डेडीकेटेड फ्रेट कोरीडोर

Dedicated Freight Corridor Corporation of India Ltd.
(A Government of India Enterprises)
5th Floor, Pragati Maidan, Metro Station Building Complex, New Delhi- 110001
Corporate Identity Number U60232DL2006GOI155068 Web:
www.dfccil.gov.in

No. 2019/HQ/Admin/RTI-315

New Delhi: 20.05.2019

Sh. Santosh Kumar Padhy
Karnataka

Subject: Providing information w.r.t. Original Application received under the RTI Act.2005.

Reference: Your RTI Application dated 21.04.19 received through DOPT.

Information i. r. o. your above RTI application as received is attached.

Appellate Authority's name and address are as under;

Shri Satish Kothari, GGM/Administration DFCCIL,
5th Floor, Pragati Maidan Metro Station Building, New Delhi-110001.

S.K.PANDA)
Dy. G.M/Admn.(PIO)
***E*-mail: skpanda@dfcc.co.in**
9717636811

DA: 25 sheets.

Note

No. 2019/HQ/HR-1/(ii)/RTI/Pt.(201900084) **Dated: 20.05.2019**

Sub: Application of Shri Santosh Kumar Padhy, R/o Karnataka, under RTI Act-2005.

Reply to RTI No. 315

S. N	Information Sought For:	Proposed Reply/Remarks
I was appeared written exam Advt. No. 11/2018 for the post of Junior Executive/S&T (post code-430. Date 13.11.2018. Roll no. 15008080027, category Ex-serviceman. Details of information required.		
1.	As per answer key released by DFCCIL above mentioned exam marks obtained by me is 63 marks out of 120 after deducted the negative marking. But in score card given to me by DFCCIL (HR) is only 59.75 and rank in combined merit list is 30 number. For this further clarify I have attached the response answer key which was given to me after completion of exam. Please intimate me after review my answer sheet so that I will get my actual obtained marks.	The final response sheet is attached.
2.	As per score card rank given to me overall is 30 number and number of vacancy category as per cut off marks displayed above my marks obtained is more than 30 numbers candidates, so it is further indicating that my marks is little higher to get the 30 number rank in overall, please give clarify after review answer sheet and merit list.	Result has been prepared keeping in view the vacancy position, merit position of the candidates and category wise reservation points.
3.	Provide list the names, ex-serviceman category and marks short listed.	Information sought does not cover section 8(j) of RTI Act 2005.
4.	Provide information regarding all 06 vacancy reserved for ex-serviceman above post 43 are given to Ex-serviceman candidates only with name and marks. To the best of my belief the details sought fall within your authority. Please provide me this information sought does not fall with in restriction contained in section 8 and 9 of RTI Act.	Information sought is not clear.

AM/HR

DGM/HR 20/05/19

DGM/Admin (PIO)

Dedicated Freight Corridor Corporation of India Ltd.
A Government of India (Ministry of Railways) Enterprise

Participant ID	15008080027
Participant Name	SANTOSH KUMAR PADHY
Test Center Name	iON Digital Zone iDZ Thigalarapalya Main Road
Test Date	13/11/2018
Test Time	12:30 PM - 2:30 PM
Subject	JUNIOR EXECUTIVE (GRADE III) SIGNAL & TELECOMMUNICATION

Section : General Knowledge

Q.1 Select the battle fought between Robert Clive and Sirajuddaulah in 1757:

Ans
✔ 1. Battle of Plassey
✗ 2. Battle of Buxar
✗ 3. Battle of Kaveripauk
✗ 4. Battle of Haldighati

Question ID : 1860452347
Status : Answered
Chosen Option : 3

Q.2 Who became the Deputy Chairman of the Rajya Sabha after S.V Krishnamoorthy Rao?

Ans
✗ 1. Godey Murahari
✗ 2. Ram Niwas Mirdha
✗ 3. Shyamlal Yadav
✔ 4. Violet Alva

Question ID : 1860452351
Status : Not Answered
Chosen Option : --

Q.3 Who is the only female to have ruled the Delhi Sultanate?

Ans
✗ 1. Qutub Begum
✔ 2. Razia Sultana
✗ 3. Jahanara Begum
✗ 4. Mehrunisa

Question ID : 1860452346
Status : Answered
Chosen Option : 2

Q.4 Which of the following leaders won the Presidential Election of Maldives in 2018?

Ans
✗ 1. Mohammed Waheed Hassan
✗ 2. Abdulla Yameen
✔ 3. Ibrahim Mohamed Solih
✗ 4. Mohamed Nasheed

Question ID : 1860452354
Status : Answered

Chosen Option : 3

Q.5 Along with Edward Lutyens who else was the Architect of New Delhi and Shahjahanabad?

Ans
✗ 1. George V, Emperor II
✗ 2. Lord Irwine
✔ 3. Herbert Baker
✗ 4. Charles Correa

Question ID : 1860452348
Status : Answered
Chosen Option : 1

Q.6 Which among the following is the traditional Indian dance form native to Assam?

Ans
✗ 1. Saang
✗ 2. Dumhal
✗ 3. Sirmour Nati
✔ 4. Sattriya

Question ID : 1860452349
Status : Answered
Chosen Option : 4

Q.7 Which of the following states has the lowest per capita income in India?

