DSSSB JE

Previous Year Paper

Electrical 22 June 2022
Shift 2

Participant ID	
Participant Name	
Test Center Name	
Test Date	22/06/2022
Test Time	12:30 PM - 2:30 PM
Subject	Junior Engineer (Electrical) or Section Officer (Electrical)

Section : **Mental Ability**

Q.1 Manoj ranked 17th from left end of the row, while Chand ranked 15th from the right end of the row. If Chand is towards left side of Manoj and only two people are between them then how many persons are in that row?

Ans ✔ A. 28

✘ B. 31

✘ C. 32

✘ D. 27

Question ID : **1841221880**

Q.2 Which number would replace question mark (?) in the given series?

122, 186, 250, 314, ?

Ans ✘ A. 402

✘ B. 346

✔ C. 378

✘ D. 388

Question ID : **1841221898**

Q.3 Four words have been given out of which three are alike in some manner, while the fourth one is different. Choose the word which is different from the rest.

Ans ✘ A. Ammeter

✔ B. Pressure

✘ C. Barometer

✘ D. Odometer

Question ID : **1841221890**

Q.4 Select the correct mirror image of the given figure when the mirror is placed to the right side.
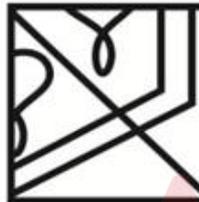

Ans

✗ A.

✗ B.

✗ C.

✔ D.

Question ID : **1841221895**

Q.5 In a certain code system EQUATION is written as AEINOQTU. In the same system of coding, what should be the code for the word CHILDREN?

Ans ✗ A. CDEIHLNR

✔ B. CDEHILNR

✗ C. CDEHILRN

✗ D. CDHEILNR

Question ID : **1841221885**

Q.6 Four words have been given out of which three are alike in some manner, while the fourth one is different. Choose the word which is different from the rest.

Ans ✗ A. Trot
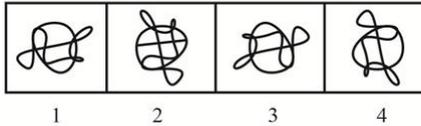
✔ B. Rabbit

✗ C. Amble

✗ D. Gallop

Question ID : **1841221891**

Q.7 **Which letter cluster would replace question mark (?) in the given series?**

CA, GX, KU, OR, ?

Ans ✔ A. SO

✘ B. SM

✘ C. OS

✘ D. TO

Question ID : 1841221883

Q.8 Four figures have been given out of which three are alike in some manner, while the fourth one is different. Choose the figure which is different from the rest.

Ans ✘ A. 3

✘ B. 4

✘ C. 1

✔ D. 2

Question ID : 1841221894

Q.9 **M ÷ N means 'M is mother of N'**
M £ N means 'M is son of N'
M Ω N means 'M is brother of N'
M ∞ N means 'M is sister of N'

If
P ÷ Q £ S Ω R ∞ T

How is R related to P?

Ans ✔ A. Sister-in-law

✘ B. Nephew

✘ C. Niece

✘ D. Brother-in-law

Question ID : 1841221888

Q.10 **Anuj is ranked 96rd from right end of the row and 15th from left end in a row. How many people are in that row?**

Ans ✔ A. 110

✘ B. 112

✘ C. 111
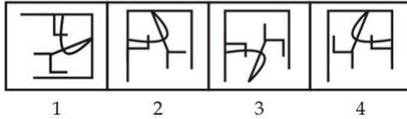
✘ D. 123

Question ID : 1841221879

Q.11 Which number would replace question mark (?) in the given series?

34, 46, 64, 88, ? , 154

Ans ✗ A. 122

✗ B. 112

✗ C. 116

✓ D. 118

Question ID : 1841221897

Q.12 Four figures have been given out of which three are alike in some manner, while the fourth one is different. Choose the figure which is different from the rest.

Ans ✗ A. 3

✓ B. 2

✗ C. 1

✗ D. 4

Question ID : 1841221893

Q.13 Two statements are followed by two conclusions. Consider the statements to be TRUE even if they seem to be at variance with commonly known facts and decide which of the given conclusion(s) logically follow(s) from the given statements.

Statements:

Some goats are hens.
All hens are cats.

Conclusions:

I. Some cats are goats.
II. All goats are cats.

Ans ✗ A. Both conclusion I and II follow

✗ B. Neither conclusion I nor II follow

✓ C. Only conclusion I follows

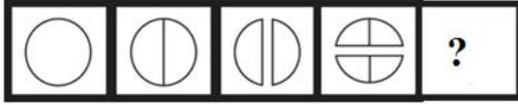✗ D. Only conclusion II follows

Question ID : 1841221881

Q.14 Asad is father of Anu and son of Sahil. Anu is paternal granddaughter of Mahak. How is Anu's mother is related to Mahak?
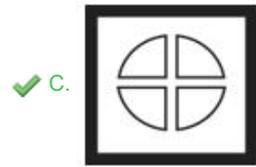
Ans ✗ A. Sister

✓ B. Daughter-in-law

✗ C. Mother

✗ D. Aunty

Question ID : 1841221887

Q.15 Select the option that will correctly replace the question mark (?) and complete the series.

Ans

✗ A.

✗ B.

✔ C.

✗ D.

Question ID : **1841221892**

Q.16 Dev walks 3 km in west direction then he turns right and walks 2 km. Again he turns left and walks 4 km. Finally he turns left again and walks 5 km in morning walk. In which direction is he facing now?

Ans ✔ A. South

✗ B. West

✗ C. North

✗ D. East

Question ID : **1841221886**

Q.17 Select the option that is related to the third word in the same way as the second word is related to the first word.

Refuse : Deny :: Error : ?

Ans ✗ A. Scarcity

✗ B. Prohibition

✔ C. Blunder

✗ D. Sin

Question ID : **1841221889**

Q.18 Which of the following meaningful word can NOT be formed using the letters of the word HYPERIMMUNIZING at once?

Ans   ✘ A. Minimize

   ✘ B. Prime

   ✔ C. Remember

   ✘ D. Immune

Question ID : 1841221884

Q.19 Manu is older than Tanu and younger than Fahad. Sachin is younger than Rahul and older than Shyam. Shyam is older than Manu. If Sachin is older than Fahad.

Who is youngest among all?

Ans   ✔ A. Tanu

   ✘ B. Rahul

   ✘ C. Fahad

   ✘ D. Manu

Question ID : 1841221882

Q.20 What will be the water image of following figure?

Ans

   ✘ A.

   ✘ B.

   ✘ C.

   ✔ D.

Question ID : 1841221896

Section : **General Awareness**

Q.1 In which month India published the amended Patents Rules (2021) and reduced fees by 80% for educational institutions?

Ans ✗ A. August

✗ B. February

✗ C. November

✓ D. September

Question ID : **1841221900**

Q.2 Which Mughal emperor's mother was a Kachhwaha princess, daughter of the Rajput ruler of Amber (Modern-day Jaipur)?

Ans ✗ A. Humayun

✗ B. Babur

✗ C. Akbar

✓ D. Jahangir

Question ID : **1841221905**

Q.3 In which year Smile Foundation an NGO based in New Delhi, was established?

Ans ✗ A. 2010

✗ B. 2006

✓ C. 2002

✗ D. 2000

Question ID : **1841221902**

Q.4 What is the height of famous statue of Gomateshwara?

Ans ✗ A. 60 feet

✗ B. 59 feet

✓ C. 57 feet

✗ D. 58 feet

Question ID : **1841221908**

Q.5 Which of the following statements is INCORRCT?

Ans ✗ A. Mahatma Gandhi returned to India in January 1915 from South Africa.

✓ B. In 1917, Mahatma Gandhi went to Ahmedabad to organize a satyagraha movement amongst cotton mill workers.

✗ C. In 1919 Mahatma Gandhi organized a satyagraha to support the peasants of the Kheda district of Gujarat.

✗ D. In 1916 Mahatma Gandhi travelled to Champaran in Bihar to inspire the peasants to struggle against the oppressive plantation system.

Question ID : **1841221907**

Q.6 Which of the following companies has entered a joint venture partnership with Yamaha, a Japanese two-wheeler major, to make electric motors for e-bicycles for the global market?

Ans ✗ A. Maruti Suzuki Motors

✗ B. Tata Motors

✗ C. TVS Motors

✔ D. Hero Motors

Question ID : **1841221914**

Q.7 The Shanti Swarup Bhatnagar Prize for Science and Technology (SSB) is a science award in India given annually by the _____.

Ans ✗ A. Indian Agricultural Research Institute (IARI)

✔ B. Council of Scientific & Industrial Research (CSIR)

✗ C. Bhabha Atomic Research Centre (BARC)

✗ D. Defense Research and Development Organization (DRDO)

Question ID : **1841221899**

Q.8 How many major factors controls the climate of any place?

Ans ✗ A. Three

✔ B. Six

✗ C. Five

✗ D. Four

Question ID : **1841221912**

Q.9 In which year National Institute of Kathak Dance was established?

Ans ✗ A. 1972

✗ B. 1980

✔ C. 1964

✗ D. 1955

Question ID : **1841221909**

Q.10 How many members are assigned to the Upper house in the Parliament by the President?

Ans ✗ A. 15

✗ B. 11

✔ C. 12

✗ D. 10

Question ID : **1841221918**

Q.11 Which of the following states has a sex ratio of 996 according to Census 2011?

Ans ✗ A. Kerala

✓ B. Tamil Nadu

✗ C. Telangana

✗ D. Andhra Pradesh

Question ID : 1841221913

Q.12 By which Amendment of the Constitution, adopted in 1976, Fundamental Duties of the citizens have also been enumerated?

Ans ✗ A. 34th

✓ B. 42nd

✗ C. 71st

✗ D. 54th

Question ID : 1841221917

Q.13 Which of the following minority groups has the highest literacy rate according to Census 2011?

Ans ✗ A. Sikhs

✗ B. Christians

✗ C. Buddhists

✓ D. Jain

Question ID : 1841221903

Q.14 Which of the following countries has the least average age group in 2020?

Ans ✗ A. Greece

✗ B. China

✗ C. Japan

✓ D. India

Question ID : 1841221901

Q.15 Who among the following was hanged to death for attacking his officers in Barrackpore?

Ans ✗ A. AshfaqUlla Khan

✗ B. Kunwar Singh

✗ C. Bipin Chandra Pal

✓ D. Mangal Pandey

Question ID : 1841221906

Q.16 Who among the following, provided evidence that the universe is expanding?

