
**DMRC_JE_EE_
9th April_Second
Shift**

Section : Domain

Q.1 The data tabulated for a power system is as follows:

Question ID : 62676629

Line voltage = 11 kV

Generated power = 558 kW

Load power = 443 kW

Load current = 50 A

The resistance of the power line connected to it is:

- Ans
- 1. 40Ω
 - 2. 220Ω
 - 3. 50Ω
 - 4. 46Ω

Q.2 Magnetic locking of the rotor with stator in case of an induction motor may be reduced by:

Question ID : 62676617

- Ans
- 1. Using inter-poles
 - 2. Laminating the rotor core
 - 3. Equaliser connections
 - 4. Skewed rotor slots

Q.3 The impedance of a circuit having $v = 120\sin(314t)$ and current $i = 12 \sin(314t + \frac{\pi}{6})$ is:

Question ID : 62676630

- Ans
- 1. 20Ω
 - 2. 10Ω
 - 3. 12Ω
 - 4. 5Ω

Q.4 Transformers work on the principle of:

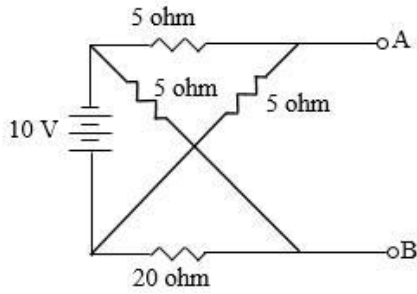
Question ID : 62676656

- Ans
- 1. Joule's law
 - 2. Faraday's laws of electromagnetic induction
 - 3. Dynamic induction
 - 4. Fleming's law

Q.5

Question ID : 62676674

The current supplied by the battery shown below is:



- Ans
- 1. 1.4A
 - 2. 3A
 - 3. 0.43A
 - 4. 0.4A

Q.6 When a long line is operating at no load, the receiving end voltage is greater than the sending end voltage. This is called the:

Question ID : 62676641

- Ans
- 1. Surge-effect
 - 2. Ferranti-effect
 - 3. Skin-effect
 - 4. Superposition-effect

Q.7 Plant capacity factor of a power plant may be calculated by the formula:

Question ID : 62676637

- Ans
- 1. $\frac{\text{Average demand}}{\text{Plant capacity}}$
 - 2. $\frac{\text{Sum of individual max.demand}}{\text{Max.demand of plant}}$
 - 3. $\frac{\text{Station output}}{\text{Plant Hours of use}}$
 - 4. $\frac{\text{Plant capacity}}{\text{Average demand}}$

Q.8 At a pressure of 500V applied between each live conductor and earth for a period of one minute, the insulation resistance of medium and low voltage installations shall be at least:

Question ID : 62676640

- Ans
- 1. 1 kilo ohm
 - 2. 1 mega ohm
 - 3. 100 mega ohm
 - 4. 0.5 kilo ohm

Q.9 Under abnormal operation of an alternator, the over voltages may be reduced using:

Question ID : 62676663

- Ans
- 1. Damper windings
 - 2. Equaliser connections
 - 3. Compensating windings
 - 4. Inter-pole windings

Q.10 The speed of prime mover for an alternator that is wound for 2 poles at the stator is:

Question ID : 62676610

- Ans
- 1. 1500 rpm
 - 2. 1000 rpm
 - 3. 3000 rpm
 - 4. 900 rpm

Q.11 The speed of rotating magnetic field of a 3 ϕ , 50 Hz slip ring induction motor running at a speed of 960 rpm will be:

Question ID : 62676618

- Ans
- 1. 1500 rpm
 - 2. 1000 rpm
 - 3. 3000 rpm
 - 4. 960 rpm

Q.12 In a measuring instrument, the torque produced by the measurand is called:

Question ID : 62676668

- Ans
- 1. Damping torque
 - 2. Controlling torque
 - 3. Deflecting torque
 - 4. Starting torque

Q.13 When forward biased, the width of depletion layer in a PN junction diode:

Question ID : 62676653

- Ans
- 1. doubles
 - 2. decreases
 - 3. remains same
 - 4. increases

Q.14 In common emitter configuration, the current amplification factor is:

Question ID : 62676658

- Ans
- 1. β
 - 2. A
 - 3. Δ
 - 4. Γ

Q.15 A consumer consumes 600 kWh per day at a load factor of 0.5. Without increasing the maximum demand, if the consumer increases the load factor to 0.8, the consumption of energy in kWh would be:

Question ID : 62676664

- Ans
- 1. 480
 - 2. 960
 - 3. 900
 - 4. 300

Q.16 The effective value of an alternating voltage is its:

Question ID : 62676623

- Ans
- 1. Instantaneous voltage
 - 2. RMS voltage
 - 3. Maximum voltage
 - 4. Average

Q.17 The effective value calculated for half cycle of an alternating quantity is:

Question ID : 62676624

- Ans
- 1. same as calculated for one cycle
 - 2. twice as calculated for one cycle
 - 3. half as calculated for one cycle
 - 4. thrice as calculated for one cycle

Q.18 The pair of acceptor impurities for semiconductor material is:

Question ID : 62676647

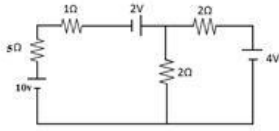
- Ans
- 1. Gallium and Indium
 - 2. Arsenic and Argon

3. Arsenic and Antimony

4. Gallium and Helium

Q.19 For the circuit given below, current through 1Ω resistance is:

Question ID : 62676632



Ans 1. 1.14A

2. 2A

3. 1.43A

4. 1.67A

Q.20 A moving coil instrument has full scale deflection at 50 mV and 10 mA. The value of shunt resistance required to be connected to convert it into a (0-5A) ammeter is:

Question ID : 62676670

Ans 1. 0.005Ω

2. 0.01Ω

3. 0.001Ω

4. 1Ω

Q.21 When the fault current is 2000A, for a relay setting of 50% with CT ratio $\frac{500}{5}$, the plug setting multiplier will be:

Question ID : 62676665

Ans 1. 8

2. 2

3. 4

4. 16

Q.22 The frequency of instantaneous power in a purely capacitive circuit is:

Question ID : 62676627

Ans 1. double the frequency of the applied voltage

2.

independent of the frequency of the applied voltage

3. half of the frequency of the applied voltage

4.

same as the frequency of the applied voltage

Q.23 The resistivity of pure germanium under normal operating conditions is:

Question ID : 62676650

Ans 1. $600\Omega\text{ cm}$

2. $60\Omega\text{ cm}$

3. $160\Omega\text{ cm}$

4. $1000\Omega\text{ cm}$

Q.24 An iron cored choke coil when connected to a 15 V DC supply draws a current of 1.5A. When connected to 230 V, 50 Hz supply; it takes 2A current and consume 60W. The iron loss in the core is:

Question ID : 62676628

Ans 1. 20W

2. 40W

3. 7.5W

4. 10W

Q.25 The frequency of rotor induced emf, for a line connected 3 phase squirrel cage induction motor, running at a slip of 4% is:

Question ID : 62676615

Ans 1. 2 Hz

2. 18.5 Hz

- 3. 4 Hz
- 4. 3/4 Hz

Q.26 The motor having similar construction as that of a DC machine is:

Question ID : 62676661

- Ans
- 1. Repulsion motor
 - 2. Shaded-pole motor
 - 3. Universal motor
 - 4. Induction motor

Q.27 Pentavalent impurity atoms that are added to intrinsic semiconductor are called:

Question ID : 62676649

- Ans
- 1. Donor or N type impurities
 - 2. Acceptor
 - 3. Acceptor or p type impurities
 - 4. Donor or p type impurities

Q.28 In case of three phase alternating voltages, various voltages are displaced at an angle of:

Question ID : 62676612

- Ans
- 1. $3\pi/2$
 - 2. $\pi/3$
 - 3. $4\pi/3$
 - 4. $2\pi/3$

Q.29 A 50 Hz current of zero reference has an average value of 45A. Its instantaneous value at an angle of 30° is:

Question ID : 62676625

- Ans
- 1. 61A
 - 2. 22.5A
 - 3. 32A
 - 4. 35.33A

Q.30 A reverse biased PN junction will act as a/an:

Question ID : 62676651

- Ans
- 1. amplifier
 - 2. open switch
 - 3. attenuator
 - 4. closed switch

Q.31 Lightning arrestors connected in power system protect electrical equipments from:

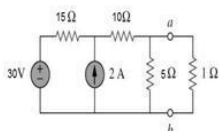
Question ID : 62676666

- Ans
- 1. frequency fluctuation
 - 2. over-current due to indirect lightning stroke
 - 3. over-voltages due to indirect lightning stroke
 - 4. direct stroke of lightning

Q.32 The venin's voltage and resistance for the circuit given below are respectively:

Question ID : 62676675

(take, $R_L = 1\Omega$)



Ans

- 1. 7.5V, 6Ω
- 2. 10V, 4.17Ω
- 3. 12V, 4.17Ω
- 4. 12V, 8.17Ω

Q.33 At a pressure of 1000 V applied between each live conductor and earth for a period of one minute, the insulation resistance of HV installations shall be at least:

Question ID : 62676639

- Ans
- 1. 0.5 kilo ohm
 - 2. 100 mega ohm
 - 3. 1 mega ohm
 - 4. 1 kilo ohm

Q.34 1 Joule of electrical energy equals:

Question ID : 6267661

- Ans
- 1. 1 watt.sec
 - 2. 1 watt
 - 3. 1 watt/sec
 - 4. 1 volt ampere

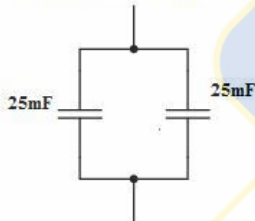
Q.35 The function of pole-shoes in a DC machine is:

Question ID : 62676662

- Ans
- 1. to increase field winding reactance
 - 2. to decrease field winding resistance
 - 3. to increase field winding resistance
 - 4. uniform distribution of flux

Q.36 The equivalent capacitance of the combination given below is:

Question ID : 62676673



- Ans
- 1. 12.5 mF
 - 2. 50 mF
 - 3. 2.5 mF
 - 4. 25 mF

Q.37 The impedance of a circuit is given by $Z = 3 + j4$. Its conductance will be:

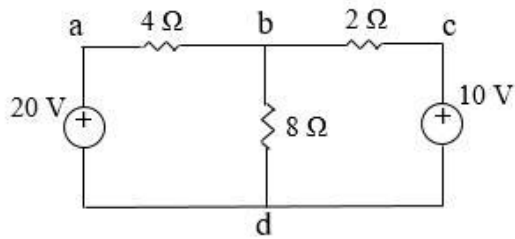
Question ID : 62676643

- Ans
- 1. $\frac{3}{7}$
 - 2. $\frac{3}{25}$
 - 3. $\frac{3}{4}$
 - 4. $\frac{1}{3}$

Q.38

Question ID : 62676622

For the circuit given below, current through 8Ω is:



- Ans
- 1. 2.5A
 - 2. 4A
 - 3. 1A
 - 4. 1.42A

Q.39 Ripple factor in a full wave rectifier is:

Question ID : 62676657

- Ans
- 1. 1.21
 - 2. 0.004
 - 3. 1.41
 - 4. 0.48

Q.40 The minimum value of current at which a relay operates is called the:

Question ID : 62676645

- Ans
- 1. Rated value
 - 2. Fusing value
 - 3. Pick-up value
 - 4. PSM value

Q.41 In case of a purely inductive circuit, the current is maximum when:

Question ID : 62676626

- Ans
- 1. applied voltage is maximum
 - 2. applied voltage is half of the maximum
 - 3. applied voltage is zero
 - 4. applied voltage is negative maximum

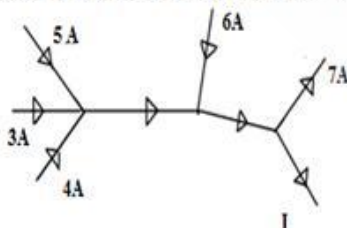
Q.42 The material used for making shunts for measuring instruments is:

Question ID : 62676669

- Ans
- 1. Indium
 - 2. Manganin
 - 3. Nickel
 - 4. Lead

Q.43 The value of current I for the given circuit is:

Question ID : 62676671



- Ans
- 1. 6A
 - 2. 11A

3. 7A

4. 3A

Q.44 The thickness of stator laminations of a 3 phase induction motor, when compared to its rotor laminations, is:

Question ID : 62676616

Ans 1. more

2. less

3. same

4. twice

Q.45 Induction motor is also known as:

Question ID : 62676621

Ans 1. Asynchronous motor

2. AC series motor

3. Commutator motor

4. Repulsion motor

Q.46 In common collector configuration, the current amplification factor is:

Question ID : 62676660

Ans 1. Δ

2. β

3. A

4. Γ

Q.47 The effect of unequal emf in the parallel paths of lap wound armature winding of a DC machine may be neutralised using:

Question ID : 62676668

Ans 1. Equaliser connections

2. Inter-poles

3. Commutator

4. Graphite brushes

Q.48 The test used to locate high-resistance faults in low-resistance conductor circuits is:

Question ID : 62676644

Ans 1. Hopkinson's test

2. Star/delta loop test

3. Murray loop test

4. Open- circuit test

Q.49 In an RLC series circuit, if the inductive reactance voltage exceeds the capacitive reactance voltage, the reactive component of power will:

Question ID : 62676631

Ans 1. be in-phase with the current

2. lead the current by 90°

3. lag the current by 90°

4. lead the voltage by 90°

Q.50 While using a clip-on type current transformer, the primary is connected to _____ and the secondary is connected to _____.