Ans
✗ 1. Assam
✔ 2. Bihar
✗ 3. Jharkhand
✗ 4. Uttar Pradesh

Question ID : 1860452355
Status : Answered
Chosen Option : 3

Q.8 The arteries divide into smaller vessels. On reaching the tissues, they divide further into extremely thin tubes called:

Ans
✔ 1. Capillaries
✗ 2. Veins
✗ 3. Venules
✗ 4. Arteriole

Question ID : 1860452357
Status : Answered
Chosen Option : 1

Q.9 Khasi is the official language of which of the following states?

Ans
✗ 1. Manipur
✗ 2. Nagaland
✗ 3. Mizoram
✔ 4. Meghalaya

Question ID : 1860452350
Status : Answered
Chosen Option : 2

Q.10 _____ has the power to grant pardons under _____ of the Constitution of India.

Ans
✗ 1. The Chief Justice of India; Article 93
✗ 2. The President; Article 52
✔ 3. The President; Article 72

✗ 4. The Chief Justice of India; Article 98

Question ID : 1860452352
Status : Answered
Chosen Option : 3

Q.1 In the cell, the food (glucose) is broken down into Carbon dioxide and water using Oxygen. Food can also be broken down, without using Oxygen. This is called:

Ans
✗ 1. Cellular respiration
✗ 2. Capillary respiration
✗ 3. Aerobic respiration
✔ 4. Anaerobic respiration

Question ID : 1860452356
Status : Answered
Chosen Option : 4

Q.1 2 Which of the following Articles of the Constitution of India deals with amendment of the Constitution?

Ans
✗ 1. Article 323
✗ 2. Article 265
✗ 3. Article 292
✔ 4. Article 368

Question ID : 1860452353
Status : Answered
Chosen Option : 3

Section : Arithmetic

Q.1 Sudha can row a certain distance downstream in 6 hours and return to the starting point in 9 hours. If the stream flows at 3 km/h, then how much time (in hours) will she take to cover a distance of 67.5 km in still water?

Ans
✔ 1. 4.5
✗ 2. 4
✗ 3. 5.5
✗ 4. 5

Question ID : 1860452368
Status : Not Answered.
Chosen Option : --

Q.2 A certain sum is lent at 16% p.a. compound interest, which is compounded quarterly. What will be the effective rate of interest per annum (correct to two decimal places)?

Ans
✔ 1. 16.99%
✗ 2. 16.72%
✗ 3. 16.56%
✗ 4. 16.52%

Question ID : 1860452363
Status : Not Answered
Chosen Option : --

Q.3 A wire was in the form of a circle of diameter 63 cm. From this wire, a rectangle is formed where the length and breadth are in the ratio of 7 : 4. What will be the area (in cm^2) of this rectangle (take $\pi = \frac{22}{7}$).

Ans
✔ 1. 2268
✗ 2. 2240
✗ 3. 2187
✗ 4. 1988

Question ID : 1860452366
Status : Not Answered
Chosen Option : --

Q.4 A man travels for 3 hours at 40 km/h and 4.5 hours at 60 km/h. Then, he finds out that he has covered 60% of the total distance he had to cover. At what average speed (in km/h) should he travel to cover the remaining distance in 3 $\frac{1}{4}$ hours?

Ans
✗ 1. 75
✓ 2. 80
✗ 3. 72
✗ 4. 84

Question ID : 1860452369
Status : Not Answered
Chosen Option : --

Q.5 Let x be the least number nearest to 100000 that can be exactly divided by 2, 3, 4, 5, 6 and 7. When x is divided by the sum (2 + 3 + 4 + 5 + 6 + 7), then the quotient will be:

Ans
✓ 1. 3702
✗ 2. 3701
✗ 3. 3717
✗ 4. 3711

Question ID : 1860452359
Status : Not Answered
Chosen Option : --

Q.6 The price of an article is first increased by 25% and then again increased by 25%. The resulting price is now decreased by 50%. What is the net change in the price of the article?

Ans
✗ 1. No change
✗ 2. 22.255% decrease
✗ 3. 21.125% increase
✓ 4. 21.875% decrease

Question ID : 1860452360
Status : Not Answered
Chosen Option : --

Q.7 The compound interest on a sum of ₹18,000 at a rate of 10% per annum for a certain period is ₹3,780. What will the simple interest on the same sum at the same rate for double the period?

Ans
✗ 1. ₹7,500
✗ 2. ₹6,800
✓ 3. ₹7,200
✗ 4. ₹7,000

Question ID : 1860452362
Status : Not Answered
Chosen Option : --

Q.8 Surbhi sold her bag at a loss of 6%. Had she sold it for ₹42 more, she would have made a profit of 8%. Had she sold it for ₹325, the profit would have been:

Ans
✓ 1. $8\frac{1}{3}\%$
✗ 2. $6\frac{1}{2}\%$
✗ 3. $8\frac{2}{3}\%$
✗ 4. $5\frac{1}{2}\%$

Question ID : 1860452361
Status : Not Answered
Chosen Option : --

Q.9 A can complete a piece of work in 18 days, B in 20 days and C in 30 days. B and C together started the work but had to leave the work after 4 days. The number of days in which A can complete the remaining work is:

Ans
✗ 1. 16

✗ 2. 8
✗ 3. 6
✔ 4. 12

Question ID : 1860452367
Status : Not Answered
Chosen Option : --

Q.10 The ratio of the incomes of A and B is 2 : 3, and the ratio of their expenditures is 3 : 5. If each of them saves ₹2,000, then the income of A is:

Ans
✗ 1. ₹10,000
✗ 2. ₹16,000
✔ 3. ₹8,000
✗ 4. ₹12,000

Question ID : 1860452365
Status : Not Answered
Chosen Option : --

Q.11 A sum of ₹1,46,410 is divided among A, B, C, D and E in the ratio of $2\frac{1}{2} : 3\frac{1}{2} : 4\frac{1}{6} : 1\frac{1}{2}$. What is the difference between the shares of B and D?