Ans ✗ A. Harold Jeffrey

✓ B. Edwin Hubble

✗ C. Immanuel Kant

✗ D. Carl Weizascar

Question ID : **1841221915**

Q.17 Which of the following fruits oxalic acid is present?

Ans ✗ A. Orange

✗ B. Banana

✗ C. Apple

✓ D. Tomato

Question ID : **1841221916**

Q.18 Tokyo Olympics gold medalist Neeraj Chopra set a national record in the javelin at the 2021 Indian Grand Prix with a throw of _____.

Ans ✗ A. 87.08 m

✗ B. 86.88 m

✓ C. 88.07 m

✗ D. 89.06 m

Question ID : **1841221904**

Q.19 In which month RBI announced the launch of its first global hackathon 'HARBINGER 2021 – Innovation for Transformation' with the theme 'Smarter Digital Payments'?

Ans ✗ A. September

✗ B. March

✗ C. August

✓ D. November

Question ID : **1841221910**

**Q.20 Which of the following statements is CORRECT?**

Ans ✗ A. India ranked 110 in the Human Development Index in 2018.

✗ B. India ranked 101 in the Human Development Index in 2018.

✗ C. India ranked 120 in the Human Development Index in 2018.

✓ D. India ranked 130 in the Human Development Index in 2018.

Question ID : **1841221911**

Section : **Arithmetic Ability**

Q.1 Based on the following bar graph answer the question.

The following is the electricity consumption of a household. The rates were fixed cost @ ₹ 180 per month and variable @ ₹ 3.50 per unit.

Electricity Usage in units
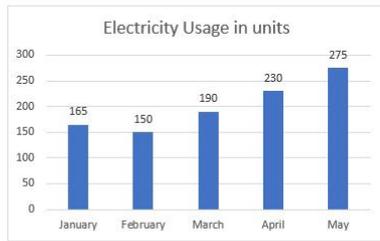
What was the difference in the total electricity charges between the months March and January?

Ans
✗ A. ₹ 92.5

✗ B. ₹ 85

✗ C. ₹ 82.5

✓ D. ₹ 87.5

Question ID : 1841221937

Q.2 The salaries of Ajay, Vijay and Sujay are in the ratio of 2 : 4 : 5. If they receive increments of 12%, 14% and 8% respectively, what will be the new ratio of their salaries?

Ans
✗ A. 51 : 68 : 108

✗ B. 35 : 42 : 57

✓ C. 56 : 114 : 135

✗ D. 45 : 38 : 72

Question ID : 1841221924

Q.3 Jai goes on a tour and he has 420 for his expenses, if he exceeds his tour by 3 days he will have to cut down his daily expense by ₹ 7. For how many days is Jai on tour?

Ans
✗ A. 10 days

✗ B. 15 days

✓ C. 12 days

✗ D. 14 days

Question ID : 1841221921

Q.4 Out of his total monthly income, Kartik spends 24% on household expenses, 16% on entertainment, 12% on education and saves ₹ 11328, find his monthly income.

Ans
✗ A. ₹ 21750

✗ B. ₹ 22950

✓ C. ₹ 23600

✗ D. ₹ 22400

Question ID : 1841221923

Q.5 A bicycle seller sells 15 bicycles at a profit of ₹ 495 per bicycle and 3 bicycles at a loss of ₹ 297 per bicycle. If the total profit percentage on all the bicycles sold is $14\frac{2}{3}\%$. Find the cost price per bicycle.

Ans
  ✗ A. ₹ 2970

  ✗ B. ₹ 3245

  ✗ C. ₹ 2050

  ✔ D. ₹ 2475

Question ID : 1841221925

Q.6 Squares each of side 4cm is cut out from the four corners of a sheet of tin measuring 42cm by 30cm.The remaining part of the tin sheet is made into an open box by folding up the flaps. Find the capacity of the box.

Ans
  ✔ A. $2992\ cm^3$

  ✗ B. $2956\ cm^3$

  ✗ C. $3024\ cm^3$

  ✗ D. $2895\ cm^3$

Question ID : 1841221934

Q.7 A train 600 m long takes 42 seconds to cross a man running @ 15 kmh speed in the opposite direction to the train. Find the speed of the train.

Ans
  ✔ A. $36\frac{3}{7}$

  ✗ B. $38\frac{5}{7}$

  ✗ C. $37\frac{2}{7}$

  ✗ D. $39\frac{1}{7}$

Question ID : 1841221929

Q.8 Using BODMAS solve:

$$5 - \left[\frac{3}{8} \div \left\{ 2\frac{1}{2} \times \left(0.7\ of\ \left(\frac{1}{6} - \frac{1}{7} \right) \right) \right\} \right]$$

Ans
  ✗ A. $-\frac{13}{8}$

  ✔ B. -4

  ✗ C. 5

  ✗ D. $\frac{41}{10}$

Question ID : 1841221922

Q.9 J has three times as much money as K. If J gives ₹ 550 to K, then K will have twice as much as J. Find the average of the original money had by both J and K.

Ans ✗ A. ₹ 450

✗ B. ₹ 720

✓ C. ₹ 660

✗ D. ₹ 540

Question ID : **1841221930**

Q.10 After replacing an old member by a new member, it was found that the average age of 6 members of the club is the same as it was 3 years ago. What is the difference between the age of the replaced member to new member?

Ans ✗ A. 15 years

✗ B. 9 years

✓ C. 18 years

✗ D. 16 years

Question ID : **1841221931**

Q.11 8 workers working 7 hours per day can build a wall in 12 days. How many days will 7 workers take to build the wall if they work 6 hours per day?

Ans ✗ A. 15 days

✗ B. 14 days

✗ C. 18 days

✓ D. 16 days

Question ID : **1841221927**

Q.12 The base of an isosceles triangle is 20 cm and its area is 261.50 sq.cm, find its perimeter.

Ans ✗ A. 58 cm

✓ B. 76 cm

✗ C. 88 cm

✗ D. 104 cm

Question ID : **1841221932**

Q.13 Based on the following bar graph answer the question.

The following is the electricity consumption of a household. The rates were fixed cost @ ₹ 180 per month and variable @ ₹ 3.50 per unit.

Electricity Usage in units
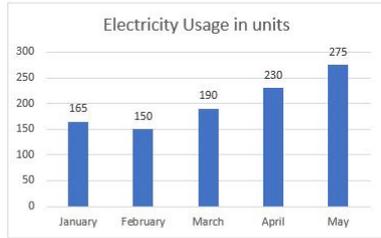
What is the average monthly electricity charge for all the five months?

Ans ✗ A. ₹ 707

✗ B. ₹ 794

✔ C. ₹ 887

✗ D. ₹ 743

Question ID : 1841221938

Q.14 When is the following arranged in ascending order which comes fourth?

$$\frac{2}{5}, \frac{3}{5}, \frac{6}{7}, \frac{1}{3}, \frac{5}{6}$$

Ans ✗ A. $\frac{3}{5}$

✗ B. $\frac{1}{3}$

✗ C. $\frac{6}{7}$

✔ D. $\frac{5}{6}$

Question ID : 1841221920

Q.15 The following is the table of marks secured by Ansha in two exams in two years.

	Marks out of 80	
Subject	2019	2020
English	72	76
Hindi	56	50
Math	62	75
Science	68	54
Social science	70	80

What was the average percentage in all subjects in the year 2020?

Ans
✗ A. 82.5%

✗ B. 84.4%

✗ C. 85.85%

✔ D. 83.75%

Question ID : 1841221935

Q.16 If $68.5208 = 6A + \frac{8}{B} + 5c + \frac{2}{D} + 8E$, find the value of 3A+B+9C+2D+5E

Ans
✗ A. 131.9105

✗ B. 30.19015

✗ C. 31.0915

✔ D. 231.9005

Question ID : 1841221919

Q.17 A man sold a radio at a profit of 10%. Had he purchased it for 5% less and sold it for ₹ 108 more, he could have gained 30%. What was the cost at which he bought the radio?

Ans
✗ A. ₹ 900

✔ B. ₹ 800

✗ C. ₹ 840

✗ D. ₹ 880

Question ID : 1841221926

Q.18 A is thrice as good a workman as B and B is twice as good a workman as C. If C can finish the work in 24 days working alone, how long will it take if A and B did the same work together?

Ans
✗ A. 5 days

✗ B. 6 days

✔ C. 3 days

✗ D. 4 days

Question ID : 1841221928

Q.19 The following is the table of marks secured by Ansha in two exams in two years.

	Marks out of 80	
Subject	2019	2020
English	72	76
Hindi	56	50
Math	62	75
Science	68	54
Social science	70	80

If the marks in Maths was interchanged between the two years, what would be the difference in the new average percentage between 2019 and 2020?

Ans ✔ A. 4.75%

✗ B. 4.96%

✗ C. 5.12%

✗ D. 5.24%

Question ID : **1841221936**

Q.20 In a four-sided field the longer diagonal is 96 m. The lengths of perpendiculars from the opposite vertices 12 m and 8 m respectively. Find the area of the field.

Ans ✗ A. 480 m^2

✗ B. 1920 m^2

✗ C. 1440 m^2

✔ D. 960 m^2

Question ID : **1841221933**

Section : **General English**

Q.1 Select the most appropriate option to fill in the blank.

My cousin felt annoyed _____ himself when he saw what he had done.

Ans ✔ A. with

✗ B. on

✗ C. to

✗ D. for

Question ID : **1841221940**

Q.2 Select the most appropriate option to fill in the blank.

Last month we met the Vyas family _____ two occasions.

Ans ✗ A. by

✗ B. in

✔ C. on

✗ D. at

Question ID : **1841221939**

Q.3 Select the sentence part which has an error in spelling. If there is no error, select 'No error'.

He had documented his work most methodically and efficiently.

Ans ✗ A. his work most methodically

✗ B. and efficiently.

✓ C. No error

✗ D. He had documented

Question ID : **1841221951**

Q.4 Select the most appropriate option to fill in the blanks in the given two sentences.

This is the latest _____ of the Wren and Martin grammar book.
She learned the _____ of two digit numbers at the age of five.

Ans ✓ A. edition; addition

✗ B. addition; addition

✗ C. addition; edition

✗ D. edition; edition

Question ID : **1841221946**

Q.5 Select the sentence which is meaningful and grammatically correct.

Ans ✗ A. My car today didn't clean the car cleaner.

✗ B. Today my car the car cleaner clean didn't.