Question ID : 62676667

Ans 1. voltmeter ; ammeter

2. ammeter ; feeder

3. ammeter ; voltmeter

4. feeder ; ammeter

Q.51 The material used for the construction of control rod in a nuclear reactor is:

Question ID : 62676636

- Ans
- 1. copper
 - 2. cadmium
 - 3. graphite
 - 4. silicon

Q.52 The pair of donor impurities for semiconductor material is:





Question ID : 62676648

- Ans
- 1. Gallium and Helium
 - 2. Gallium and Indium
 - 3. Arsenic and Antimony
 - 4. Arsenic and Argon

Q.53 From the following, identify the diode.

Question ID : 62676655

Ans

- 1. 
- 2. 
- 3. 
- 4. 

Q.54 The type of turbine used in hydro-electric plant for a water head range of 70 meter-500 meter is:

Question ID : 62676633

- Ans
- 1. Pelton
 - 2. Kaplan
 - 3. Francis
 - 4. Propeller

Q.55 An extrinsic semiconductor has:

Question ID : 62676646

- Ans
- 1. more number of free electrons than holes
 - 2. more number of holes than free electrons
 - 3. either more holes or more free electrons
 - 4. equal number of holes and free electrons

Q.56 For a synchronous machine:

Question ID : 62676619

- Ans
- 1. Rotor speed > stator field speed
 - 2. Rotor speed = stator speed
 - 3. Rotor speed < stator field speed
 - 4. Rotor speed = stator field speed

Q.57

Question ID : 6267662

Select the wrong option related to the statement given below.

The main characteristic of a series circuit is that:

- Ans 1. applied voltage equals the sum of different voltage drops.
2. different resistors have same voltage drops.
3. same current flows through all parts of the circuit.
4. powers are additive.

Q.58 Impulse turbines are used in:

Question ID : 62676634

- Ans 1. Very low head plants
2. High head plants
3. Medium head plants
4. Low head plants

Q.59 A varistor is made of:

Question ID : 62676663

- Ans 1. Copper
2. Carbon film
3. Carborundum crystals
4. Aluminium

Q.60 Direct current machines are attached with inter-poles in order to:

Question ID : 62676666

- Ans 1. Increase the starting torque
2. Improve commutation under loaded conditions
3. Increase running torque
4. Decrease windage loss

Q.61 In case of 3 phase induction motor, synchronous speed is:

Question ID : 62676614

- Ans 1. Speed of stator
2. Speed of rotor
3. Speed of rotor flux
4. Speed of stator flux

Q.62 The type of armature winding used for high current rated DC machine is:

Question ID : 62676667

- Ans 1. Series-parallel winding
2. Wave winding
3. Lap winding
4. Asymmetrical winding

Q.63 The purpose of moderator in the reactor core of a nuclear power plant is to:

Question ID : 62676635

- Ans 1. reduce the neutron speed
2. break uranium atoms

3. shut down the reactor

4. heat the coolant

Q.64 An industrial consumer has a daily load pattern of 4000 kW at 0.8 lag for 10 hrs and 1000 kW unity power factor for 16 hrs. The daily load factor is:

Question ID : 62676642

Ans 1. 1.0

2. 2.0

3. 0.75

4. 0.5

Q.65 In a 3 phase alternator the rotating part is the:

Question ID : 62676613

Ans 1. Commutator

2. Field system

3. Slip rings

4. Armature system

Q.66 Inductive reactance of a coil may be calculated as:

Question ID : 6267665

Ans 1. $1/\omega L$

2. $2\pi L$

3. ωL

4. $2fL$

Q.67 Solid state power supplies are protected from medium surge voltage using:

Question ID : 6267664

Ans 1. Zinc-oxide-based varistors

2. Cermet resistors

3. Metal glaze resistors

4. Silicon-carbide varistors

Q.68 During discharging of a capacitor of $C = 1000 \mu\text{f}$ through a resistance of 1ms^2 applied with 50V, the voltage at time constant is:

Question ID : 62676672

Ans 1. 18.35V

2. 50V

3. 45V

4. zero

Q.69 A forward biased PN junction will act as a/an:

Question ID : 62676652

Ans 1. closed switch

2. amplifier

3. attenuator

4. open switch

Q.70 The frequency of emf generation in India is:

Question ID : 62676611

Ans 1. 60 Hz

2. 230 Hz

3. 50 Hz

4. 55 Hz

Q.71 When reverse biased, the width of depletion layer in a PN junction diode:

Question ID : 62676654

- Ans
- 1. decreases
 - 2. remains same
 - 3. increases
 - 4. reduces to half

Q.72 In case of a DC machine, the value of load current at maximum efficiency is:

Question ID : 6267669

- Ans
- 1. $I_L = \sqrt{\frac{\text{constant loss}}{\text{armature resistance}}}$
 - 2. $I_L = \sqrt{\frac{\text{variable loss}}{\text{armature resistance}}}$
 - 3. $I_L = \sqrt{\frac{\text{variable loss} + \text{constant loss}}{\text{armature resistance}}}$
 - 4. $I_L = \sqrt{\frac{\text{constant loss}}{R_a + R_f}}$

Q.73 DC current flowing through a conductor:

Question ID : 62676638

- Ans
- 1. distributes non-uniformly over the cross-section
 - 2. concentrates towards the centre
 - 3. concentrates towards the outer periphery
 - 4. distributes uniformly over the cross-section

Q.74 When an alternator is over-excited, which of the following is true with regard to the reactive power that flows from it?

Question ID : 62676620

- Ans
- 1. It flows outward
 - 2. It is zero
 - 3. It flows inward
 - 4. Reactive power neutralises active power

Q.75 In common base configuration, the current amplification factor is:

Question ID : 62676659

- Ans
- 1. A
 - 2. Δ
 - 3. Γ
 - 4. β

Section : General Awareness

Q.1 How many Rajya Sabha members can be nominated directly by the President of India?

