltage
 - ☒ 3. Temperature should remain constant
 - ☒ 4. Pressure can be varied

Question Type : MCQ
Question ID : 630680340666
Status : Answered
Chosen Option : 4
Marks : 1

Q.34 What is the generalised value for the voltage across resistor RB1 in a unijunction transistor?

- Ans
- ☒ 1. $V_{RB1} = (R_{B2} / R_{B1} - R_{B2}) \times V_{BB}$
 - ☒ 2. $V_{RB1} = (R_{B1} / R_{B1} + R_{B2}) \times V_{BB}$
 - ☒ 3. $V_{RB1} = (R_{B1} / R_{B1} - R_{B2}) \times V_{BB}$
 - ☒ 4. $V_{RB1} = (R_{B2} / R_{B1} + R_{B2}) \times V_{BB}$

Question Type : MCQ
Question ID : 630680352169
Status : Answered
Chosen Option : 2
Marks : 1

Q.35 Resonant pulse commutation is also known as:

- Ans
- ☒ 1. Voltage Commutation
 - ☒ 2. Load Commutation
 - ☒ 3. Current Commutation
 - ☒ 4. Line Commutation

Question Type : MCQ
Question ID : 6306801392683
Status : Answered
Chosen Option : 3
Marks : 1

Q.36 What is the reactive power consumed by the balanced load in two-wattmeter method of power measurement if the reading of two wattmeters are W_1 and W_2 ?

- Ans
- ☒ 1. $\sqrt{3}(W_1 - W_2)$
 - ☒ 2. $W_1 + W_2$
 - ☒ 3. $\sqrt{3}(W_1 + W_2)$
 - ☒ 4. $\sqrt{2}(W_1 + W_2)$

Question Type : MCQ
Question ID : 6306801394745
Status : Answered
Chosen Option : 1
Marks : 1

Q.37 What is the purpose of heliostats in a power tower system?

- Ans
- ☐ 1. To operate the steam turbine
 - ☐ 2. To generate steam directly
 - ☐ 3. To track the movement of the tower
 - ☒ 4. To concentrate sunlight onto the central receiver

Question Type : MCQ
Question ID : 630680374468
Status : Answered
Chosen Option : 3
Marks : 0

Q.38 In a vertical amplifier of CRO, the rise is defined as the required time for the pulse to rise from _____ of its maximum amplitude.

- Ans
- ☐ 1. 10% to 50%
 - ☐ 2. 10% to 70%
 - ☒ 3. 10% to 90%
 - ☐ 4. 10% to 40%

Question Type : MCQ
Question ID : 630680217933
Status : Answered
Chosen Option : 3
Marks : 1

Q.39 क्रय आदेश (purchase order) कब कानूनी रूप से बाध्यकारी अनुबंध बन जाता है?

- Ans
- ☐ 1. जब माल वितरित किया जाता है
 - ☒ 2. जब विक्रेता क्रय आदेश को मानता है और स्वीकार करता है
 - ☐ 3. जब भुगतान किया जाता है
 - ☐ 4. जब खरीदार आदेश देता है

Question Type : MCQ
Question ID : 6306801392605
Status : Answered
Chosen Option : 2
Marks : 1

Q.40 Which of the following statements is FALSE about the operation of a Buchholz relay?

- Ans
- ☐ 1. When a minor fault occurs, the oil level in the transformer tank rises and the mercury switch is tilted to close the alarm circuit.
 - ☐ 2. The relay gives an alarm so that the transformer can be disconnected before the fault becomes severe.
 - ☒ 3. A release cock is provided for pressure release before the operation.
 - ☐ 4. The testing of oil can indicate the type of insulation failure in the transformer.

Question Type : MCQ
Question ID : 630680326197
Status : Answered
Chosen Option : 1
Marks : 0

Q.41 A slip ring induction motor is used for crane machine, hoist and line shafts because it has:

- Ans ☒ 1. high starting torque
☒ 2. constant speed
☒ 3. zero speed
☒ 4. low starting torque

Question Type : MCQ
Question ID : 630680337193
Status : Answered
Chosen Option : 1
Marks : 1

Q.42 The primary effect of bus bar faults is:

- Ans ☒ 1. a permanent increase in system voltage
☒ 2. current transformer saturation
☒ 3. a permanent improvement in power factor
☒ 4. a decrease in system reliability and stability

Question Type : MCQ
Question ID : 6306801393603
Status : Answered
Chosen Option : 2
Marks : 0

Q.43 Light emitting diodes (LEDs) are preferred over traditional incandescent lamps due to _____.