✓ C. The car cleaner didn't clean my car today.

✗ D. Didn't clean my car today the car cleaner.

Question ID : **1841221952**

Q.6 Select the most appropriate meaning of the given idiom.

to play ducks and drakes

Ans ✓ A. to behave recklessly

✗ B. to play a game

✗ C. to act cleverly

✗ D. to be hostile

Question ID : **1841221948**

Q.7 Select the most appropriate synonym of the given word.

PRECIOUS

Ans ✗ A. graceful

✓ B. valuable

✗ C. worthless

✗ D. majestic

Question ID : **1841221944**

Q.8 Select the most appropriate option to fill in the blank.

The delegates to the International Peace Conference were all dressed in their national _____.

Ans   ✗ A. clothes

    ✗ B. apparels

    ✗ C. dresses

    ✓ D. costumes

Question ID : **1841221953**

Q.9 Select the most appropriate antonym of the given word.

PERPETUAL

Ans   ✗ A. constant

    ✗ B. unending

    ✗ C. ceaseless

    ✓ D. momentary

Question ID : **1841221945**

Q.10 Complete the following proverb.

_____ on the other side.

Ans   ✗ A. the book's cover is

    ✗ B. the blood is thicker

    ✓ C. the grass is always greener

    ✗ D. beauty is always

Question ID : **1841221947**

Q.11 Select the most appropriate synonym of the given word.

SCAR

Ans   ✓ A. mark

    ✗ B. point

    ✗ C. tip

    ✗ D. dot

Question ID : **1841221943**

Q.12 Select the sentence part which has an error in spelling. If there is no error, select 'No error'.

Before begining my work, I was introduced to the young man who was going to coordinate with me.

Ans   ✗ A. No error

    ✗ B. I was introduced to the young man

    ✓ C. Before begining my work

    ✗ D. who was going to coordinate with me.

Question ID : **1841221950**

Q.13 Select the most appropriate option to fill in the blank.

It is Sunday. The children are at home. Avika _____ a painting and Kavya is playing with her doll.

Ans ✗ A. had made

✗ B. makes

✗ C. made

✔ D. is making

Question ID : **1841221942**

Q.14 Select the most appropriate option to fill in the blank.

Last night, I _____ a call from my son when he reached the Poland border safely.

Ans ✗ A. get

✗ B. gets

✔ C. got

✗ D. have got

Question ID : **1841221941**

Q.15 Select the most appropriate idiom to fill in the blank.

We arrived at the airport _____.The check-in counter was going to close.

Ans ✗ A. in the running

✗ B. in high spirits

✗ C. in character

✔ D. in the nick of time

Question ID : **1841221949**

Comprehension:

Read the following passage and answer the questions given after it.

In 17th and 18th century England, coffeehouses were popular places for people from all walks of life to go and meet, chat, gossip and have fun, whilst enjoying the latest fashion, a drink newly arrived in Europe from Turkey – coffee.

Whilst the taste of 17th century coffee was not very palatable – indeed, it tasted quite disgusting according to accounts of the time but the caffeine in it and the 'buzz' it provided, proved quite addictive.

The first coffeehouse in England was opened in Oxford in 1652. In London, the first one was opened later that same year in at St Michael's Alley, Cornhill, by an eccentric Greek named PasquaRoseé. Soon they were commonplace.

The new coffeehouses became fashionable places for the chattering classes to meet, conduct business, gossip, exchange ideas and debate the news of the day. Unlike public houses, no alcohol was served and women were excluded. Each coffeehouse had a particular clientele, usually defined by occupation, interest or attitude, such as Tories and Whigs, traders and merchants, poets and authors, and men of fashion and leisure.

Polite conversation led to reasoned and sober debate on matters of politics, science, literature and poetry, commerce and religion, so much so that London coffeehouses became known as 'penny universities', as that was the price of a cup of coffee. Influential patrons included Samuel Pepys, John Dryden, Alexander Pope and Isaac Newton.

However not all coffeehouses hosted such highbrow clientele: some were haunts for criminals, scoundrels and pimps.

Anyone of any social class could frequent the coffeehouses, and so they became associated with equality and republicanism. So much so that in 1675 an attempt to ban them was made by Charles II, which caused such a public outcry that it was withdrawn.

SubQuestion No : 16

Q.16 The first coffeehouse in London was started by:

Ans ✗ A. John Dryden

✓ B. PasquaRoseé

✗ C. Samuel Pepys

✗ D. Alexander Pope

Question ID : 1841221958

Comprehension:

Read the following passage and answer the questions given after it.

In 17th and 18th century England, coffeehouses were popular places for people from all walks of life to go and meet, chat, gossip and have fun, whilst enjoying the latest fashion, a drink newly arrived in Europe from Turkey – coffee.

Whilst the taste of 17th century coffee was not very palatable – indeed, it tasted quite disgusting according to accounts of the time but the caffeine in it and the 'buzz' it provided, proved quite addictive.

The first coffeehouse in England was opened in Oxford in 1652. In London, the first one was opened later that same year in at St Michael's Alley, Cornhill, by an eccentric Greek named PasquaRoseé. Soon they were commonplace.

The new coffeehouses became fashionable places for the chattering classes to meet, conduct business, gossip, exchange ideas and debate the news of the day. Unlike public houses, no alcohol was served and women were excluded. Each coffeehouse had a particular clientele, usually defined by occupation, interest or attitude, such as Tories and Whigs, traders and merchants, poets and authors, and men of fashion and leisure.

Polite conversation led to reasoned and sober debate on matters of politics, science, literature and poetry, commerce and religion, so much so that London coffeehouses became known as 'penny universities', as that was the price of a cup of coffee. Influential patrons included Samuel Pepys, John Dryden, Alexander Pope and Isaac Newton.

However not all coffeehouses hosted such highbrow clientele: some were haunts for criminals, scoundrels and pimps.

Anyone of any social class could frequent the coffeehouses, and so they became associated with equality and republicanism. So much so that in 1675 an attempt to ban them was made by Charles II, which caused such a public outcry that it was withdrawn.

SubQuestion No : 17

Q.17 The English coffeehouses became associated with equality and republicanism basically because:

Ans ✔️ A. anybody from any social class could go and sit there.

❌ B. reasoned and sober debate on politics took place there.

❌ C. Influential patrons like Samuel Pepys, John Dryden, Alexander Pope and Isaac Newton frequented them.

❌ D. they were also haunted by criminals, scoundrels and pimps.

Question ID : **1841221956**

Comprehension:

Read the following passage and answer the questions given after it.

In 17th and 18th century England, coffeehouses were popular places for people from all walks of life to go and meet, chat, gossip and have fun, whilst enjoying the latest fashion, a drink newly arrived in Europe from Turkey – coffee.

Whilst the taste of 17th century coffee was not very palatable – indeed, it tasted quite disgusting according to accounts of the time but the caffeine in it and the 'buzz' it provided, proved quite addictive.

The first coffeehouse in England was opened in Oxford in 1652. In London, the first one was opened later that same year in at St Michael's Alley, Cornhill, by an eccentric Greek named PasquaRoseé. Soon they were commonplace.

The new coffeehouses became fashionable places for the chattering classes to meet, conduct business, gossip, exchange ideas and debate the news of the day. Unlike public houses, no alcohol was served and women were excluded. Each coffeehouse had a particular clientele, usually defined by occupation, interest or attitude, such as Tories and Whigs, traders and merchants, poets and authors, and men of fashion and leisure.

Polite conversation led to reasoned and sober debate on matters of politics, science, literature and poetry, commerce and religion, so much so that London coffeehouses became known as 'penny universities', as that was the price of a cup of coffee. Influential patrons included Samuel Pepys, John Dryden, Alexander Pope and Isaac Newton.

However not all coffeehouses hosted such highbrow clientele: some were haunts for criminals, scoundrels and pimps.

Anyone of any social class could frequent the coffeehouses, and so they became associated with equality and republicanism. So much so that in 1675 an attempt to ban them was made by Charles II, which caused such a public outcry that it was withdrawn.

SubQuestion No : 18

Q.18 The main theme of the passage is:

Ans ✗ A. advent of equality and republicanism in England

✗ B. history of coffeehouses in Europe

✓ C. 17th and 18th century English coffeehouses

✗ D. Penny Universities in England

Question ID : **1841221955**

Comprehension:

Read the following passage and answer the questions given after it.

In 17th and 18th century England, coffeehouses were popular places for people from all walks of life to go and meet, chat, gossip and have fun, whilst enjoying the latest fashion, a drink newly arrived in Europe from Turkey – coffee.

Whilst the taste of 17th century coffee was not very palatable – indeed, it tasted quite disgusting according to accounts of the time but the caffeine in it and the 'buzz' it provided, proved quite addictive.

The first coffeehouse in England was opened in Oxford in 1652. In London, the first one was opened later that same year in at St Michael's Alley, Cornhill, by an eccentric Greek named PasquaRoseé. Soon they were commonplace.

The new coffeehouses became fashionable places for the chattering classes to meet, conduct business, gossip, exchange ideas and debate the news of the day. Unlike public houses, no alcohol was served and women were excluded. Each coffeehouse had a particular clientele, usually defined by occupation, interest or attitude, such as Tories and Whigs, traders and merchants, poets and authors, and men of fashion and leisure.

Polite conversation led to reasoned and sober debate on matters of politics, science, literature and poetry, commerce and religion, so much so that London coffeehouses became known as 'penny universities', as that was the price of a cup of coffee. Influential patrons included Samuel Pepys, John Dryden, Alexander Pope and Isaac Newton.

However not all coffeehouses hosted such highbrow clientele: some were haunts for criminals, scoundrels and pimps.

Anyone of any social class could frequent the coffeehouses, and so they became associated with equality and republicanism. So much so that in 1675 an attempt to ban them was made by Charles II, which caused such a public outcry that it was withdrawn.

SubQuestion No : 19

Q.19 Which of the following statements is NOT true according to the passage?

Ans ✘ A. Coffee arrived in Europe from Turkey.

✘ B. In 1675, Charles II tried to ban the coffeehouses, but had to withdraw his order.

✔ C. In the English coffeehouses alcohol was also served.

✘ D. Women were not allowed in English coffeehouses.

Question ID : **1841221959**

Comprehension:

Read the following passage and answer the questions given after it.

In 17th and 18th century England, coffeehouses were popular places for people from all walks of life to go and meet, chat, gossip and have fun, whilst enjoying the latest fashion, a drink newly arrived in Europe from Turkey – coffee.