Question ID : 62676682

- Ans
- 1. 15
 - 2. 8
 - 3. 10
 - 4. 12

Q.2 NALCO is associated with which of the following industries?

Question ID : 62676680

- Ans
- 1. Aluminum industry
 - 2. Iron and Steel industry
 - 3. Brass industry
 - 4. Cement industry

Q.3 Mahatma Gandhi returned his _____ gold medal as a mark of protest against the Jallianwala Bagh massacre.

Question ID : 62676678

- Ans
- 1. Hind Kesari
 - 2. Hindustan Kesari
 - 3. Kaisar-i-Hind
 - 4. Kaisar-i-Hindustan

Q.4 The Kaziranga National Park is located in:

Question ID : 62676681

- Ans
- 1. Assam
 - 2. Meghalaya
 - 3. West Bengal
 - 4. Uttar Pradesh

Q.5 Which is the fastest land animal?

Question ID : 62676679

- Ans
- 1. Cheetah
 - 2. Deer
 - 3. Tiger
 - 4. Hyena

Q.6 राज्यों की परिषद् के संबंध में निम्नलिखित में से कौन सा कथन सही है?

Question ID : 62676683

- Ans
- 1. राष्ट्रपति राज्य परिषद् को भंग कर सकते हैं।
 - 2. 25 वर्ष की आयु का व्यक्ति, राज्य परिषद् का सदस्य बन सकता है।
 - 3. राज्य परिषद् के सदस्य का चुनाव 5 वर्ष की अवधि हेतु किया जाता है।
 - 4. राज्य परिषद् के एक-तिहाई सदस्य, प्रत्येक दो वर्ष में सेवानिवृत्त हो जाते हैं।

Q.7 Who among the following is NOT one of the ten Sikh Gurus?

Question ID : 62676686

- Ans
- 1. Guru Har Krishan
 - 2. Guru Ram Charan
 - 3. Guru Har Rai
 - 4. Guru Har Gobind

Q.8 The capital of the Guptas was at _____.

Question ID : 62676677

- Ans
- 1. Rajgriha
 - 2. Vaishali
 - 3. Patliputra
 - 4. Kannauj

Q.9 In 2015, who became the CEO of Google Inc?

Question ID : 62676690

- Ans
- 1. Larry Page
 - 2. Sergey Brin
 - 3. Sunder Pichai

4. Satya Nadella

Q.10 In the quarter of 2017 following the introduction of demonetisation, cash in the economy declined by _____.

Question ID : 62676685

- Ans 1. 6.80%
2. 9.40%
3. 3.70%
4. 2.50%

Q.11 The _____ Government launched the Zero Budget Natural Farming (ZBNF) project to promote organic farming.

Question ID : 62676688

- Ans 1. Maharashtra
2. Uttar Pradesh
3. Himachal Pradesh
4. Gujarat

Q.12 As on 8 September 2017, what mark did India's FOREX (Foreign Exchange) Reserves cross?

Question ID : 62676684

- Ans 1.
200 Billion USD (₹ 1,30,48,08,00,00,000.00)
2.
300 Billion USD (₹ 1,95,72,75,00,00,000.00)
3.
400 Billion USD (₹ 2,61,00,08,00,00,000.00)
4. 100 Billion USD (₹ 65,24,01,00,00,000.00)

Q.13 Who was the UNICEF and 'Cricket for Good' ambassador for the 21-day ICC Women's Cricket World Cup 2017?

Question ID : 62676687

- Ans 1. Brian Lara
2. Sachin Tendulkar
3. Steve Waugh
4. Mark Waugh

Q.14 The Indian National Congress split into two groups at the _____ session in 1907.

Question ID : 62676676

- Ans 1. Surat
2. Pune
3. Lucknow
4. Patna

Q.15 In which city is the century-old refurbished 'Royal Opera House' situated?

Question ID : 62676689

- Ans 1. Chennai
2. Kolkata
3. Mysuru
4. Mumbai

Section : Quantitative Aptitude

Q.1 The amount of profit and loss will be the same if an article is sold at ₹ 12,750 or ₹ 9,750 respectively. Find the percentage of profit/loss involved in each case.

Question ID : 62676696

- Ans 1. $13\frac{1}{3}\%$
2. $13\frac{2}{3}\%$

3. $15\frac{3}{5}\%$

4. $26\frac{2}{3}\%$

Q.2 Find the amount of original deposit, if the maturity value after three years at 7% p.a. simple rate of interest is ₹ 22,990.

Question ID : 62676694

Ans 1. ₹ 18,300

2. ₹ 19,300

3. ₹ 18,900

4. ₹ 19,000

Q.3 A person is running around a rectangular track of length 100 m and breadth 80 m with a speed of 10.8 km/h. How much time in minutes will he take to complete 10 rounds?

Question ID : 62676698

Ans 1. 18

2. 24

3. 20

4. 22

Q.4 6 men can plough 6 acres of field in 6 days. Then how many days will one man take to plough 1 acre of field?

Question ID : 62676699

Ans 1. 6

2. 1

3. 18

4. 24

Q.5 If angle $A = 30^\circ$ and angle $B = 90^\circ$, $\sin(A + B) = ?$

Question ID : 626766103

Ans 1. $\frac{2}{\sqrt{3}}$

2. $\frac{1}{2}$

3. $\frac{1}{\sqrt{2}}$

4. $\frac{\sqrt{3}}{2}$

Q.6 If l and m are the roots of the equation $4x^2 + 3x + 7$, then $\frac{1}{l} + \frac{1}{m} = ?$

Question ID : 626766105

Ans 1. $\frac{3}{7}$

2. $-\frac{3}{7}$

3. $-\frac{7}{3}$

4. $\frac{7}{3}$

Q.7 In what ratio should ₹ 46 per kg rice be mixed with ₹ 74 per kg rice so that the mixture is worth ₹ 62 per kg?

Question ID : 62676697

Ans 1. 3 : 4

2. 5 : 4

3. 4 : 5

4. 4 : 3

Q.8 Four bells ring at intervals of 24, 36, 45 and 54 seconds respectively. If they all rang together at 9 am, when will they next ring together?

Question ID : 62676691

Ans 1. 9 : 12 am

2. 9 : 06 am

3. 9 : 18 am

4. 9 : 24 am

Q.9 Find the greatest number that can divide 108 and 144 in order to leave a remainder of 3 and 4 respectively.