Ans
✗ 1. ₹5,324
✗ 2. ₹13,310
✗ 3. ₹10,648
✔ 4. ₹7,986

Question ID : 1860452364
Status : Not Answered
Chosen Option : --

Q.12 The value of $\frac{9\div[0.5+0.1+\{0.8\div(0.2\times0.1)\}]}{3-[1.2\div\{0.8\ of\ (1.7+2-2.5)\}]}$ lies between:

Ans
✗ 1. 0.09 and 0.1
✔ 2. 0.08 and 0.09
✗ 3. 0.1 and 0.11
✗ 4. 0.07 and 0.08

Question ID : 1860452358
Status : Not Answered
Chosen Option : --

Section : General Aptitude Reasoning

Q.1 Shashank's house faces South. He leaves from the back gate of his house and walks 18 m. Then he turns right and walks 28 m. Then he turns right and walks 35 m. Then he turns left and walks 12 m. He then turns left and walks 17 m. How many metres away is he from the original position?

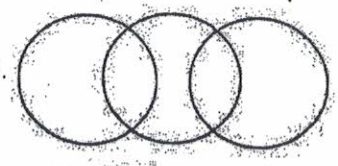
Ans
✗ 1. 30 m
✗ 2. 24 m
✗ 3. 17 m
✔ 4. 40 m

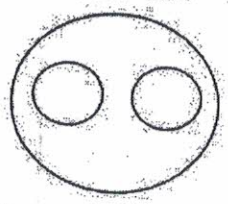
Question ID : 1860452385
Status : Not Answered
Chosen Option : --

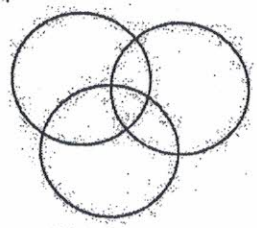
Q.2 Which of the Venn diagrams correctly represents the following classes:

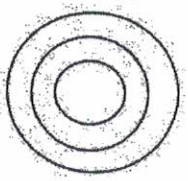
SCIENCE, BIOLOGY, BOTANY

Ans

✗ 1. 

✗ 2. 

✗ 3. 

✔ 4. 

Question ID : **1860452384**
Status : **Not Answered**
Chosen Option : **--**

Q.3 XYZ Ltd. is a small organization with eight employees. In order to have no interruptions in service to its clients, the H. R department has planned a split Lunch schedule for its employees - 'P, Q, R, S, T, U, V and W'. There are only two slots 1.00 PM to 1.30 PM and 1.30 PM to 2.00 PM and with the following conditions:

(a) Due to limitation of dining space, one slot can accommodate maximum five and minimum four employees.
(b) 'P' and 'S' will eat together. 'W' is not in the same slot.
(c) 'Q' and 'R' can't have the lunch at the same time as 'S'.
(d) 'U' cannot have lunch along with 'V' but can have it with 'P' and 'T'.

If V and W are having lunch at 1.30 pm slot, who are other people at the dining table?

Ans
✗ 1. Q and S
✗ 2. R and S
✔ 3. Q and R
✗ 4. V and P

Question ID : **1860452382**
Status : **Not Answered**
Chosen Option : **--**

Q.4 How many days will there be from 24th January, 2016, to 13th May, 2016 (both days included)?

Ans
✗ 1. 109
✔ 2. 111
✗ 3. 110
✗ 4. 112

Question ID : **1860452381**
Status : **Not Answered**
Chosen Option : **--**

Q.5 Select the option that is related to the third term in the same way as the second term is related to the first term.

EDBF : GCEF : : VYXW : ?

Ans
✔ 1. XYZW
✗ 2. XYVZ
✗ 3. YXZV
✗ 4. VYXZ

Question ID : 1860452371
Status : Not Answered
Chosen Option : --

Q.6 Consider the given statements to be true and decide which of the conclusions logically follow(s) from the statements.

Statements:
1. All cooks are drivers.
2. No driver is a gardener.
Conclusions:
I. No cook is a gardener.
II. Some drivers are cooks.

Ans
✗ 1. Neither Conclusion I nor II follows.
✗ 2. Only conclusion I follows.
✗ 3. Only conclusion II follows.
✔ 4. Both conclusions follow.

Question ID : 1860452374
Status : Not Answered
Chosen Option : --

Q.7 In a certain code language 'LOAD' is written as '3214' and 'LADS' is written as '4215', then, what will be the code of 'S' in the same code language?

Ans
✗ 1. 2
✗ 2. 4
✗ 3. 1
✔ 4. 5

Question ID : 1860452379
Status : Not Answered
Chosen Option : --

Q.8 Sarah is 75 m southeast of Vicky. Adrian is 75 km southwest of Vicky. Then, Sarah is in which direction of Adrian?

Ans
✗ 1. West
✗ 2. South
✗ 3. North
✔ 4. East

Question ID : 1860452376
Status : Not Answered
Chosen Option : --

Q.9 Which one set of letters when sequentially placed at the gaps in the given letter series will complete it?

b_dc_efd_f_be_ghi

Ans
✗ 1. cdefg
✔ 2. cdegf
✗ 3. bcdef
✗ 4. cedgf

Question ID : 1860452372
Status : Not Answered
Chosen Option : --

Q.10 In the given series, how many times does the number '5' appear after '9' but is not followed by '7'?