Whilst the taste of 17th century coffee was not very palatable – indeed, it tasted quite disgusting according to accounts of the time but the caffeine in it and the 'buzz' it provided, proved quite addictive.

The first coffeehouse in England was opened in Oxford in 1652. In London, the first one was opened later that same year in at St Michael's Alley, Cornhill, by an eccentric Greek named PasquaRoseé. Soon they were commonplace.

The new coffeehouses became fashionable places for the chattering classes to meet, conduct business, gossip, exchange ideas and debate the news of the day. Unlike public houses, no alcohol was served and women were excluded. Each coffeehouse had a particular clientele, usually defined by occupation, interest or attitude, such as Tories and Whigs, traders and merchants, poets and authors, and men of fashion and leisure.

Polite conversation led to reasoned and sober debate on matters of politics, science, literature and poetry, commerce and religion, so much so that London coffeehouses became known as 'penny universities', as that was the price of a cup of coffee. Influential patrons included Samuel Pepys, John Dryden, Alexander Pope and Isaac Newton.

However not all coffeehouses hosted such highbrow clientele: some were haunts for criminals, scoundrels and pimps.

Anyone of any social class could frequent the coffeehouses, and so they became associated with equality and republicanism. So much so that in 1675 an attempt to ban them was made by Charles II, which caused such a public outcry that it was withdrawn.

SubQuestion No : 20

Q.20 Why did coffeehouses become extremely popular in 17th - 18th century England?

Ans ✗ A. Coffee was a newly arrived drink in England.

✗ B. People could debate on politics, literature, science etc.

✗ C. Coffee was extremely palatable and tasty.

✅ D. The caffeine and the atmosphere in the coffeehouse provided a special excitement.

Question ID : 1841221957

Section : **General Hindi**

Q.1 'विधि' का विलोम युग्म कौनसा है?

Ans ✗ A. परिधीय

✗ B. सुविधि

✗ C. अविधि

✅ D. निषेध

Question ID : 1841221967

Q.2 अधोलिखित में 'रोब न रह जाना' किस मुहावरे का अर्थ है?

Ans ✗ A. हवा उड़ना

✗ B. हवा का रंग देखना

✅ C. हवा उखड़ना

✗ D. हवा के घोड़े पर सवार होना

Question ID : 1841221968

Q.3 इनमें 'भगल गांठना' मुहावरे का अर्थ है-

Ans ✗ A. चक्कर में पड़ना

✓ B. छल-कपट करना

✗ C. संन्यास लेना

✗ D. भला बनने का ढोंग करना

Question ID : 1841221969

Q.4 अपादान कारक युक्त वाक्य नहीं है-

Ans ✗ A. लड़का पेड़ से गिरा।

✗ B. चूहा बिल से बाहर आया।

✓ C. मुझे अपनी कमाई से भोजन मिलता है।

✗ D. हिमालय से गंगा निकलती है।

Question ID : 1841221961

Q.5 भीतर _____ जाओ । उचित क्रिया विशेषण का चयन कर रिक्त स्थान की पूर्ति कीजिए।

Ans ✗ A. बहुधा

✓ B. मत

✗ C. नहीं

✗ D. केवल

Question ID : 1841221962

Q.6 किस विकल्प में शब्द का संधि विच्छेद अनुचित है?

Ans ✗ A. सम् + योग = संयोग

✗ B. जगत् + ईश = जगदीश

✓ C. सम + पूर्ण = संपूर्ण

✗ D. अनु + सरण = अनुसरण

Question ID : 1841221964

Q.7 इस गीत की दो-चार _____ सुना दो। उचित शब्द का चयन कर वाक्य पूर्ण कीजिए।

Ans ✗ A. लड़ियाँ

✗ B. वाक्य

✗ C. झाड़ियाँ

✓ D. कड़ियाँ

Question ID : 1841221973

Q.8 संभाव्य वर्तमान काल वाला वाक्य कौनसा है?

Ans ✓ A. हम ऐसा घर चाहते हैं, जिसमें धूप आती हो।

✗ B. सिपाही रात को पहरा देता है।

✗ C. मैं अभी अयोध्या से आता हूँ।

✗ D. आपको राजा सभा में बुलाते हैं।

Question ID : 1841221972

Q.9 करण कारक का विभक्ति चिह्न कौनसा है?

Ans ✗ A. हे

✗ B. अजी

✗ C. पर

✓ D. से

Question ID : 1841221960

Q.10 'समाहित' का पर्यायवाची शब्द नहीं है-

Ans ✗ A. मिश्रित

✓ B. समुचित

✗ C. निहित

✗ D. केंद्रित

Question ID : 1841221966

Q.11 कौनसा वाक्य अशुद्ध नहीं है?

Ans ✗ A. मैं अपने मित्रों के पास बैठी हूँ।

✓ B. पत्नी सूख-दुःख की साथी है।

✗ C. मेरी बेटी मेरा प्राण है।

✗ D. सरकार धन्यवाद का प्रात्र है।

Question ID : 1841221974

Q.12 इनमें कौनसा सामान्य भूतकाल वाला वाक्य नहीं है?

Ans ✗ A. अब यह बेमौत मरा।

✗ B. आप चलिए, मैं अभी आया।

✗ C. गाड़ी दोपहर में आई।

✓ D. कथा पूरी न होने पाई थी कि सब लोग चले गए।

Question ID : 1841221971

Q.13 किस विकल्प में लोकोक्ति और उसका अर्थ सुमेलित नहीं है?

Ans ✗ A. फूल सूंघकर रह जाना – अत्यल्प भोजन करना

✗ B. आई तो रोजी नहीं तो रोज़ा – मजदूरी मिली तो पेट भरना नहीं तो भूखे रहना

✗ C. कटे किसान का सीखे नई – हानि किसी की और लाभ किसी का

✓ D. कूद-कूदकर मछली बगुले को खाए – बदला लेना

Question ID : 1841221970

Q.14 इनमें 'समझौता' का पर्यायवाची शब्द कौनसा है?

Ans ✗ A. तालमेल

✗ B. समायोजन

✓ C. अनुबंध

✗ D. समरसता

Question ID : 1841221965

Q.15 'वयोवृद्ध' शब्द का उचित संधि विच्छेद है-

Ans ✅ A. वय: + वृद्ध

❌ B. वय + वृद्ध

❌ C. व + योवृद्ध

❌ D. वयो + वृद्ध

Question ID : 1841221963

Comprehension:

निकम्मे रहकर मनुष्यों की चिंतन-शक्ति थक गई है। बिस्तरों और आसनों पर सोते और बैठे-बैठे मन के घोड़े हार गए हैं। सारा जीवन निचुड़ चुका है। स्वप्न पुराने हो चुके हैं। आजकल की कविता में नयापन नहीं। उसमें पुराने जमाने की कविता की पुनरावृत्ति मात्र है। इस नकल में असल की पवित्रता और कुँवारेपन का अभाव है। अब तो एक नए प्रकार का कला-कौशल-पूर्ण संगीत साहित्य संसार में प्रचलित होने वाला है। यदि वह न प्रचलित हुआ तो मशीनों के पहियों के नीचे दबकर हमें मरा समझिए। यह नया साहित्य मजदूरों के हृदय से निकलेगा। उन मजदूरों के कंठ से यह नई कविता निकलेगी जो अपना जीवन आनंद के साथ खेत की मेड़ों का, कपड़े के तागों का, जूते के टाँकों का, लकड़ी की रगों का, पत्थर की नसों का भेदभाव दूर करेंगे। हाथ में कुल्हाड़ी, सिर पर टोकरी नंगे सिर और नंगे पाँव, धूल से लिपटे और कीचड़ से रंगे हुए ये बेजबान कवि जब जंगल में लकड़ी काटेंगे तब लकड़ी काटने का शब्द इनके असभ्य स्वरों से मिश्रित होकर वायुयान पर चढ़ दसों दिशाओं में ऐसा अद्भुत गान करेगा कि भविष्य के कलावंतों के लिए वही ध्रुपद और मल्हार का काम देगा। चरखा कातने वाली स्त्रियों के गीत संसार के सभी देशों के कौमी गीत होंगे। मजदूरों की मजदूरी ही यथार्थ पूजा होगी। कलारूपी धर्म की तभी वृद्धि होगी। तभी नए कवि पैदा होंगे, तभी नए औलियों का उद्भव होगा। परंतु ये सब के सब मजदूरी के दूध से पलेंगे। धर्म, योग, शुद्धाचरण, सभ्यता और कविता आदि के फूल इन्हीं मजदूर-ऋषियों के उद्यान में प्रफुल्लित होंगे।

SubQuestion No : 16

Q.16 धर्म, योग, शुद्धाचरण, सभ्यता और कविता के फूल कहाँ खिलेंगे?

Ans ❌ A. गरीबों के आँगन में

✅ B. मजदूर-ऋषियों के उद्यान में

❌ C. पवित्रता और कुँवारों के उद्यान में

❌ D. अमीरों के उद्यान में

Question ID : 1841221979

Comprehension:

निकम्मे रहकर मनुष्यों की चिंतन-शक्ति थक गई है। बिस्तरों और आसनों पर सोते और बैठे-बैठे मन के घोड़े हार गए हैं। सारा जीवन निचुड़ चुका है। स्वप्न पुराने हो चुके हैं। आजकल की कविता में नयापन नहीं। उसमें पुराने जमाने की कविता की पुनरावृत्ति मात्र है। इस नकल में असल की पवित्रता और कुँवारेपन का अभाव है। अब तो एक नए प्रकार का कला-कौशल-पूर्ण संगीत साहित्य संसार में प्रचलित होने वाला है। यदि वह न प्रचलित हुआ तो मशीनों के पहियों के नीचे दबकर हमें मरा समझिए। यह नया साहित्य मजदूरों के हृदय से निकलेगा। उन मजदूरों के कंठ से यह नई कविता निकलेगी जो अपना जीवन आनंद के साथ खेत की मेड़ों का, कपड़े के तागों का, जूते के टाँकों का, लकड़ी की रगों का, पत्थर की नसों का भेदभाव दूर करेंगे। हाथ में कुल्हाड़ी, सिर पर टोकरी नंगे सिर और नंगे पाँव, धूल से लिपटे और कीचड़ से रंगे हुए ये बेजबान कवि जब जंगल में लकड़ी काटेंगे तब लकड़ी काटने का शब्द इनके असभ्य स्वरों से मिश्रित होकर वायुयान पर चढ़ दसों दिशाओं में ऐसा अद्भुत गान करेगा कि भविष्य के कलावंतों के लिए वही ध्रुपद और मल्हार का काम देगा। चरखा कातने वाली स्त्रियों के गीत संसार के सभी देशों के कौमी गीत होंगे। मजदूरों की मजदूरी ही यथार्थ पूजा होगी। कलारूपी धर्म की तभी वृद्धि होगी। तभी नए कवि पैदा होंगे, तभी नए औलियों का उद्भव होगा। परंतु ये सब के सब मजदूरी के दूध से पलेंगे। धर्म, योग, शुद्धाचरण, सभ्यता और कविता आदि के फूल इन्हीं मजदूर-ऋषियों के उद्यान में प्रफुल्लित होंगे।

SubQuestion No : 17

Q.17 कलारूपी धर्म की कब वृद्धि होगी?