Question ID : 62676692

Ans 1. 15

2. 21

3. 14

4. 35

Q.10 Indira returned 10 damaged mobile phones out of 10 dozen purchased by her at a cost of ₹ 10,000 each, and sold the remaining for ₹ 12.10 lakhs. What is her profit percentage?

Question ID : 62676695

Ans 1. 11.10%

2. 10%

3. 11%

4. 10.10%

Q.11 A pole 9 m long casts a shadow of $3\sqrt{3}$ m long on the ground. What is the Sun's elevation at that time?

Question ID : 626766102

Ans 1. 45°

2. 30°

3. 90°

4. 60°

Q.12 Find the mean of the natural numbers from 4 to 13.

Question ID : 626766100

Ans 1. 8.5

2. 13.2

3. 12.3

4. 9.5

Q.13 $(x^2 - y - x + xy)$ is equal to:

Question ID : 626766104

Ans 1. $(x + 1)(y - x)$

2. $(y - 1)(x + y)$

3. $(x - 1)(x + y)$

4. $(x + 1)(x - y)$

Q.14 If the 10th term is 5 and the 18th term is 77, then what is the arithmetic progression?

Question ID : 626766101

Ans 1. - 76, - 68, - 60,

2. - 77, - 68, - 59,

3. 76, 85, 94,

4. - 76, - 67, - 58,

Q.15 There are 378 teachers for 5670 students in a school. Find the teacher-student ratio.

Question ID : 62676693

Ans 1. 2 : 27

2. 1 : 8

3. 1 : 15

4. 2 : 15

Section : General Intelligence and Reasoning

Q.1 फिरोज शाहिद के पिता के एकमात्र भाई की पत्नी का एकमात्र पुत्र है। शाहिद के पिता का फिरोज के साथ क्या संबंध है?

Question ID : 626766106

- Ans
- 1. भतीजा
 - 2. पुत्र
 - 3. पिता
 - 4. चाचा / मामा / मौसा / फूफा

Q.2 Select the option that is related to the third term in the same way as the second term is related to the first term.

Question ID : 626766107

34 : 14 :: 57 : ?

- Ans
- 1. 12
 - 2. 24
 - 3. 35
 - 4. 27

Q.3 अनीता के पास बकुला से अधिक चूड़ियाँ हैं, चंचल के पास दीपाली से अधिक चूड़ियाँ हैं, तथा गौरी के पास अनीता से अधिक चूड़ियाँ हैं किन्तु दीपाली से अधिक नहीं। इन सभी सखियों में किसके पास सबसे अधिक चूड़ियाँ हैं?

Question ID : 626766110

- Ans
- 1. चंचल
 - 2. अनीता
 - 3. दीपाली
 - 4. बकुला

Q.4 What will come in place of the blank in the series?

Question ID : 626766119

3, 15, 35, 63, _____, 143, 195

- Ans
- 1. 99
 - 2. 121
 - 3. 100
 - 4. 81

Q.5 In a code language, CROCODILE is coded as DILEOCROC. How will DEPARTURE be coded in that language?

Question ID : 626766112

- Ans
- 1. TURERAPED
 - 2. APEDRERUT
 - 3. ERUTRAPED
 - 4. TURERDEPA

Q.6 Some equations are solved on the basis of a certain system. On the same basis select the most appropriate answer from amongst the four alternatives for the unsolved equation.

Question ID : 626766115

 $25 \times 64 = 13$, $49 \times 81 = 16$, $36 \times 64 = ?$

- Ans
- 1. -2
 - 2. 6
 - 3. 48
 - 4. 14

Q.7 What will come in place of the blank in the series?

Question ID : 626766120

2, 4, 8, 16, 32, _____, 128

- Ans
- 1. 80
 - 2. 60
 - 3. 64

4. 48

Q.8 उस विकल्प का चयन करें जो तीसरे पद से उसी प्रकार संबंधित है जिस प्रकार दूसरा पद पहले पद से संबंधित है? खरगोश (Rabbit) : मादा खरगोश (Doe) :: भेड़ (Sheep) : ?

Question ID : 626766109

- Ans
- 1. घोड़ी (Mare)
 - 2. मादा शूकर (Sow)
 - 3. मादा भेड़ (Ewe)
 - 4. मेमना (Lamb)

Q.9 A bus starts from the terminus and travels 8 km to the east; it then turns right and goes for 12 km. Finally, turning left it goes for a distance of 4 km to reach the first bus stop. To which direction is the bus terminus with respect to the first bus stop?

Question ID : 626766118

- Ans
- 1. North-east
 - 2. South-east
 - 3. South-west
 - 4. North-west

Q.10 If TRAIN is called BUS, BUS is called BOAT, BOAT is called CHOPPER, and CHOPPER is called BIKE, which of the following will sail on water?

Question ID : 626766117

- Ans
- 1. BIKE
 - 2. BUS
 - 3. CHOPPER
 - 4. TRAIN

Q.11 In a code language, STORY is written as 67459, HOST as 3467 and HOUSE as 34861. How will REST be written in that code?

Question ID : 626766116

- Ans
- 1. 3465
 - 2. 5381
 - 3. 5476
 - 4. 5167

Q.12 Six buildings L, M, N, X, Y, and Z stand in a circle facing the centre. Each building is exactly opposite another one. Building X is not immediately next to either building M or Z. Building M is to building Y's immediate right. Building N is exactly opposite building M. Building L, which is opposite building X, has building Z to its immediate right. Which of the following buildings is located to building X's immediate right?

Question ID : 626766111

- Ans
- 1. N
 - 2. Z
 - 3. Y
 - 4. M

Q.13 नीचे दिए गए शब्द के अक्षरों का प्रयोग करके कौन सा शब्द नहीं बनाया जा सकता? इतने अक्षर का उतनी बार ही प्रयोग होगा जितनी बार नीचे दिए शब्द में उसका प्रयोग हुआ है।
FORMIDABLE

Question ID : 626766113

- Ans
- 1. FEABLE
 - 2. FRAMED
 - 3. BROMIDE
 - 4. MARBLE

Q.14 यदि बाईं ओर 'x' चिह्न का स्थान '+' चिह्न के स्थान से प्रतिस्थापित कर दिया जाए तथा संख्या '4' का स्थान संख्या '8' के स्थान से प्रतिस्थापित कर दिया जाए, तो नीचे दिए गए व्यंजक का मान क्या होगा?
(21 + 6) × 4 = ?