9, 6, 9, 5, 3, 5, 9, 5, 7, 3, 7, 5, 9, 5, 1, 7, 6, 5, 3, 7, 9, 5, 6, 3, 7, 9, 8, 3, 7, 8

Ans
✗ 1. Once
✔ 2. Thrice
✗ 3. Four times
✗ 4. Twice

Question ID : 1860452373
Status : Not Answered

Chosen Option : --

Q.1 1 Consider the given question and decide which of the following statements is sufficient to answer the question given below.

Question:

What was the volume of sales for last month of a company making only LED bulbs?

Statements:

1. Last month, the company sold 5000 units of bulbs at the rate of ₹ 125 per bulb.
2. Company's annual turnover is ₹ 50 Crores.

Ans
✗ 1. Both statements are needed.
✗ 2. Statement 2 alone is sufficient.
✗ 3. Neither statement is needed.
✔ 4. Statement 1 alone is sufficient.

Question ID : 1860452377
Status : Not Answered
Chosen Option : --

Q.1 2 If the letters of Beautiful are arranged alphabetically then which letter would be the last letter?

Ans
✗ 1. T
✗ 2. L
✗ 3. F
✔ 4. U

Question ID : 1860452387
Status : Not Answered
Chosen Option : --

Q.1 3 Select the option which is different from the other three responses.

Ans
✔ 1. 338
✗ 2. 428
✗ 3. 224
✗ 4. 236

Question ID : 1860452370
Status : Not Answered
Chosen Option : --

Q.1 4 XYZ Ltd. is a small organization with eight employees. In order to have no interruptions in service to the clients, the H R department has planned a split Lunch schedule for the employees – 'P, Q, R, S, T, U, V and W'. There are only two slots 1.00 PM to 1.30 PM and 1.30 PM to 2.00 PM with the following conditions:

a) Due to limitation of dining space, one slot can accommodate maximum five and minimum four employees.
b) 'P' and 'S' will eat together. 'W' is not in the same slot.
c) 'Q' and 'R' can't have the lunch at the same time as 'S'.
d) 'U' cannot have lunch along with 'V' but can have it with 'P' and 'T'.

If P and S are at lunch together, who else will be eating with them?

Ans
✔ 1. U, T
✗ 2. Q, V
✗ 3. R, V
✗ 4. T, V

Question ID : 1860452383
Status : Not Answered
Chosen Option : --

Q.1 5 Select the correct equation after interchanging operators and numbers as given below.

x and =; 2 and 5

Ans
✗ 1. $5+1=2\times3$
✗ 2. $3\times5=1+2$
✔ 3. $3+5\times1=2$
✗ 4. $3\times5+1=2$

Question ID : 1860452378
Status : Not Answered
Chosen Option : --

Q.16 Which of the following does a restaurant always has?

Ans
✗ 1. Music
✗ 2. Table
✗ 3. Building
✔ 4. Food

Question ID : 1860452380
Status : Not Answered
Chosen Option : --

Q.17 In the following equation, two signs need to be interchanged to make it correct. Choose the signs from the given alternatives.

$3 \times 5 + 3 - 18 \div 3 = 12$

Ans
✗ 1. × and −
✗ 2. × and −
✔ 3. × and +
✗ 4. ÷ and +

Question ID : 1860452386
Status : Not Answered
Chosen Option : --

Q.18 Swati ranks 15th in a class of 35 students. What is her rank from the last?

Ans
✗ 1. 22nd
✗ 2. 20th
✔ 3. 21st
✗ 4. 15th

Question ID : 1860452375
Status : Not Answered
Chosen Option : --

Section : General Science

Q.1 The process of cell division by which most of the body cells divide for growth is called:

Ans
✗ 1. meiosis
✗ 2. fusion
✗ 3. fission
✔ 4. mitosis

Question ID : 1860452390
Status : Answered
Chosen Option : 1

Q.2 Which property determines if an object will float or sink in a fluid?

Ans
✗ 1. Surface area
✔ 2. Density relative to fluid
✗ 3. Mass
✗ 4. Volume

Question ID : 1860452393
Status : Answered
Chosen Option : 2

Q.3 Which of the following harmful radiations from sun are absorbed by the ozone layer?

Ans
✗ 1. UV-A
✓ 2. UV-B
✗ 3. Microwaves
✗ 4. X-rays

Question ID : 1860452397
Status : Answered
Chosen Option : 1

Q.4 The term rancidity is used for the deterioration of which food component?

Ans
✗ 1. Carbohydrates
✗ 2. Vitamins
✓ 3. Fats
✗ 4. Proteins

Question ID : 1860452400
Status : Answered
Chosen Option : 3

Q.5 Deforestation results in:

Ans
✗ 1. increase in the water table
✗ 2. decrease in soil erosion
✓ 3. loss of biodiversity
✗ 4. increase in rainfall

Question ID : 1860452405
Status : Answered
Chosen Option : 3

Q.6 Which of the following methods can be used for separating a mixture of two miscible liquids?

Ans
✓ 1. Distillation
✗ 2. Centrifugation
✗ 3. Chromatography
✗ 4. Sublimation

Question ID : 1860452388
Status : Answered
Chosen Option : 1

Q.7 Protium, deuterium and tritium are _____ of hydrogen.