Ans ✅ A. मजदूरी की पूजा से

❌ B. मजदूरों की आराधना से

❌ C. नई कविता लिखने से

❌ D. पवित्रता और कुँवारेपन से
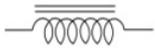
Question ID : 1841221978

Comprehension:

निकम्मे रहकर मनुष्यों की चिंतन-शक्ति थक गई है। बिस्तरों और आसनों पर सोते और बैठे-बैठे मन के घोड़े हार गए हैं। सारा जीवन निचुड़ चुका है। स्वप्न पुराने हो चुके हैं। आजकल की कविता में नयापन नहीं। उसमें पुराने जमाने की कविता की पुनरावृत्ति मात्र है। इस नकल में असल की पवित्रता और कुँवारेपन का अभाव है। अब तो एक नए प्रकार का कला-कौशल-पूर्ण संगीत साहित्य संसार में प्रचलित होने वाला है। यदि वह न प्रचलित हुआ तो मशीनों के पहियों के नीचे दबकर हमें मरा समझिए। यह नया साहित्य मजदूरों के हृदय से निकलेगा। उन मजदूरों के कंठ से यह नई कविता निकलेगी जो अपना जीवन आनंद के साथ खेत की मेड़ों का, कपड़े के तागों का, जूते के टाँकों का, लकड़ी की रगों का, पत्थर की नसों का भेदभाव दूर करेंगे। हाथ में कुल्हाड़ी, सिर पर टोकरी नंगे सिर और नंगे पाँव, धूल से लिपटे और कीचड़ से रंगे हुए ये बेजबान कवि जब जंगल में लकड़ी काटेंगे तब लकड़ी काटने का शब्द इनके असभ्य स्वरों से मिश्रित होकर वायुयान पर चढ़ दसों दिशाओं में ऐसा अद्भुत गान करेगा कि भविष्य के कलावंतों के लिए वही धुपद और मल्हार का काम देगा। चरखा कातने वाली स्त्रियों के गीत संसार के सभी देशों के कौमी गीत होंगे। मजदूरों की मजदूरी ही यथार्थ पूजा होगी। कलारूपी धर्म की तभी वृद्धि होगी। तभी नए कवि पैदा होंगे, तभी नए औलियों का उद्भव होगा। परंतु ये सब के सब मजदूरी के दूध से पलेंगे। धर्म, योग, शुद्धाचरण, सभ्यता और कविता आदि के फूल इन्हीं मजदूर-ऋषियों के उद्यान में प्रफुल्लित होंगे।

SubQuestion No : 18

Q.18 गद्यांश के लिए अधिक उपयुक्त शीर्षक कौनसा है?

Ans
  ✗ A. मजदूरी का दूध

  ✗ B. मजदूरी और देश

  ✗ C. मजदूरों की मजदूरी

  ✔ D. मजदूरी और कला

Question ID : 1841221980

Comprehension:

निकम्मे रहकर मनुष्यों की चिंतन-शक्ति थक गई है। बिस्तरों और आसनों पर सोते और बैठे-बैठे मन के घोड़े हार गए हैं। सारा जीवन निचुड़ चुका है। स्वप्न पुराने हो चुके हैं। आजकल की कविता में नयापन नहीं। उसमें पुराने जमाने की कविता की पुनरावृत्ति मात्र है। इस नकल में असल की पवित्रता और कुँवारेपन का अभाव है। अब तो एक नए प्रकार का कला-कौशल-पूर्ण संगीत साहित्य संसार में प्रचलित होने वाला है। यदि वह न प्रचलित हुआ तो मशीनों के पहियों के नीचे दबकर हमें मरा समझिए। यह नया साहित्य मजदूरों के हृदय से निकलेगा। उन मजदूरों के कंठ से यह नई कविता निकलेगी जो अपना जीवन आनंद के साथ खेत की मेड़ों का, कपड़े के तागों का, जूते के टाँकों का, लकड़ी की रगों का, पत्थर की नसों का भेदभाव दूर करेंगे। हाथ में कुल्हाड़ी, सिर पर टोकरी नंगे सिर और नंगे पाँव, धूल से लिपटे और कीचड़ से रंगे हुए ये बेजबान कवि जब जंगल में लकड़ी काटेंगे तब लकड़ी काटने का शब्द इनके असभ्य स्वरों से मिश्रित होकर वायुयान पर चढ़ दसों दिशाओं में ऐसा अद्भुत गान करेगा कि भविष्य के कलावंतों के लिए वही धुपद और मल्हार का काम देगा। चरखा कातने वाली स्त्रियों के गीत संसार के सभी देशों के कौमी गीत होंगे। मजदूरों की मजदूरी ही यथार्थ पूजा होगी। कलारूपी धर्म की तभी वृद्धि होगी। तभी नए कवि पैदा होंगे, तभी नए औलियों का उद्भव होगा। परंतु ये सब के सब मजदूरी के दूध से पलेंगे। धर्म, योग, शुद्धाचरण, सभ्यता और कविता आदि के फूल इन्हीं मजदूर-ऋषियों के उद्यान में प्रफुल्लित होंगे।

SubQuestion No : 19

Q.19 नया सार्थक साहित्य कैसा होगा?

Ans
  ✗ A. नएपन के आभाव वाला

  ✗ B. पुराने की पुनरावृत्ति वाला

  ✗ C. पिष्टपेषण वाला

  ✔ D. मजदूरों के कंठ से निकलने वाला

Question ID : 1841221977

Comprehension:

निकम्मे रहकर मनुष्यों की चिंतन-शक्ति थक गई है। बिस्तरों और आसनों पर सोते और बैठे-बैठे मन के घोड़े हार गए हैं। सारा जीवन निचुड़ चुका है। स्वप्न पुराने हो चुके हैं। आजकल की कविता में नयापन नहीं। उसमें पुराने जमाने की कविता की पुनरावृत्ति मात्र है। इस नकल में असल की पवित्रता और कुँवारेपन का अभाव है। अब तो एक नए प्रकार का कला-कौशल-पूर्ण संगीत साहित्य संसार में प्रचलित होने वाला है। यदि वह न प्रचलित हुआ तो मशीनों के पहियों के नीचे दबकर हमें मरा समझिए। यह नया साहित्य मजदूरों के हृदय से निकलेगा। उन मजदूरों के कंठ से यह नई कविता निकलेगी जो अपना जीवन आनंद के साथ खेत की मेड़ों का, कपड़े के तागों का, जूते के टाँकों का, लकड़ी की रगों का, पत्थर की नसों का भेदभाव दूर करेंगे। हाथ में कुल्हाड़ी, सिर पर टोकरी नंगे सिर और नंगे पाँव, धूल से लिपटे और कीचड़ से रंगे हुए ये बेजबान कवि जब जंगल में लकड़ी काटेंगे तब लकड़ी काटने का शब्द इनके असभ्य स्वरों से मिश्रित होकर वायुयान पर चढ़ दसों दिशाओं में ऐसा अद्भुत गान करेगा कि भविष्य के कलावंतों के लिए वही ध्रुपद और मल्हार का काम देगा। चरखा कातने वाली स्त्रियों के गीत संसार के सभी देशों के कौमी गीत होंगे। मजदूरों की मजदूरी ही यथार्थ पूजा होगी। कलारूपी धर्म की तभी वृद्धि होगी। तभी नए कवि पैदा होंगे, तभी नए औलियों का उद्भव होगा। परंतु ये सब के सब मजदूरी के दूध से पलेंगे। धर्म, योग, शुद्धाचरण, सभ्यता और कविता आदि के फूल इन्हीं मजदूर-ऋषियों के उद्यान में प्रफुल्लित होंगे।

SubQuestion No : 20

Q.20 मनुष्य की चिंतनशीलता क्यों थक गई है?

Ans ✗ A. ज्यादा काम करने से

✗ B. बहुत सोचने से

✗ C. अधिक चिंतन करने से

✔ D. निकम्मा रहने से

Question ID : 1841221976

Section : Discipline1

Q.1 In electrical engineering drawing, the symbol shown in the figure represents which of the following?

Ans ✗ A. Transformer

✗ B. Auto transformer

✗ C. Transformer with tappings

✔ D. Choke

Question ID : 1841221993

Q.2

Identify the drawing instrument shown in the figure?

Ans ✗ A. Protractor

✗ B. Drafter

✔ C. French curve

✗ D. Set square

Question ID : 1841221990

Q.3 Considering adding impurities to semiconductors, what is the abbreviation for 'ppm'?

Ans ✗ A. Parts Per Mass

✗ B. Parts Per Milligram

✓ C. Parts Per Million

✗ D. Parts Per Microgram

Question ID : **1841221999**

Q.4 Which of the following does not have the direct correlation with the resistivity of electrical materials?

Ans ✗ A. Age hardening

✗ B. Temperature

✗ C. Alloying

✓ D. Frequency

Question ID : **1841221995**

Q.5
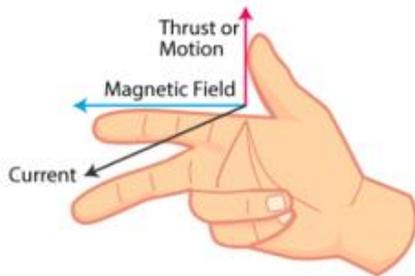
The figure represents which of the following law?

Ans ✗ A. Fleming's left hand rule

✗ B. Right hand curl rule

✗ C. Left hand curl rule

✓ D. Fleming's right hand rule

Question ID : **1841221984**

Q.6 The representative factor is given as 1:24000; what is the meaning of 1:24000 here?