Question ID : 626766114

- Ans
- 1. 78
 - 2. 31
 - 3. 90
 - 4. 130

Q.15 उस विकल्प का चयन करें जो तीसरे पद से उसी प्रकार संबंधित है जिस प्रकार दूसरा पद पहले पद से संबंधित है?
36 : 216 : 64 : ?

Question ID : 626766108

- Ans
- 1. 128
 - 2. 1024
 - 3. 512
 - 4. 256

Section : General English

Comprehension:

Read the passage carefully and answer the questions based on it.

Let us now talk about the parts of your mouth, especially the teeth and the tongue. We are not going to look at these parts in detail, but some basic information will be sufficient for the time being. Your teeth may be part of your smile, but they have a more important job—they are the first step in the process of digestion. You have three kinds of teeth. In the very front of your mouth are eight flat, thin teeth called incisors. They are used for cutting and biting food. Next to these are pointed teeth called canines, which also help you tear food. The remaining teeth are molars. These teeth have flat tops for crushing and grinding the food. Now let us come to your tongue. If you take a close look at your tongue you will see that it is covered with tiny bumps called taste buds. They contain nerves that send messages to your brain that give you the sense of taste. Your tongue can only detect four kinds of tastes—sweet, sour, salty, and bitter. The taste buds that pick up these signals are arranged on your tongue in different places.

SubQuestion No : 1

Q.1 The passage aims to _____.

Question ID : 626766122

- Ans
- 1. examine the relationship between the teeth and the tongue
 - 2. show the superiority of the tongue over the teeth
 - 3. explain the functions of the teeth and the tongue in detail
 - 4. provide some basic information about the teeth and tongue

Comprehension:

Read the passage carefully and answer the questions based on it.

Let us now talk about the parts of your mouth, especially the teeth and the tongue. We are not going to look at these parts in detail, but some basic information will be sufficient for the time being. Your teeth may be part of your smile, but they have a more important job—they are the first step in the process of digestion. You have three kinds of teeth. In the very front of your mouth are eight flat, thin teeth called incisors. They are used for cutting and biting food. Next to these are pointed teeth called canines, which also help you tear food. The remaining teeth are molars. These teeth have flat tops for crushing and grinding the food. Now let us come to your tongue. If you take a close look at your tongue you will see that it is covered with tiny bumps called taste buds. They contain nerves that send messages to your brain that give you the sense of taste. Your tongue can only detect four kinds of tastes—sweet, sour, salty, and bitter. The taste buds that pick up these signals are arranged on your tongue in different places.

SubQuestion No : 2

Q.2 The key function of the teeth is to _____.

Question ID : 626766123

- Answers
- 1. form a protective layer around the tongue
 - 2. aid the course of digestion
 - 3. enhance an individual's smile
 - 4. develop the growth of the tongue

Comprehension:

Read the passage carefully and answer the questions based on it.

Let us now talk about the parts of your mouth, especially the teeth and the tongue. We are not going to look at these parts in detail, but some basic information will be sufficient for the time being. Your teeth may be part of your smile, but they have a more important job—they are the first step in the process of digestion. You have three kinds of teeth. In the very front of your mouth are eight flat, thin teeth called incisors. They are used for cutting and biting food. Next to these are pointed teeth called canines, which also help you tear food. The remaining teeth are molars. These teeth have flat tops for crushing and grinding the food. Now let us come to your tongue. If you take a close look at your tongue you will see that it is covered with tiny bumps called taste buds. They contain nerves that send messages to your brain that give you the sense of taste. Your tongue can only detect four kinds of tastes—sweet, sour, salty, and bitter. The taste buds that pick up these signals are arranged on your tongue in different places.

SubQuestion No : 3

Q.3 The word 'nerves' is used in the passage in connection to _____.

Question ID : 626766125

- Answers
- 1. digestion
 - 2. molars
 - 3. incisors
 - 4. taste buds

Comprehension:

Read the passage carefully and answer the questions based on it.

Let us now talk about the parts of your mouth, especially the teeth and the tongue. We are not going to look at these parts in detail, but some basic information will be sufficient for the time being. Your teeth may be part of your smile, but they have a more important job-they are the first step in the process of digestion. You have three kinds of teeth. In the very front of your mouth are eight flat, thin teeth called incisors. They are used for cutting and biting food. Next to these are pointed teeth called canines, which also help you tear food. The remaining teeth are molars. These teeth have flat tops for crushing and grinding the food. Now let us come to your tongue. If you take a close look at your tongue you will see that it is covered with tiny bumps called taste buds. They contain nerves that send messages to your brain that give you the sense of taste. Your tongue can only detect four kinds of tastes-sweet, sour, salty, and bitter. The taste buds that pick up these signals are arranged on your tongue in different places.

SubQuestion No : 4

Q.4 Incisors are located at the _____ of the mouth.

Question ID : 626766126

- Answers
- 1. right
 - 2. left
 - 3. front
 - 4. back

Comprehension:

Read the passage carefully and answer the questions based on it.

Let us now talk about the parts of your mouth, especially the teeth and the tongue. We are not going to look at these parts in detail, but some basic information will be sufficient for the time being. Your teeth may be part of your smile, but they have a more important job-they are the first step in the process of digestion. You have three kinds of teeth. In the very front of your mouth are eight flat, thin teeth called incisors. They are used for cutting and biting food. Next to these are pointed teeth called canines, which also help you tear food. The remaining teeth are molars. These teeth have flat tops for crushing and grinding the food. Now let us come to your tongue. If you take a close look at your tongue you will see that it is covered with tiny bumps called taste buds. They contain nerves that send messages to your brain that give you the sense of taste. Your tongue can only detect four kinds of tastes-sweet, sour, salty, and bitter. The taste buds that pick up these signals are arranged on your tongue in different places.

SubQuestion No : 5

Q.5 Teeth that come in handy for crushing and grinding food are called _____.

Question ID : 626766124

- Answers
- 1. premolars
 - 2. canines
 - 3. molars
 - 4. incisors

Q.6

Question ID : 626766129

Identify the adverb in the given sentence:

Did you know that Sumit could speak French perfectly?

- Ans
- 1. perfectly
 - 2. know
 - 3. speak
 - 4. did

Q.7 Identify which type of noun the underlined word is:

Question ID : 626766141

The Indian Navy's powerful fleet was on display during the Republic Day celebrations.

- Ans
- 1. Abstract
 - 2. Proper
 - 3. Common
 - 4. Collective

Q.8 Identify which type of pronoun the underlined word is:

Question ID : 626766143

Do you like your new job at the bakery?