- Ans ☒ 1. production of more heat and consumption of less energy
☒ 2. longer lifespan and lower energy consumption
☒ 3. high emitting ultraviolet radiations
☒ 4. high cost

Question Type : MCQ
Question ID : 630680373436
Status : Answered
Chosen Option : 2
Marks : 1

Q.44 The unbalanced phase currents in a three-phase system can lead to _____.

- Ans ☒ 1. increased heating and energy wastage
☒ 2. higher energy efficiency
☒ 3. increased power factor
☒ 4. lower mechanical stress on motors

Question Type : MCQ
Question ID : 630680403610
Status : Answered
Chosen Option : 1
Marks : 1

Q.45 In which of the following types of materials is magnetostriction predominant?

Ans ☒ 1. Ferromagnetic material

☐ 2. Paramagnetic material

☐ 3. Ferrimagnetic material

☐ 4. Diamagnetic material

Question Type : MCQ

Question ID : 630680503995

Status : Answered

Chosen Option : 1

Marks : 1

Q.46 Where is the Fermi level located in an n-type semiconductor?

Ans ☐ 1. Near the valence band

☐ 2. Middle of the valence and conduction bands

☐ 3. Below the valence band

☒ 4. Near the conduction band

Question Type : MCQ

Question ID : 6306801395975

Status : Answered

Chosen Option : 4

Marks : 1

Q.47 If the mobility (μ) of electrons is $1000 \text{ cm}^2/\text{Vs}$ and the thermal voltage (V_T) is 0.026 V , what is the value of the diffusion coefficient (D) in a semiconductor material?

Ans ☐ 1. $48 \text{ m}^2/\text{s}$.

☒ 2. $26 \text{ cm}^2/\text{s}$.

☐ 3. $26 \text{ m}^2/\text{s}$.

☐ 4. $48 \text{ cm}^2/\text{s}$.

Question Type : MCQ

Question ID : 6306801395382

Status : Answered

Chosen Option : 2

Marks : 1

Q.48 Which of the following statements is correct about the Fermi level in an n-type semiconductor?

Ans ☐ 1. It is closer to the conduction band but not lies below to it.

☐ 2. It lies above the conduction band.

☒ 3. It is closer to the conduction band and lies below the conduction band.

☐ 4. It lies below the conduction band but not closer to it.

Question Type : MCQ

Question ID : 630680503979

Status : Answered

Chosen Option : 3

Marks : 1

Q.49 Which of the following statements is/are correct regarding a three-phase AC system?

- (a) For a three-phase system, there are three possible phase sequences.
- (b) The phase rotation can be reversed by swapping any two of the three terminals of the supply.
- (c) The phase rotation has no impact on the resistive load.

Ans ☒ 1. Only (b)

☒ 2. Only (b) and (c)

☒ 3. (a), (b) and (c)

☒ 4. Only (a)

Question Type : MCQ

Question ID : 630680328980

Status : Answered

Chosen Option : 3

Marks : 0

Q.50 Zener breakdown occurs in _____, while avalanche breakdown occurs in _____.

Ans ☒ 1. low doped diodes at higher reverse voltages ; highly doped diodes at lower forward voltages

☒ 2. highly doped diodes at lower reverse voltages ; low doped diodes at higher reverse voltages

☒ 3. low doped diodes at lower reverse voltages ; highly doped diodes at higher reverse voltages

☒ 4. highly doped diodes at higher forward voltages ; low doped diodes at lower forward voltages

Question Type : MCQ

Question ID : 6306801395428

Status : Answered

Chosen Option : 2

Marks : 1

Q.51 If the gain of a vertical amplifier is doubled, then the sensitivity of the oscilloscope will _____.