Ans ✗ A. 1 inch on map equals 24000 centimeter on ground

✓ B. 1 centimeter on map equals 24000 centimeter on ground

✗ C. 1 meter on map equals 24000 centimeter on ground

✗ D. 1 millimeter on map equals 24000 centimeter on ground

Question ID : **1841221992**

Q.7
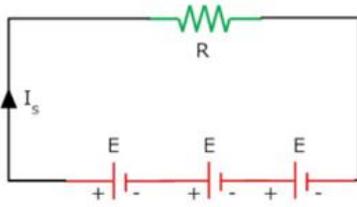
Neglecting internal resistance of the cells, what is the total voltage applied across 'R'?

Ans ✗ A. 2E

✗ B. E

✔ C. 3E

✗ D. 4E

Question ID : 1841221985

Q.8 A 5 H coil is coupled with a 20 H coil. What could be the maximum value of mutual inductance between them considering no flux linkage?

Ans ✗ A. 12.5 H

✗ B. 5 H

✔ C. 10 H

✗ D. 25 H

Question ID : 1841221986

Q.9 $\dfrac{valance\ electrons\ in\ Arsenic}{valance\ electrons\ in\ Phosphorous} = \underline{\hspace{1cm}}$?

Ans ✗ A. 4

✔ B. 1

✗ C. 2

✗ D. 3

Question ID : 1841222000

Q.10 'dielectric constant' is mathematically equal to which of the following?

Ans ✔ A. Relative permittivity

✗ B. Loss factor

✗ C. Polarization

✗ D. Relative permeability

Question ID : 1841221996

Q.11 Find R_N for the following circuit:

Ans ✗ A. 25 Ω

✗ B. 20 Ω

✔ C. 4 Ω

✗ D. 5 Ω
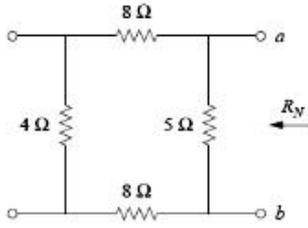
Question ID : **1841221989**

Q.12 For the arrangement shown in figure, calculate dipole moment?
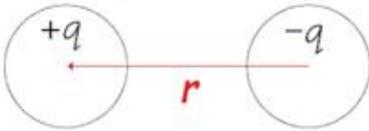
Ans ✗ A. $-qr$

✗ B. $\dfrac{qr}{2}$

✔ C. qr

✗ D. $\dfrac{-qr}{2}$

Question ID : **1841221997**

Q.13 Considering electromagnetic circuits, which of the following is unit less?

Ans ✗ A. Permeance

✗ B. Reluctance

✔ C. Relative permeability

✗ D. Absolute permeability

Question ID : **1841221982**

Q.14
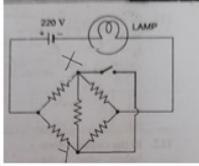
For the circuit shown, if the resistance of each resistor is 100 ohm, then $\frac{potential\ at\ X}{potential\ at\ Y}$ = _____?

Ans ✗ A. 0

✓ B. 1

✗ C. Infinity

✗ D. -1

Question ID : **1841221983**

Q.15 Find current through 8Ω when i_S is 30 A.
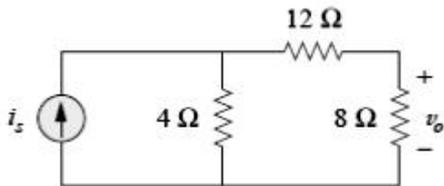
Ans ✗ A. 6 A

✗ B. 3 A

✓ C. 5 A

✗ D. 4 A

Question ID : **1841221988**

Q.16 Which of the following describes relation between susceptance of magnetic material and temperature?

Ans ✗ A. Kelvin's law

✓ B. Curie's law

✗ C. Coulomb's law

✗ D. Ampere's law

Question ID : **1841221998**

Q.17 The length and breadth ratio of a drawing sheet is equal to, which of the following?

Ans ✗ A. $1 : \sqrt{3}$

✓ B. $1 : \sqrt{2}$

✗ C. $1 : 3$

✗ D. $1 : 2$

Question ID : **1841221991**

Q.18 In magnetic circuits, H = _____ per unit length of core.

Ans   ✗ A. Flux density

     ✗ B. Emf

     ✔ C. mmf

     ✗ D. Flux

Question ID : **1841221987**

Q.19 Glass and paper belong to which of the following group of magnetic materials?

Ans   ✗ A. Paramagnetic materials

     ✔ B. Diamagnetic materials

     ✗ C. Ferrimagnetic materials

     ✗ D. Ferromagnetic materials

Question ID : **1841221994**

Q.20
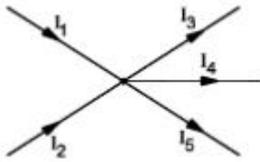
For the circuit shown in figure, calculate, $\dfrac{I_1+I_2}{I_3+I_4+I_5}$ = _____ ?

Ans   ✗ A. 0

     ✔ B. 1

     ✗ C. Infinity

     ✗ D. 2

Question ID : **1841221981**

Section : **Discipline2**

Q.1 Which of the following is the cheapest among others?

Ans   ✔ A. Aluminium

     ✗ B. Copper

     ✗ C. Silver

     ✗ D. Gold

Question ID : **1841222001**

Q.2
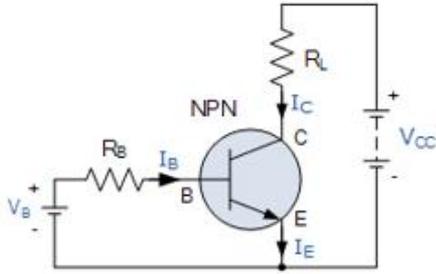
In the circuit shown above, assume silicon diode, then V_{BE} = ?

Ans ✗ A. 0.5 V

   ✓ B. 0.7 V

   ✗ C. 0.3 V

   ✗ D. 0.1 V

Question ID : **1841222003**

Q.3 The total number of ground (GND) pins in 8086 microprocessor is(are) equal to
_____?

Ans ✗ A. 1

   ✗ B. 3

   ✓ C. 2

   ✗ D. 4

Question ID : **1841222016**

Q.4 Find the result of the following binary Arithmetic?

$$11011011$$
$$+\ 00010010$$

Ans ✗ A. 11101111

   ✓ B. 11101101

   ✗ C. 11111101

   ✗ D. 11101100

Question ID : **1841222012**

Q.5
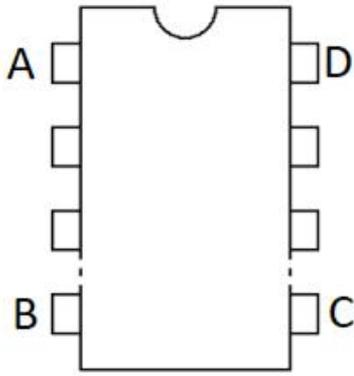
In the above image of IC (integrated chip) identify the pin number 1?

Ans ✗ A. B

✗ B. C

✗ C. D

✔ D. A

Question ID : 1841222013

Q.6
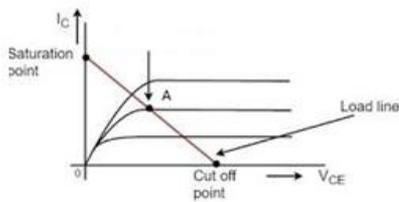
The graph represents characteristics of a BJT, then point A is called _____.

Ans ✗ A. Quadrant point

✔ B. Quiescent point

✗ C. Overhead point

✗ D. Quality point

Question ID : 1841222008

Q.7 In which of the following components of microprocessor 'accumulator' is placed?

Ans ✗ A. Program memory

✔ B. Arithmatic logic unit

✗ C. Control unit

✗ D. Data memory

Question ID : 1841222015

Q.8
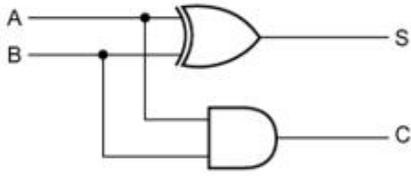
For the circuit shown, find the expression for 's'?

Ans ✔ A. $\bar{A}B + A\bar{B}$

✘ B. $\bar{B}B + A\bar{B}$

✘ C. $\bar{A}B + B\bar{B}$

✘ D. $AB + A$

Question ID : **1841222009**

Q.9 For a transistor biased with fixed-bias method of biasing, if β = 100, find the stability factor.

Ans ✘ A. 110

✘ B. 99

✔ C. 101

✘ D. 100

Question ID : **1841222002**

Q.10

Identify the logic gate shown in the figure?

Ans ✘ A. XNOR

✘ B. NAND

✔ C. NOR

✘ D. XOR

Question ID : **1841222011**

Q.11
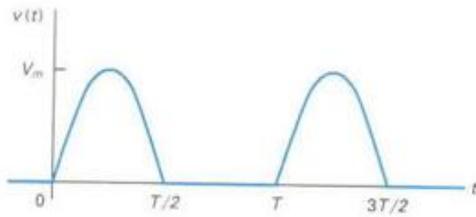
The graph represents the output of a(an) _____.

Ans ✗ A. full wave rectifier with cosine wave as input

✔ B. half wave rectifier with sine wave as input

✗ C. full wave rectifier with sine wave as input

✗ D. half wave rectifier with cosine wave as input

Question ID : **1841222005**

Q.12 A two-way switch technically is called as _____?

Ans ✗ A. DPST

✗ B. TPST

✔ C. SPDT

✗ D. SPST

Question ID : **1841222018**

Q.13
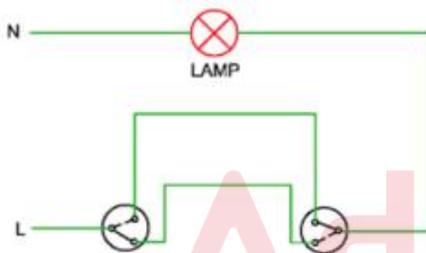
Identify the type of switch used in the circuit diagram shown.

Ans ✔ A. SPDT

✗ B. DPST

✗ C. TPST

✗ D. SPST

Question ID : **1841222019**

Q.14 With usual notations of transistor, identify the correct relation.

Ans ✗ A. $I_c = (\alpha + \beta)I_e$

✗ B. $I_c = \beta I_e$

✔ C. $I_c = \alpha I_e$

✗ D. $I_c = I_e$

Question ID : **1841222007**

Q.15

Identify the wiring component shown in the figure, which is used in small residential building electrical installation.