- Ans
- 1. Reflexive
 - 2. Relative
 - 3. Distributive
 - 4. Possessive

Q.9 Choose the correct meaning of the underlined word:

Question ID : 626766158

Suresh must learn to bridle his tongue.

- Ans
- 1. Refuse
 - 2. Control
 - 3. Take care of
 - 4. Accept

Q.10 Select the most appropriate direct speech form of the below sentence:

Question ID : 626766149

The candidate said that he had been waiting there for a long time.

- Ans
- 1. The candidate said, "I had been waiting here for a long time."
 - 2. The candidate says, "I have been waiting here for a long time."
 - 3. The candidate said, "I have been waiting here for a long time."
 - 4. The candidate said, "I am waiting here for a long time."

Q.11 Choose the correct meaning of the underlined word:

Question ID : 626766157

Regular exercise is beneficial for good health.

- Ans
- 1. Better
 - 2. Useful

3. Useless

4. Harmful

Q.12 Choose the correct meaning of the underlined words/phrases:

Question ID : 626766171

English often becomes the Achilles' heel for many students.

Ans 1. Problem with heels

2. High heels

3. Aching heels

4. Weakness

Q.13 Choose the appropriate antonym of the underlined word:

Question ID : 626766167

Reports state that the umpires were neutral with regard to several decisions.

Ans 1. Disappointed

2. Sad

3. Happy

4. Partial

Q.14 Identify the underlined part of speech in the given sentence:

Question ID : 626766139

I need a sharp knife to cut these potatoes.

Ans 1. Adjective

2. Noun

3. Verb

4. Adverb

Q.15 Identify the error in the sentence given:

Question ID : 626766178

I haven't attended the meeting yesterday.

Ans 1. the

2. meeting yesterday

3. I haven't

4. attended

Q.16 Identify the error in the sentence given:

Question ID : 626766180

Why don't you advise your son? He is never listening to me.

Ans 1. advise

2. Why don't you

3. to me

4. is never listening

Q.17 Choose the appropriate antonym of the underlined word:

Question ID : 626766166

The interior designer has chosen transparent glass for the windows.

Ans 1. Opaque

2. Hard

- 3. Thin
- 4. Clear

Q.18 Identify which type of noun the underlined word is:

Question ID : 626766140

Honesty is an admirable feature in any individual.

- Ans
- 1. Common
 - 2. Collective
 - 3. Material
 - 4. Abstract

Q.19 Identify which type of pronoun the underlined word is:

Question ID : 626766142

This pencil is very blunt. I don't like it.

- Ans
- 1. Personal
 - 2. Relative
 - 3. Reflexive
 - 4. Possessive

Q.20 Fill in the blank with the appropriate preposition:

Question ID : 626766133

Our exams will begin _____ two weeks.

- Ans
- 1. on
 - 2. since
 - 3. from
 - 4. in

Q.21 Change the voice of the following sentence:

Question ID : 626766152

They are painting the apartments near the highway.

- Ans
- 1. The apartment near the highway is being painted by them.
 - 2. The apartments near the highway are being painted by them.
 - 3. The apartments near the highway have been painted by them.
 - 4. Someone is painting the apartments near the highway.

Q.22 Choose the correct meaning of the underlined word:

Question ID : 626766161

Dr. Roy is an eminent lawyer of the High Court.

- Ans
- 1. Rogue
 - 2. Minor
 - 3. Marked
 - 4. Illustrious

Q.23

Question ID : 626766144

Identify the conjunction in the following sentence:

He made no sound lest he wake the baby.

- Ans
- 1. Made
 - 2. Wake
 - 3. Lest
 - 4. Sound

Q.24 Choose the correct meaning of the underlined words/phrases:

The children always keep saying that they are taken to the park once in a blue moon.

Question ID : 626766170

- Ans
- 1. When the moon has a bluish tinge
 - 2. On a full moon day
 - 3. On a new moon day
 - 4. Very rarely

Q.25 Change the voice of the following sentence:

When was this dam constructed by them?

Question ID : 626766153

- Ans
- 1. When is this dam constructed by them?
 - 2. When did they construct this dam?
 - 3. When is this dam being constructed by them?
 - 4. When was this dam being constructed by them?

Q.26 Select the most appropriate direct speech form of the below sentence:

Sajan said that he wanted to become a pilot.

Question ID : 626766148

- Ans
- 1. Sajan says, "I want to become a pilot."
 - 2. Sajan is saying, "I want to become a pilot."
 - 3. Sajan had said, "I want to become a pilot."
 - 4. Sajan said, "I want to become a pilot."

Q.27 Identify the error in the sentence given:

It was raining heavily the whole night, but we are blissfully asleep.

Question ID : 626766177

- Ans
- 1. But we are
 - 2. whole night
 - 3. raining heavily
 - 4. blissfully asleep

Q.28 Change the voice of the following sentence:

When I was here a few months ago, they were building a new mall.

Question ID : 626766150

- Ans
- 1. When I was here a few months ago, a new mall was built by them.
 - 2. When I was here a few months ago, a new mall was being build by them.

3.

They were building a new mall, when I was here a few months ago.

4.

When I was here a few months ago, a new mall was being built by them.

Q.29 Identify the error in the sentence given:

Question ID : 626766176

That woman near our car appear to be angry.

- Ans
- 1. That woman
 - 2. our car
 - 3. Angry
 - 4. appear to be

Q.30 Choose the correct meaning of the underlined word:

Question ID : 626766162

A child's mind develops properly in congenial surroundings.

- Ans
- 1. Remote
 - 2. Natural
 - 3. Agreeable
 - 4. Artificial

Q.31 Choose the correct meaning of the underlined word:

Question ID : 626766160

This English poet makes several allusions to Indian mythology in his poems.

- Ans
- 1. Points
 - 2. Aspects
 - 3. References
 - 4. Features

Q.32 Identify the underlined part of speech in the given sentence:

Question ID : 626766138

Hurrah! We have scored a goal.

- Ans
- 1. Adjective
 - 2. Adverb
 - 3. Interjection
 - 4. Conjunction

Q.33 Fill in the blank with the appropriate preposition:

Question ID : 626766134

They often go to the park _____ summer.

- Ans
- 1. on
 - 2. to
 - 3. in
 - 4. at

Q.34 Identify the adverb in the given sentence:

Question ID : 626766131

Romesh keeps fit by playing badminton regularly.

Ans

- 1. badminton
- 2. keeps
- 3. playing
- 4. regularly

Q.35 Identify the adverb in the given sentence:

Question ID : 626766127

Two people were seriously injured in the accident.