Ans
✗ 1. isotypes
✗ 2. isobars
✓ 3. isotopes
✗ 4. idiotypes

Question ID : 1860452389
Status : Answered
Chosen Option : 2

Q.8 Geothermal energy is NOT used in:

Ans
✗ 1. generating electricity
✓ 2. running vehicles
✗ 3. heat pumps
✗ 4. the heating system of buildings

Question ID : 1860452398
Status : Not Answered
Chosen Option : --

Q.9 SONAR is a device to measure the distance, direction and speed of underwater objects. It uses:

Ans
✔ 1. ultrasonic waves
✘ 2. microwaves
✘ 3. radio waves
✘ 4. infrasonic waves

Question ID : 1860452395
Status : Answered
Chosen Option : 1

Q.10 Which of the following is NOT a connective tissue?

Ans
✘ 1. Blood
✘ 2. Cartilage
✔ 3. Skin
✘ 4. Bone

Question ID : 1860452391
Status : Answered
Chosen Option : 2

Q.11 What is the acceleration of a bus that increases its speed from 60 m/s to 100 m/s in 5 s?

Ans
✔ 1. 8 m/s^2
✘ 2. 30 m/s^2
✘ 3. 80 m/s^2
✘ 4. 32 m/s^2

Question ID : 1860452392
Status : Answered
Chosen Option : 1

Q.12 Which of the following metals has the lowest electrical resistivity?

Ans
✘ 1. Copper
✘ 2. Tungsten
✘ 3. Aluminium
✔ 4. Silver

Question ID : 1860452404
Status : Answered
Chosen Option : 4

Q.13 The 22 carat gold used in making ornaments actually is:

Ans
✘ 1. an amalgam
✘ 2. oxidised gold
✔ 3. an alloy
✘ 4. pure gold

Question ID : 1860452401
Status : Answered
Chosen Option : 3

Q.14 The process in which milk curdles due to the conversion of milk sugar (lactose) into lactic acid is called:

Ans
✔ 1. fermentation
✗ 2. displacement reaction
✗ 3. oxidation
✗ 4. reduction

Question ID : 1860452402
Status : Answered
Chosen Option : 1

Q.15 The ozone layer is depleting due to the excessive use of:

Ans
✗ 1. petrol
✗ 2. diesel
✔ 3. refrigerants
✗ 4. fertilizers

Question ID : 1860452399
Status : Answered
Chosen Option : 4

Q.16 Which of the following activities shows the maximum amount of work done?

Ans
✗ 1. A man standing with a load on his head
✔ 2. Climbing up a tall tree
✗ 3. A green plant carrying out photosynthesis
✗ 4. Reading and memorising for exams

Question ID : 1860452394
Status : Answered
Chosen Option : 3

Q.17 Plasmodia reproduce by which of the following modes of reproduction?

Ans
✔ 1. Multiple fission
✗ 2. Budding
✗ 3. Binary fission
✗ 4. Fragmentation

Question ID : 1860452403
Status : Not Answered
Chosen Option : --

Q.18 Immunisation is unavailable against:

Ans
✗ 1. smallpox
✗ 2. polio
✗ 3. diphtheria
✔ 4. asthma

Question ID : 1860452396
Status : Answered
Chosen Option : 4

Section : Electronic Measurements and Instrumentation

Q.1 The S-R latch is an example of:

Ans
✗ 1. One-clock delay element
✗ 2. Combinatorial circuit

✔ 3. One-bit memory element

✘ 4. Synchronous sequential circuit

Question ID : 1860452409
Status : Answered
Chosen Option : 3

Q.2 A 4 bit digital word (D) is used to represent an analog signal that varies from 0 V to 15 V. The digital word D corresponding to 7 V will be:

Ans
✔ 1. 0111
✘ 2. 0010
✘ 3. 0110
✘ 4. 0001

Question ID : 1860452406
Status : Answered
Chosen Option : 1

Q.3 A fan in a room has 2 switches. The fan can be turned on by any one of the switches irrespective of the state of other switch. The logic for the set of switches is equivalent to:

Ans
✘ 1. NAND Gate
✘ 2. XNOR Gate
✘ 3. NOR Gate
✔ 4. XOR Gate

Question ID : 1860452408
Status : Answered
Chosen Option : 4

Q.4 The bandgap of Si at 300 k is:

Ans
✔ 1. 1.12 eV
✘ 2. 1.36 eV
✘ 3. 0.53 eV
✘ 4. 0.80 eV

Question ID : 1860452415
Status : Answered
Chosen Option : 1

Q.5 A logic family shows the following values:

VOH = 5 V, VOL = 1 V, VIH = 3 V, and VIL = 2 V.
The noise margins, NMH and NML, respectively, will be:

Ans
✘ 1. 5 V and 1 V
✔ 2. 2 V and 1 V
✘ 3. 2 V and 4 V
✘ 4. 3 V and 1 V

Question ID : 1860452412
Status : Answered
Chosen Option : 2

Q.6 N-type silicon is obtained by doping silicon with:

Ans
✘ 1. Germanium
✘ 2. Boron
✘ 3. Aluminum
✔ 4. Phosphorus

Question ID : 1860452414
Status : Answered

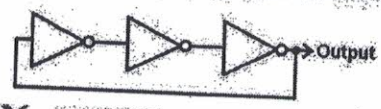
Chosen Option : 4

Q.7 A 4 bit serial in parallel out shift register is initially set to 1111. The data 1010 is applied to the input. After 3 clock cycles, the output will be:

Ans
✗ 1. 1100
✗ 2. 1010
✔ 3. 0101
✗ 4. 1011

Question ID : 1860452413
Status : Answered
Chosen Option : 3

Q.8 What will be the fundamental frequency for the following circuit if each inverter delay is 100 nsec?