Ans ✗ A. Socket

✔ B. Ceiling rose

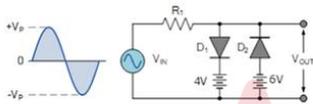✗ C. Batten holder

✗ D. Pendent holder

Question ID : **1841222020**

Q.16
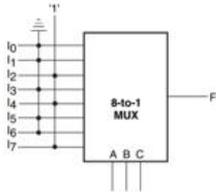
For the multiplexer shown above, the number of selection lines is equal to _____?

Ans ✔ A. 3

✗ B. 2

✗ C. 8

✗ D. 1

Question ID : **1841222010**

Q.17

If diodes are ideal, in the circuit shown above, then determine the maximum value of V_{out}, during positive half of the input signal.

Ans ✗ A. $6\,V$

✗ B. $V_p - 4\,V$

✗ C. $V_p - 6\,V$

✔ D. $4\,V$

Question ID : **1841222004**

Q.18 In case of internal wiring, which of the following is placed between incoming service cable and energy meter?

Ans ✔ A. Cut-out

✗ B. Fuse

✗ C. Main switch

✗ D. Distribution board

Question ID : **1841222017**

Q.19
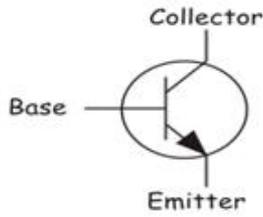
The circuit symbol represents _____

Ans ✔ A. NPN transistor

✘ B. Zener diode

✘ C. PNP transistor

✘ D. PN diode

Question ID : **1841222006**

Q.20 Considering microprocessor, what is 'R' in RISC?

Ans ✘ A. Reliable

✘ B. Restore

✔ C. Reduced

✘ D. Read

Question ID : **1841222014**

Section : **Discipline3**

Q.1 What is VAWT considering wind turbine?

Ans ✘ A. Variable Area Wind Turbine

✘ B. Volt Ampere Wind Turbine

✔ C. Vertical Axis Wind Turbine

✘ D. Variable Axis Wind Turbine

Question ID : **1841222024**

Q.2 Which of the following is used to increase the acting head on the water wheel in a hydro electric power plant?

Ans ✘ A. Surge tank

✘ B. Reservoir

✔ C. Draft tube

✘ D. Penstock

Question ID : **1841222021**

Q.3 With the usual notations, in the equation:

$$Eg = \frac{\Phi ZN}{60} \times \frac{P}{A}$$

Find the ratio of $\frac{P}{A}$, if the DC machine is LAP WOUND.

Ans ✗ A. 4

  ✔ B. 1

  ✗ C. 2

  ✗ D. 3

Question ID : **1841222040**
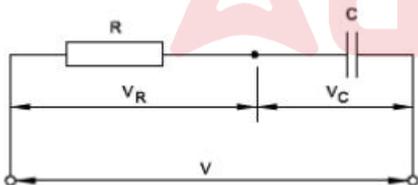
Q.4

4 mho   8 mho

Find the equivalent resistance in ohm in the circuit shown above _____.

Ans

  ✔ A. $\frac{3}{8}$

  ✗ B. 4
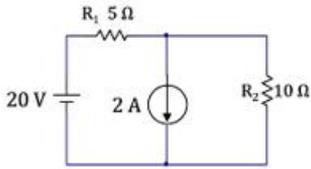
  ✗ C. $\frac{1}{4}$

  ✗ D. 8

Question ID : **1841222035**

Q.5 For the following circuit, $V_R = 12$ V and $V_C = 16$ V. Find the voltage "V":

Ans ✔ A. 20 V

  ✗ B. 25 V

  ✗ C. 30 V

  ✗ D. 15 V

Question ID : **1841222033**

Q.6

The current through 10Ω, when only current source is active in the circuit?

Ans ✓ A. 0.66A

✗ B. 1.33A

✗ C. 1.66A

✗ D. 0A

Question ID : **1841222038**

Q.7 If the supply frequency increases, the inductive reactance will _____ and capacitive reactance will _____.

Ans ✓ A. increase, decrease

✗ B. decrease, decrease

✗ C. decrease, increase

✗ D. increase, increase

Question ID : **1841222032**

Q.8 For any given electrical machine, which of the following equation is TRUE?

Ans ✗ A. Input = losses – output

✗ B. Input = Output – losses

✓ C. Output = Input – losses

✗ D. Output = Input

Question ID : **1841222039**

Q.9 Three capacitors 10 µF,20 µF,30 µF are connected across 150V(sinusoidal). Then identify the correct statement.

Ans ✗ A. Minimum voltage will be applied across 20 µF

✗ B. Maximum voltage will be applied across 20 µF

✓ C. Maximum voltage will be applied across 10 µF

✗ D. Maximum voltage will be applied across 30 µF

Question ID : **1841222034**

Q.10 Which of the following is not an atomic fuel?

Ans ✗ A. Plutonium

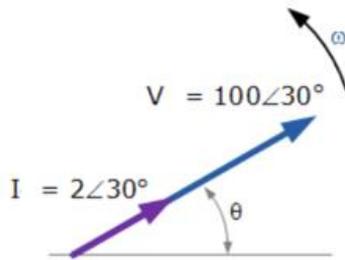✗ B. Uranium

✗ C. Thorium

✓ D. Cadmium

Question ID : **1841222022**

Q.11 A sinusoidal voltage is expressed as: $v(t) = 5\sin(4\pi t - 60)$. The frequency of the signal is:

Ans ✗ A. 4 Hz

✗ B. 25 Hz

✓ C. 2 Hz

✗ D. 50 Hz

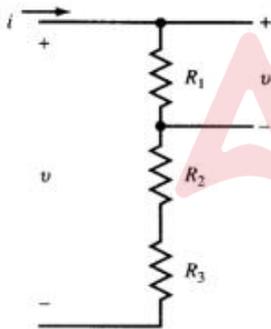Question ID : **1841222030**

Q.12

The phasor diagram shown above represents which of the following circuit?

Ans ✓ A. Pure resistive circuit

✗ B. R-L series circuit

✗ C. Pure inductive circuit

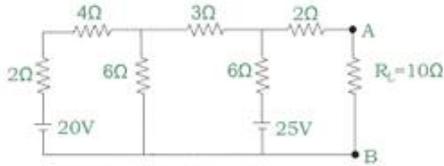✗ D. Pure capacitive circuit

Question ID : **1841222029**

Q.13 Find the voltage $v - v_1$ in the following circuit.

Ans

✗ A. $v\left(\dfrac{R_1}{R_2 + R_3}\right)$

✗ B. $v\left(\dfrac{1}{R_1 + R_2 + R_3}\right)$

✗ C. $v\left(\dfrac{R_1 + R_2 + R_3}{R_1}\right)$

✓ D. $v\left(\dfrac{R_2 + R_3}{R_1 + R_2 + R_3}\right)$

Question ID : **1841222036**

Q.14

The thevenin's resistance as seen through the terminals A and B is:

Ans ✗ A. 6 Ω

✓ B. 5 Ω

✗ C. 4 Ω

✗ D. 7 Ω

Question ID : 1841222037

Q.15 The expression $(0.736/75)$ WQHη (symbols have their usual meaning) represents which of the following power plants?

Ans ✓ A. Hydroelectric power plant

✗ B. Nuclear power plant

✗ C. Thermal power plant

✗ D. Wind power plant

Question ID : 1841222027

Q.16 For which of the following power plant, the initial cost is so high and the mass (quantity) of fuel required per MW of output produced is less?

Ans ✗ A. Gas power plant

✗ B. Steam power plant

✗ C. Diesel power plant

✓ D. Nuclear power plant

Question ID : 1841222023

Q.17 Match List -I with List-II

List-I	List-II
a. Base load	1. nuclear power plant
b. Peak load	2. diesel power plant
	3. gas power plant

Ans ✗ A. 1-a, 2-b, 3-a

✓ B. 1-a, 2-b, 3-b

✗ C. 1-a, 2-a, 3-b

✗ D. 1-b, 2-b, 3-b

Question ID : 1841222028

Q.18 For which of the following power plants the ratio $\dfrac{operating\ cost}{initial\ cost}$ is least?

Ans ✗ A. Thermal power plant

✔ B. Hydro-electric power plant

✗ C. Nuclear power plant

✗ D. Gas power plant

Question ID : 1841222026

Q.19 In a 3-phase circuit, the ratio of the reactive power to active power is _____.

Ans ✗ A. $\cos \Phi$

✗ B. $\cot \Phi$

✗ C. $\sin \Phi$

✔ D. $\tan \Phi$

Question ID : 1841222031

Q.20 Fill the blank here.

1kWh = 860 kCal = _____kJ (kilo Joules).

Ans ✗ A. 36

✗ B. 360

✔ C. 3600

✗ D. 3.6

Question ID : 1841222025

Section : Discipline4

Q.1 Shaded pole motor belongs to which of the following family of motors?

Ans ✗ A. DC motors

✗ B. Three phase induction motors

✗ C. Three phase Synchronous motors

✔ D. Single phase induction motors

Question ID : 1841222043

Q.2 The number of conduction mode(s) of operation of SCR is equal to _____?

Ans ✗ A. 4

✗ B. 1

✗ C. 2

✔ D. 3

Question ID : 1841222050

Q.3 $\dfrac{diameter\ of\ n-layered\ stranded\ conductor}{dimeter\ of\ each\ strand} = \underline{\hspace{1cm}}?$

Ans ✗ A. $3n - 1$

✗ B. $3n + 1$

✓ C. $2n - 1$

✗ D. $2n + 1$

Question ID : **1841222057**

Q.4 Stator of which of the following motors is similar?

Ans ✗ A. Induction motor and DC motor

✓ B. Induction motor and synchronous motor

✗ C. Synchronous motor and DC motor

✗ D. Induction motor and stepper motor

Question ID : **1841222047**

Q.5 For a short-pitched synchronous machine, (distribution factor) × (pitch factor) is _____?

Ans ✗ A. always 0

✗ B. always equal to 1

✓ C. always less than 1

✗ D. always greater than 1

Question ID : **1841222048**

Q.6 State TRUE/FALSE for following statements:

1. A synchronous motor is a doubly excited machine.
2. Rotor poles of synchronous motor are excited by direct current.

Ans ✗ A. False, False

✓ B. True, True

✗ C. False, True

✗ D. True, False

Question ID : **1841222044**

Q.7 Which of the following is referred as TRIGGERING a thyristor?