- Ans
- 1. injured
 - 2. accident
 - 3. two
 - 4. seriously

Q.36 Choose the correct meaning of the underlined words/phrases:

Question ID : 626766168

The tsunami that caused so much destruction was like a bolt from the blue.

- Ans
- 1. Bluish in colour
 - 2. Sudden and unexpected
 - 3. Lightning bolts
 - 4. Related to the sky

Q.37 Choose the appropriate antonym of the underlined word:

Question ID : 626766163

The jury acquitted all the accused, a verdict which surprised many.

- Ans
- 1. Freed
 - 2. Condemned
 - 3. Avoided
 - 4. Opposed

Q.38 Identify the error in the sentence given:

Question ID : 626766175

One of the students have rebelled against the English teacher.

- Ans
- 1. English teacher
 - 2. against
 - 3. have rebelled
 - 4. One of the

Q.39 Identify the error in the sentence given:

Question ID : 626766172

Our car, which finally has new seats, need to be repaired again

- Ans
- 1. new seats
 - 2. need to be repaired
 - 3. our car
 - 4. which

Q.40 Identify the underlined part of speech in the given sentence:

Question ID : 626766137

Are you feeling cold? Shall I close the window?

- Ans
- 1. Verb
 - 2. Adjective
 - 3. Conjunction
 - 4. Adverb

Q.41 Choose the appropriate antonym of the underlined word:

Question ID : 626766164

They did not know that the pond was deep in that region.

- Ans
- 1. Drastic
 - 2. Low
 - 3. High
 - 4. Shallow

Q.42 Change the voice of the following sentence:

Question ID : 626766151

My scooter was stolen yesterday by somebody.

- Ans
- 1. Somebody was stealing my scooter yesterday.
 - 2. My scooter was being stolen by somebody yesterday.
 - 3. Somebody had stolen my scooter yesterday.
 - 4. Somebody stole my scooter yesterday.

Q.43 Choose the correct meaning of the underlined word:

Question ID : 626766155

The inspector was not promoted because there was an adverse report against him.

- Ans
- 1. Ordinary
 - 2. Unfavourable
 - 3. Averse
 - 4. Major

Q.44 Identify the error in the sentence given:

Question ID : 626766181

When he speaker sat down, only my friend applauded.

- Ans
- 1. sat down
 - 2. When he speaker
 - 3. applauded
 - 4. only my friend

Q.45 Identify the error in the sentence given:

Question ID : 626766179

The principal want all the parents to attend the meeting.

- Ans
- 1. to attend
 - 2. want all the parents
 - 3. The principal
 - 4. the meeting

Q.46 Select the most appropriate indirect speech form of the below sentence:

Question ID : 626766147

“Keep quiet,” said the mother to the child.

- Ans
- 1. The mother tells the child to keep quiet.
 - 2. The mother is telling the child to keep quiet.
 - 3. The mother had told the child to keep quiet.
 - 4. The mother told the child to keep quiet.

Q.47 Identify the error in the sentence given:

Question ID : 626766173

Not everyone in these houses feel comfortable during May.

- Ans
- 1. these houses
 - 2. feel comfortable
 - 3. everyone
 - 4. May

Q.48 Fill in the blank with the appropriate preposition:

Question ID : 626766136

The Principal will meet you _____ noon.

- Ans
- 1. since
 - 2. on
 - 3. at
 - 4. in

Q.49 Fill in the blank with the appropriate preposition:

Question ID : 626766135

Don't forget, Jasmin's birthday is _____ the 3rd.

- Ans
- 1. on
 - 2. from
 - 3. at
 - 4. in

Q.50 Choose the appropriate antonym of the underlined word:

Question ID : 626766165

The witness gave a fictitious account of the crime to the police.

- Ans
- 1. Ridiculous
 - 2. Brilliant
 - 3. Real
 - 4. Wrong

Q.51 Choose the correct meaning of the underlined words/phrases:

Question ID : 626766169

My office is only a stone's throw away from my house.

- Ans
- 1. Throwing something
 - 2. Very near
 - 3. Parallel to
 - 4. Stoning someone

Q.52 Fill in the blank with the appropriate preposition:

Question ID : 626766132

I'm sorry, I can't come to the party _____ Sunday.

- Ans
- 1. at
 - 2. for
 - 3. in
 - 4. on

Q.53 Choose the correct meaning of the underlined word:

Question ID : 626766156

Steps are being taken to expedite the process of selecting good officers.

- Ans
- 1. Accelerate
 - 2. Produce
 - 3. Predict
 - 4. Reduce

Q.54 Select the most appropriate indirect speech form of the below sentence:

Question ID : 626766145

"Could you please lend me your pen?" said the stranger.

- Ans
- 1. The stranger ordered me to lend him my pen.
 - 2. The stranger asked me to lend him my pen.
 - 3. The stranger requested me to lend him my pen.
 - 4. The stranger requested me to lend him a pen.

Q.55 Identify the adverb in the given sentence:

Question ID : 626766128

We didn't go to school as it was raining heavily.

- Ans
- 1. raining
 - 2. we
 - 3. heavily
 - 4. go

Q.56 Choose the correct meaning of the underlined word:

Question ID : 626766159

The students were unable to properly comprehend what Professor Johnson was saying.

- Ans
- 1. Understand
 - 2. Analyse
 - 3. Create
 - 4. Remember

Q.57 Select the most appropriate indirect speech form of the below sentence:

Question ID : 626766146

Raji said to Hema, "There was a big fire here last night."

- Ans
- 1. Raji tells Hema that there was a big fire there the previous night.
 - 2. Raji told Hema that there was a big fire there last night.

✓ 3.

Raji told Hema that there was a big fire there the previous night.

✗ 4.

Raji told Hema that there was a big fire here the previous night.

Q.58 Identify the adverb in the given sentence:

Question ID : 626766130

This is a hospital. Please speak quietly.

Ans ✗ 1. hospital

✗ 2. speak

✗ 3. please

✓ 4. quietly

Q.59 Identify the error in the sentence given:

Question ID : 626766174

Do you know that Arun never get angry?

Ans ✗ 1. Arun

✗ 2. Do you know

✗ 3. never

✓ 4. get angry

Q.60 Change the voice of the following sentence:

Question ID : 626766154

It is reported that many people are homeless after the earthquake.

Ans ✓ 1.

Many people are reported to be homeless after the earthquake.

✗ 2.

Many people are homeless after the earthquake.

✗ 3.

The earthquake has made many people homeless.

✗ 4.

Many people are reported to being homeless after the earthquake.