Ans
✗ 1. 0.5 GHz
✗ 2. 1 GHz
✔ 3. 1.67 MHz
✗ 4. 3.34 MHz

Question ID : 1860452407
Status : Marked For Review
Chosen Option : 3

Q.9 Three T flip flops are connected to form a counter. The maximum stages possible for the counter will be:

Ans
✗ 1. 7
✗ 2. 5
✔ 3. 8
✗ 4. 3

Question ID : 1860452410
Status : Answered
Chosen Option : 3

Q.10 The Gray code equivalent of number 14 will be:

Ans
✗ 1. 1110
✔ 2. 1001
✗ 3. 1000
✗ 4. 1111

Question ID : 1860452411
Status : Answered
Chosen Option : 1

Section : Analog and Digital Circuits

Q.1 In a positive feedback control system, the feedback signal is _____ with respect to the input signal.

Ans
✗ 1. leading by 90°
✔ 2. in phase
✗ 3. out of phase
✗ 4. lagging by 90°

Question ID : 1860452420
Status : Answered
Chosen Option : 2

Q.2 RISC stands for:

Ans

✔ 1. Reduced Instruction Set Computer
✘ 2. Remaining Instruction Set Computer
✘ 3. Remaining Intermediate Storage of Computer
✘ 4. Reduced Intermediate Storage of Computer

Question ID : 1860452422
Status : Answered
Chosen Option : 1

Q.3 Bootstrap loader code is the:

Ans
✘ 1. Last code of any instruction
✘ 2. Can happen anytime in the set of instructions
✔ 3. First code when a machine initializes
✘ 4. Intermediate code in the set of instructions

Question ID : 1860452424
Status : Answered
Chosen Option : 1

Q.4 Circuit used to shift the DC level of the input signal is:

Ans
✘ 1. Rectifier
✘ 2. Amplifier
✔ 3. Clamper
✘ 4. Clipper

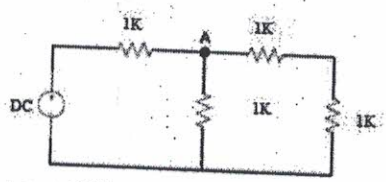
Question ID : 1860452416
Status : Answered
Chosen Option : 3

Q.5 BCD equivalent of $(345)_{10}$ is:

Ans
✘ 1. 0101 1100 1001
✘ 2. 1001 1001 1111
✘ 3. 0011 1001 1010
✔ 4. 0011 0100 0101

Question ID : 1860452423
Status : Answered
Chosen Option : 4

Q.6 What does the point A in the below circuit represent?



Ans
✘ 1. Voltage source
✘ 2. Ammeter
✘ 3. Delay element
✔ 4. Junction and a node

Question ID : 1860452425
Status : Answered
Chosen Option : 4

Q.7 The Ebers moll model is applicable to:

Ans
✗ 1. JFET
✔ 2. Bipolar Junction Transistor
✗ 3. MOSFET
✗ 4. Zener Diode

Question ID : 1860452417
Status : Answered
Chosen Option : 4

Q.8 The valence band and conduction band for a semiconductor is:

Ans
✗ 1. Can't say
✔ 2. Nearer to Fermi Level
✗ 3. Far apart from each other
✗ 4. Overlapping

Question ID : 1860452421
Status : Answered
Chosen Option : 2

Q.9 Which of the following is not a standard input test signal?

Ans
✗ 1. Impulse signal
✗ 2. Ramp signal
✔ 3. Speech Signal
✗ 4. Step signal

Question ID : 1860452419
Status : Answered
Chosen Option : 3

Q.10 An amplifier has voltage gain and current gain of 10 and 100 respectively. The voltage, current and power gain in decibels, respectively, will be:

Ans
✗ 1. 12, 16 and 20 dB
✔ 2. 20, 40 and 30 dB
✗ 3. 40, 60 and 50 dB
✗ 4. 10, 100 and 1000 dB

Question ID : 1860452418
Status : Answered
Chosen Option : 4

Section : Analog and Digital Communication Systems

Q.1 If the frequency of the signal is 1 MHz, the minimum height of the transmitting antenna should be:

Ans
✔ 1. 75 m
✗ 2. 70 m
✗ 3. 50 m
✗ 4. 72.5 m

Question ID : 1860452430
Status : Answered
Chosen Option : 1

Q.2 The frequency of the carrier wave is _____ as compared to the frequency of the modulating signal.

Ans
✗ 1. Null
✔ 2. Higher
✗ 3. Equal
✗ 4. Lower

Question ID : 1860452431
Status : Answered
Chosen Option : 2

Q.3 The modulation technique in which frequency of the carrier wave is changed with respect to the modulating wave is called:

Ans
✗ 1. Pulse code modulation
✔ 2. Frequency modulation
✗ 3. Amplitude modulation
✗ 4. Phase modulation

Question ID : 1860452435
Status : Answered
Chosen Option : 2

Q.4 The ratio of amplitude of modulating wave to the amplitude of carrier wave is called:

Ans
✗ 1. Carrier index
✗ 2. Amplitude modulation ratio
✔ 3. Modulation index
✗ 4. Transmitting ratio

Question ID : 1860452432
Status : Answered
Chosen Option : 3

Q.5 What does DM stand for?