Ans ☒ 1. reduce by 25%

☒ 2. remain the same

☒ 3. double

☒ 4. reduce to half

Question Type : MCQ

Question ID : 6306801393735

Status : Answered

Chosen Option : 1

Marks : 0

Q.52 The light-controlled gears in a lighting system is refer to _____.

- Ans ☒ 1. frequency limiting control gear
- ☒ 2. current limiting control gear
- ☒ 3. harmonics limiting control gear
- ☒ 4. voltage limiting control gear

Question Type : MCQ
Question ID : 630680403608
Status : Answered
Chosen Option : 4
Marks : 0

Q.53 The power generation capacity of a power plant which is connected to the bus and ready to take load is called _____.

- Ans ☒ 1. spinning reserve
- ☒ 2. hot reserve
- ☒ 3. cold reserve
- ☒ 4. firm reserve

Question Type : MCQ
Question ID : 6306801393472
Status : Answered
Chosen Option : 1
Marks : 1

Q.54 DC series wound motor has:

- Ans ☒ 1. low starting torque and always operates at constant speed
- ☒ 2. very high starting torque and varying speed
- ☒ 3. very high starting torque and always operates at constant speed
- ☒ 4. low starting torque and varying speed

Question Type : MCQ
Question ID : 6306801394483
Status : Answered
Chosen Option : 2
Marks : 1

Q.55 In a parallel R-L-C circuit, the current is found to be minimum at a frequency of 300 rad/sec. If $L = 5\text{ H}$, $R = 10\ \Omega$ and $C = 2\text{ F}$, then the Q-factor of the circuit at resonance will be _____.

- Ans ☒ 1. 200
- ☒ 2. 150
- ☒ 3. 600
- ☒ 4. 100

Question Type : MCQ
Question ID : 630680328972
Status : Answered
Chosen Option : 2
Marks : 1

Q.56 What is the maximum demand of a residential consumer who has ten lamps, each rated at 40 watts, connected at the premises, with a load factor of 20% and an average load of 80 watts?

- Ans ☒ 1. 360 W
☒ 2. 0 W
☒ 3. 400 W
☒ 4. 300 W

Question Type : **MCQ**
 Question ID : **630680426232**
 Status : **Answered**
 Chosen Option : **3**
 Marks : **1**

Q.57 Which of the following statements is correct about p-type and n-type semiconductors?

- Ans ☒ 1. The resistivity of p-type semiconductors is higher than that of n-type semiconductors.
☒ 2. The resistivity of p-type semiconductors is lower than that of n-type semiconductors and the conductivity of n-type semiconductors is lower than that of p-type semiconductors.
☒ 3. The conductivity of n-type semiconductors is lower than that of p-type semiconductors.
☒ 4. The resistivity of p-type semiconductors is lower than that of n-type semiconductors.

Question Type : **MCQ**
 Question ID : **630680503978**
 Status : **Answered**
 Chosen Option : **1**
 Marks : **1**

Q.58 How does the relay operating coil get energised during an inter-turn fault?

- Ans ☒ 1. An amount of current proportional to the maximum of the two currents flows through it.
☒ 2. An amount of current proportional to the minimum of the two currents flows through it.
☒ 3. An amount of current proportional to the sum of the two currents flows through it.
☒ 4. An amount of current proportional to the difference between the two currents flows through it.

Question Type : **MCQ**
 Question ID : **630680311157**
 Status : **Answered**
 Chosen Option : **4**
 Marks : **1**

Q.59 Which bridge measures an unknown mutual inductance in terms of a standard mutual inductance?

- Ans ☒ 1. Carey Foster bridge
☒ 2. Campbell's bridge
☒ 3. Hay's bridge
☒ 4. Heydweiller bridge

Question Type : **MCQ**
 Question ID : **630680217890**
 Status : **Answered**
 Chosen Option : **2**
 Marks : **1**

Q.60 In a commercial building, what is the main purpose of a grounding system in the electrical design?

- Ans
- ☐ 1. To monitor energy consumption
 - ☐ 2. To regulate the voltage supplied to the building
 - ☐ 3. To connect all electrical components to a backup power supply
 - ☒ 4. To ensure the safe dissipation of electrical faults and prevent shock hazards

Question Type : **MCQ**

Question ID : **6306801392627**

Status : **Answered**

Chosen Option : **4**

Marks : **1**