Ans ✗ A. Turning the SCR from reverse blocking state to forward blocking state

✗ B. Turning the SCR from forward conduction state to forward blocking state

✗ C. Turning the SCR from forward blocking state to reverse blocking state

✓ D. Turning the SCR from forward blocking state to forward conduction state

Question ID : **1841222053**

Q.8 The dimensional symbol LT^{-2} represents which of the following?

Ans ✗ A. Distance

✗ B. Power

✔ C. Acceleration

✗ D. Speed

Question ID : 1841222054

Q.9 MT1, MT2 and GATE are the terminals of which of the following power electronics device?

Ans ✗ A. DIAC

✗ B. SCR

✗ C. GTO

✔ D. TRIAC

Question ID : 1841222052

Q.10 Microphone is used at _____, and loud speaker is used at _____?

Ans ✔ A. transmitting end, receiving end

✗ B. receiving end, transmitting end

✗ C. receiving end, receiving end

✗ D. transmitting end, transmitting end

Question ID : 1841222055

Q.11 The starting torque in a three phase induction motor, will be maximum when, $\frac{rotor\ restistance\ per\ phase}{rotor\ reactance\ per\ phase} = ?$

Ans ✗ A. 0

✔ B. 1

✗ C. -1

✗ D. infinity

Question ID : 1841222045

Q.12 State TRUE / FALSE for the following statements:

1. An indoor sub-station is less expensive than outdoor sub-station.
2. Fault location is easier in an outdoor sub-station than in indoor sub-station.

Ans ✔ A. False, True

✗ B. False, False
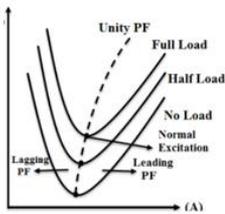
✗ C. True, False

✗ D. True, True

Question ID : 1841222058

Q.13 Which of the following is not a characteristic of a transformer?

Ans ✔ A. Windings are electrically coupled

✘ B. Rugged in construction

✘ C. It has NO moving parts

✘ D. Very high efficiency

Question ID : **1841222041**

Q.14

The graph represents three phase synchronous motor, and it is a plot between which of the following?

Ans ✘ A. Field current and power factor

✘ B. Armature current and power factor

✘ C. Armature current and armature resistance
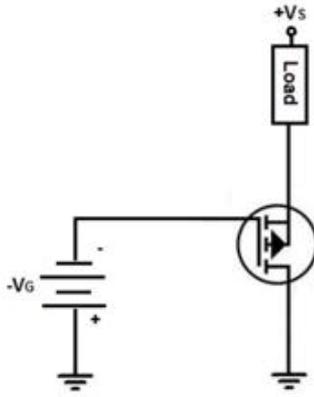
✔ D. Armature current and field current

Question ID : **1841222046**

Q.15 For a thyristor, the ratio $\frac{latching\ current}{holding\ current} = $ _____ ?

Ans ✘ A. Less than 1

✔ B. Greater than 1

✘ C. Equal to 1

✘ D. Equal to 0

Question ID : **1841222051**

Q.16

Identify the terminals of the device shown in the circuit.

Ans ✗ A. Emitter, base, collector

✗ B. Anode, cathode, gate

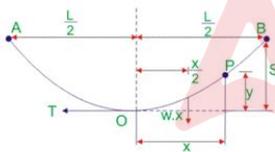✔ C. Drain, source, gate

✗ D. Drain, anode, gate

Question ID : **1841222049**

Q.17 **Which of the following is an electromagnetic transducer?**

Ans ✗ A. Solar cell

✔ B. Generator

✗ C. Fuel cell

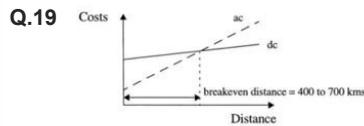✗ D. Thermocouple

Question ID : **1841222056**

Q.18

In the figure shown above, if AOB is the conductor; A and B are points of supports. Then which of the following is expression to calculate sag? (assume all other quantities with usual notations)

Ans

✔ A. $\dfrac{wl^2}{8T}$

✗ B. $\dfrac{wl^2}{2T}$

✗ C. $\dfrac{wl^2}{T}$

✗ D. $\dfrac{wl^2}{4T}$

Question ID : **1841222060**

Q.19

Figure: Relative costs of AC and DC transmission lines vs distance

The graph represents relative costs of AC and DC transmission lines w.r.t distance. Then identify the TRUE statement.

Ans   ✗ A. DC transmission is NOT economical for long distance transmission

✗ B. AC transmission is NOT economical for short to medium distance transmission

✗ C. Both AC and DC transmission are NOT economical for long distance transmission

✓ D. AC transmission is economical for short to medium distance transmission

Question ID : **1841222059**

Q.20 The impedances of primary and secondary transformers are Z_1 and Z_2 respectively, then the ratio $\frac{Z_1}{Z_2} = $ _____ ?

Ans   ✗ A. 1 - Turns ratio

✗ B. Turns ratio

✗ C. 1 + Turns ratio

✓ D. (Turns ratio)^2

Question ID : **1841222042**

Section : **Discipline5**

Q.1 On the basis of physical state lubrcants can be cassiffied into _____ types.

Ans   ✗ A. 1

✗ B. 2

✓ C. 3

✗ D. 4

Question ID : **1841222065**

Q.2 Considering installation of transmission and distribution equipment, what is 'ROW'?

Ans   ✗ A. Red Or White

✗ B. Right Or Wrong

✗ C. Right Of Warning

✓ D. Right Of Way

Question ID : **1841222077**

Q.3 In MCCB, the alphabet 'M' stands for, which of the following?

Ans   ✗ A. Mini

✗ B. Miniature

✗ C. Mono

✓ D. Moulded

Question ID : **1841222066**

Q.4 How many types of circuit breakers are available based on the arc quenching medium used?

Ans ✘ A. 2

✘ B. 5

✘ C. 3

✔ D. 4

Question ID : 1841222067

Q.5 The constant $\dfrac{1}{4\pi\epsilon_0}$; represents which of the following?

Ans ✔ A. Coulomb's constant

✘ B. Joule's constant

✘ C. Planck's constant

✘ D. Faraday's constant

Question ID : 1841222068

Q.6 If $T = \theta^5$; the calculate $\dfrac{dT}{dx} = ?$

Ans ✘ A. $5\theta^4$

✔ B. 0

✘ C. $4\theta^3$

✘ D. 1

Question ID : 1841222074

Q.7 For which of the following type of motor, least maintenance is required?

Ans ✘ A. DC motor

✔ B. Three phase squirrel cage motor

✘ C. Three Phase Synchronous motor

✘ D. Three phase slip ring induction motor

Question ID : 1841222071

Q.8 Due to which of the following combustion of fuels is possible?

Ans ✘ A. Ozone

✔ B. Oxygen

✘ C. Nitrogen

✘ D. Sulphur

Question ID : 1841222064

Q.9 Which of the following is a scalar quantity in engineering mechanics?

Ans ✅ A. Moment of inertia

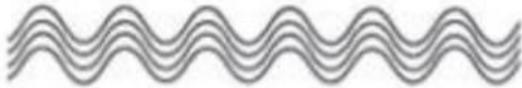❌ B. Displacement

❌ C. Momentum

❌ D. Force

Question ID : **1841222078**

Q.10 With usual notations, the energy stored in a capacitor is given by the expression, $E = XQV$. Then what is the value of 'X' here?

Ans ❌ A. 1

❌ B. 2

✅ C. 0.5

❌ D. 1.5

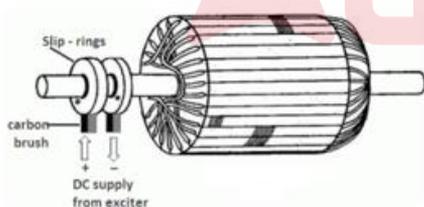Question ID : **1841222069**

Q.11

The figure represents, which of the following important property of LASER.

Ans ✅ A. Coherence

❌ B. Monochromacity

❌ C. Divergence

❌ D. Irradiance

Question ID : **1841222070**

Q.12 The rotor shown in the figure represent which of the following machine?

Ans ❌ A. Three phase induction generator

✅ B. Three phase synchronous generator

❌ C. Shaded pole motor

❌ D. DC shunt generator

Question ID : **1841222072**

Q.13 If $f(x) = e^{kx}$; then find the indefinite integral of $f(x)$?

Ans

✔ A. $\dfrac{1}{k} e^{kx} + c$

✘ B. $e^x + c$

✘ C. $-e^{-x} + c$

✘ D. $\dfrac{1}{k} \sin kx + c$

Question ID : **1841222073**

Q.14 Which of the following is the complex conjugate of $-2 + 3i$?

Ans

✘ A. $3 + 2i$

✔ B. $-2 - 3i$

✘ C. $2 + 3i$

✘ D. $2 - 3i$

Question ID : **1841222075**

Q.15 Which of the following effect is NOT related to transmission of electrical power/overhead transmission?

Ans

✔ A. Stroboscopic effect

✘ B. Ferranti effect

✘ C. Skin effect

✘ D. Proximity effect

Question ID : **1841222061**

Q.16

$$\frac{A}{\sin \alpha} = \frac{B}{\sin \beta} = \frac{C}{\sin \gamma}$$

Above equation represents which of the following?

Ans

✘ A. Equilibrium law

✘ B. Lambert's law

✔ C. Lami's theorem

✘ D. Law of superposition

Question ID : **1841222080**

Q.17 Identify the type of insulator shown in the figure below.

Ans ✅ A. Guy insulator

❌ B. Disc insulator

❌ C. Shackle insulator

❌ D. Pin insulator

Question ID : **1841222076**

Q.18 Which of the following is the inner most part of an underground cable?

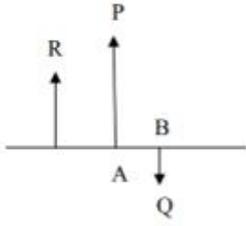**Ans** ❌ A. Serving

✅ B. Conductor

❌ C. Armouring

❌ D. Insulation

Question ID : **1841222062**

Q.19 Which of the following measuring unit does not belong to volumetric analysis?

Ans ❌ A. $(meter)^3$

✅ B. Gram

❌ C. Litre

❌ D. Milli Litre

Question ID : **1841222063**

Q.20

The resultant of unlike parallel forces, R = ?

Ans   ✔ A. $P - Q$

✖ B. $Q - P$

✖ C. $(P)(Q)$

✖ D. $P + Q$

Question ID : **1841222079**