Ans
✗ 1. Duplex modulation
✗ 2. Distributed modulation
✗ 3. Differential modulation
✔ 4. Delta modulation

Question ID : 1860452434
Status : Answered
Chosen Option : 4

Q.6 A device that transforms one form of energy to another is called:

Ans
✗ 1. Transistor
✗ 2. Transmitter
✗ 3. Transformer
✔ 4. Transducer

Question ID : 1860452429
Status : Answered
Chosen Option : 4

Q.7 If a signal can take values of only 0 and 1, it is a/an:

Ans
✗ 1. Periodic Signal
✔ 2. Digital Signal
✗ 3. Analog Signal
✗ 4. Mixed Signal

Question ID : 1860452427
Status : Answered
Chosen Option : 2

Q.8 The Wi-Fi operates on the _____ frequency.

Ans
✔ 1. radio

✗ 2. infrared
✗ 3. ultraviolet
✗ 4. X-ray

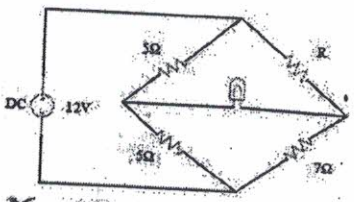
Question ID : 1860452433
Status : Answered
Chosen Option : 1

Q.9 Human voice is an example of:

Ans
✗ 1. Periodic Signal
✔ 2. Analog Signal
✗ 3. Digital Signal
✗ 4. Mixed Signal

Question ID : 1860452428
Status : Answered
Chosen Option : 2

Q.10 In the following circuit, if the LED is not glowing, what is the value of R?



Ans
✗ 1. 5 Ω
✗ 2. 4 Ω
✗ 3. 3 Ω
✔ 4. 7 Ω

Question ID : 1860452426
Status : Answered
Chosen Option : 4

Section : Computer Organization and Architecture

Q.1 Hartley Oscillator is a:

Ans
✗ 1. Relaxation frequency oscillator
✗ 2. Low frequency oscillator
✗ 3. Stable frequency oscillator
✔ 4. High frequency oscillator

Question ID : 1860452442
Status : Answered
Chosen Option : 4

Q.2 The process of superimposing a signal on the carrier wave is called:

Ans
✗ 1. Demodulation
✗ 2. Quantization
✔ 3. Modulation
✗ 4. Transmission

Question ID : 1860452437
Status : Answered
Chosen Option : 3

Q.3 An unwanted signal that enters the transmitted signal which cannot be controlled is called as:

Ans
✗ 1. Carrier Signal
✔ 2. Noise Signal
✗ 3. Modulated Signal
✗ 4. Modulating Signal

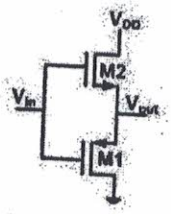
Question ID : 1860452436
Status : Answered
Chosen Option : 2

Q.4 The impedance of television coaxial cable is usually:

Ans
✗ 1. 500 Ω
✗ 2. 5 Ω
✗ 3. 300 Ω
✔ 4. 75 Ω

Question ID : 1860452444
Status : Answered
Chosen Option : 4

Q.5 The above circuit acts as:



Ans
✗ 1. Tristate buffer
✔ 2. Inverter
✗ 3. Buffer
✗ 4. NAND gate

Question ID : 1860452441
Status : Answered
Chosen Option : 4

Q.6 For a zero-mean sine wave, if the RMS value is 100 V, what is the peak-to-peak amplitude?

Ans
✗ 1. 70 V
✗ 2. 140 V
✔ 3. 280 V
✗ 4. 200 V

Question ID : 1860452445
Status : Answered
Chosen Option : 3

Q.7 The 555 timer IC can have operating modes as:

Ans
✗ 1. Bistable and monostable
✗ 2. Astable and monostable
✔ 3. Astable, monostable and bistable
✗ 4. Monostable and astable

Question ID : 1860452439
Status : Answered
Chosen Option : 4

Q.8 For BJT to act as an amplifier, which operating region is preferred?

Ans
✗ 1. Cutoff
✗ 2. Subthreshold
✔ 3. Linear
✗ 4. Saturation

Question ID : 1860452438
Status : Answered
Chosen Option : 3

Q.9 Regulator IC 7905 provides regulated output voltage equal to:

Ans
✗ 1. 9 V
✗ 2. 18 V
✗ 3. −12 V
✔ 4. −5 V

Question ID : 1860452443
Status : Answered
Chosen Option : 4

Q.10 Negative feedback in amplifier:

Ans
✔ 1. Increases stability
✗ 2. Increases frequency distortion
✗ 3. Increases noise
✗ 4. Increases gain

Question ID : 1860452440
Status : Answered
Chosen Option : 1

Section : Electro Magnetics

Q.1 The battery with a 1400 mAh can supply 2.8 Ampere current for:

Ans
✗ 1. 50 minutes
✗ 2. 100 minutes
✗ 3. 60 minutes
✔ 4. 30 minutes

Question ID : 1860452448
Status : Answered
Chosen Option : 4

Q.2 Android is a/an:

Ans
✗ 1. Data transfer protocol
✗ 2. Database
✗ 3. Programming language
✔ 4. Operating system

Question ID : 1860452446
Status : Answered
Chosen Option : 4

Q.3 Which of the following is a non-volatile memory?

Ans
✗ 1. DRAM
✗ 2. RAM
✔ 3. EEPROM

✗ 4. SRAM

Question ID : 1860452449
Status : Answered
Chosen Option : 3

Q.4 Program counter for any counter:

Ans
✗ 1. Stores the current updated value in any register
✔ 2. Stores the address of the next instruction to be executed
✗ 3. Stores the current instruction
✗ 4. Accumulates the results

Question ID : 1860452452
Status : Answered
Chosen Option : 2

Q.5 A transformer is an electrical device that transfers electrical energy from one electric circuit to another, without changing:

Ans
✗ 1. Current
✗ 2. Voltage
✗ 3. Capacitance
✔ 4. Frequency

Question ID : 1860452454
Status : Answered
Chosen Option : 4

Q.6 In the PCB, the conformal coating is done to:

Ans
✗ 1. Provide mechanical strength
✔ 2. Protect it from moisture and chemical contaminants
✗ 3. To produce a better looking product
✗ 4. Protect it from surge voltage

Question ID : 1860452447
Status : Answered
Chosen Option : 2

Q.7 The frequency range of AM radio is:

Ans
✔ 1. 535 kHz to 1605 kHz
✗ 2. 3.2 GHz to 8.2 GHz
✗ 3. 20 Hz to 20 kHz
✗ 4. 88 MHz to 108 MHz

Question ID : 1860452451
Status : Answered
Chosen Option : 1

Q.8 A resistor has the following 4 color bands (in this order): yellow, yellow, brown and gold. Its nominal value is:

Ans
✔ 1. 440 Ω ± 5 %
✗ 2. 4.4 k Ω ± 5 %
✗ 3. 4.4 k ohm ± 10 %
✗ 4. 440 Ω ± 10 %

Question ID : 1860452450
Status : Answered
Chosen Option : 1

Q.9 Which of the following type of memory is the fastest to access?

Ans
✔ 1. Cache

✗ 2. SRAM
✗ 3. ROM
✗ 4. DRAM

Question ID : 1860452455
Status : Answered
Chosen Option : 1

Q.10 The solvent used for cleaning of a PCB is:

Ans
✗ 1. Carbonated water
✔ 2. Iso-propyl alcohol
✗ 3. Steam
✗ 4. Kerosene

Question ID : 1860452453
Status : Answered
Chosen Option : 2

Section : Advanced Communication Topics

Q.1 One byte equals to _____ bits.

Ans
✗ 1. 10
✗ 2. 16
✗ 3. 32
✔ 4. 8

Question ID : 1860452457
Status : Answered
Chosen Option : 4

Q.2 If a program containing 5 instructions executed in 7 clock cycles, the CPI is:

Ans
✗ 1. 1
✗ 2. 1.5
✗ 3. 2
✔ 4. 1.4

Question ID : 1860452461
Status : Answered
Chosen Option : 4

Q.3 Which one of the following is the most widely used logic family?

Ans
✗ 1. PMOS logic
✗ 2. Emitter couple logic
✔ 3. Transistor-transistor logic
✗ 4. NMOS logic

Question ID : 1860452459
Status : Answered
Chosen Option : 3

Q.4 If a system gives unbounded output for a bounded input, then the system is:

Ans
✔ 1. Unstable
✗ 2. Oscillatory
✗ 3. Marginally
✗ 4. Stable

Question ID : 1860452456

Status : **Answered**
Chosen Option : **1**

Q.5 According to maximum power transfer theorem, the maximum efficiency that can be achieved during power transfer from a power source to an external load can be _____ %.

Ans
✔ 1. 50
✗ 2. 100
✗ 3. 25
✗ 4. 75

Question ID : **1860452460**
Status : **Answered**
Chosen Option : **2**

Q.6 Pipelining increases _____ of the processor.

Ans
✗ 1. Storage
✗ 2. Latency
✔ 3. Throughput
✗ 4. Predictivity

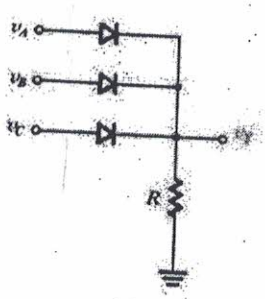
Question ID : **1860452458**
Status : **Answered**
Chosen Option : **4**

Q.7 The sensitivity of a sensor can be depicted by:

Ans
✔ 1. Bode plot
✗ 2. Nyquist plot
✗ 3. X-Y plot
✗ 4. Pole-zero plot

Question ID : **1860452464**
Status : **Answered**
Chosen Option : **1**

Q.8 Which logic gate is represented by the following circuit?



Ans
✔ 1. OR
✗ 2. NAND
✗ 3. NOR
✗ 4. AND

Question ID : **1860452462**
Status : **Answered**
Chosen Option : **1**

Q.9 A tactile sensor is:

Ans
✗ 1. Pressure-sensitive

✗ 2. Humidity-sensitive

✓ 3. Touch-sensitive

✗ 4. Input-voltage sensitive

Question ID : 1860452465
Status : Answered
Chosen Option : 4

Q.10 The smallest change that a sensor can detect is:

Ans ✗ 1. Scale

✓ 2. Resolution

✗ 3. Range

✗ 4. Accuracy

Question ID : 1860452463
Status : Answered
Chosen Option : 4