

Comprehension:

SubQuestion No : 2

Q.2 Total urban population of the students in colleges A and B is how much percent of total population of these two colleges?

1. 13.24%
2. 24.44%
3. 75.56%
4. 88.80%

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046293**

Option 1 ID : **48180424501**

Option 2 ID : **48180424502**

Option 3 ID : **48180424503**

Option 4 ID : **48180424504**

Status : **Answered**

Chosen Option : **1**

Comprehension:

SubQuestion No : 3

Q.3 The number of female students in college C is how much percent less than the number of male students in this college?

1. 1%
2. 15%
3. 25%
4. 75%

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046297**

Option 1 ID : **48180424517**

Option 2 ID : **48180424518**

Option 3 ID : **48180424519**

Option 4 ID : **48180424520**

Status : **Answered**

Chosen Option : **3**

Comprehension:

SubQuestion No : 4

Q.4 How many female students are post graduate in total students of all the colleges?

1. 720
2. 318
3. 2200
4. 1100

Options

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

Question Type : **MCQ**

Question ID : **4818046296**

Option 1 ID : **48180424513**

Option 2 ID : **48180424514**

Option 3 ID : **48180424515**

Option 4 ID : **48180424516**

Status : **Answered**

Chosen Option : **2**

Comprehension:

SubQuestion No : 5

Q.5 What is the total number of urban students in all the four colleges?

1. 1380
2. 1680
3. 1100
4. 820

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046295**

Option 1 ID : **48180424509**

Option 2 ID : **48180424510**

Option 3 ID : **48180424511**

Option 4 ID : **48180424512**

Status : **Answered**

Chosen Option : **1**

Q.6 Arrange the following methods of data collection in terms of the personal involvement of researcher from high to low.

- A. Structured interview
- B. Unstructured interview
- C. Questionnaire
- D. Participant observation
- E. Observation

Choose the **correct** answer from the options given below:

- 1. A, B, C, D, E
- 2. D, E, B, A, C
- 3. E, A, B, C, D
- 4. C, B, A, D, E

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046305**

Option 1 ID : **48180424549**

Option 2 ID : **48180424550**

Option 3 ID : **48180424551**

Option 4 ID : **48180424552**

Status : **Answered**

Chosen Option : **3**

Q.7 Arrange the following events in proper sequence with respect to land degradation cycle arising from opencast mining, mineral dressing and other related activities.

- A. Loss of greenery
- B. Drying up of land
- C. Land degradation
- D. Decrease in irrigation potential
- E. Desertification

Choose the **correct** answer from the options given below:

- 1. A, B, C, D, E
- 2. A, D, B, C, E
- 3. A, C, B, D, E
- 4. A, B, D, C, E

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046330**

Option 1 ID : **48180424649**

Option 2 ID : **48180424650**

Option 3 ID : **48180424651**

Option 4 ID : **48180424652**

Status : **Answered**

Chosen Option : **1**

Q.8

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046336

Option 1 ID : 48180424673

Option 2 ID : 48180424674

Option 3 ID : 48180424675

Option 4 ID : 48180424676

Status : Answered

Chosen Option : 2

Q.9 Match the LIST-I with LIST-II

LIST-I Forms of message style		LIST-II Dialogue, examples	
A. Threat		I. I think you are great, would you clean the apartment	
B. Altruism		II. I will make your favourite dinner if you clean the apartment	
C. Promise		III. If you will not clean the apartment I am going to be mad	
D. Linking		IV. For my sake clean the apartment, will you?	

Choose the **correct** answer from the options given below:

1. A-III, B-IV, C-II, D-I

2. A-III, B-II, C-IV, D-I

3. A-III, B-I, C-IV, D-II

4. A-IV, B-III, C-II, D-I

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046312

Option 1 ID : 48180424577

Option 2 ID : 48180424578

Option 3 ID : 48180424579

Option 4 ID : 48180424580

Status : Answered

Chosen Option : 2

Q.10 Match the LIST-I with LIST-II

LIST-I		LIST-II	
Assessment		Function	
A.	Norm-Referenced	I.	Position of the learner in the class
B.	Criterion Referenced	II.	Cut off marks
C.	Self Referenced	III.	Current behavior compared to earlier behavior
D.	Competency Based	IV.	Measures effective performance of task

Choose the **correct** answer from the options given below:

1. A-III, B-IV, C-II, D-I
2. A-IV, B-I, C-III, D-II
3. A-II, B-IV, C-I, D-III
4. A-I, B-II, C-III, D-IV

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046302**

Option 1 ID : **48180424537**

Option 2 ID : **48180424538**

Option 3 ID : **48180424539**

Option 4 ID : **48180424540**

Status : **Answered**

Chosen Option : **4**

Q.11 Arrange the following stages of personality development sequentially as proposed by Freud

- A. Phallic
- B. Oral
- C. Anal
- D. Genital
- E. Latency

Choose the **correct** answer from the options given below:

1. B, A, C, E, D
2. B, C, A, E, D
3. B, D, E, C, A
4. A, E, C, D, B

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046300**

Option 1 ID : **48180424529**

Option 2 ID : **48180424530**

Option 3 ID : **48180424531**

Option 4 ID : **48180424532**

Status : **Answered**

Chosen Option : **1**

Q.12

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046299**

Option 1 ID : **48180424525**

Option 2 ID : **48180424526**

Option 3 ID : **48180424527**

Option 4 ID : **48180424528**

Status : **Answered**

Chosen Option : **1**

Q.13 Arrange the following steps according to deductive reasoning

- A. Data collection
- B. Hypothesis
- C. General principle (Theory)
- D. Specific Result
- E. Analysis

Choose the **correct** answer from the options given below:

- 1. B, A, C, D, E
- 2. A, B, C, D, E
- 3. C, B, A, E, D
- 4. D, E, A, B, C

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046319**

Option 1 ID : **48180424605**

Option 2 ID : **48180424606**

Option 3 ID : **48180424607**

Option 4 ID : **48180424608**

Status : **Answered**

Chosen Option : **2**

Q.14

Options

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

Question Type : **MCQ**

Question ID : **4818046331**

Option 1 ID : **48180424653**

Option 2 ID : **48180424654**

Option 3 ID : **48180424655**

Option 4 ID : **48180424656**

Status : **Answered**

Chosen Option : **4**

Q.15 Forms of interpersonal conflicts combine

- A. Pervasive communication
- B. Innovation Diffusion
- C. Hostile episode
- D. Agenda-setting model
- E. Disagreeable communication

Choose the **correct** answer from the options given below:

- 1. C, D & E only
- 2. A, C & E only
- 3. A, C & D only
- 4. B, C & D only

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046311**

Option 1 ID : **48180424573**

Option 2 ID : **48180424574**

Option 3 ID : **48180424575**

Option 4 ID : **48180424576**

Status : **Answered**

Chosen Option : **2**

Q.16 Arrange the opening lines of stanzas in Vande Matram

- A. Sujalam, Suflam malyaj sheetalam
- B. Saptakoti kanth kalkal ninad karale
- C. Shubra jyotsna pulkit yaminim
- D. Tvan hi durga dashapraharan dharini
- E. Tumi vidya tumi dharma, tumi hridi tumi marma

Choose the **correct** answer from the options given below:

- 1. A, C, D, E, B
- 2. A, C, B, D, E
- 3. A, C, B, E, D
- 4. D, E, B, A, C

Options 1. 1

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

Question Type : MCQ

Question ID : 4818046334

Option 1 ID : 48180424665

Option 2 ID : 48180424666

Option 3 ID : 48180424667

Option 4 ID : 48180424668

Status : Answered

Chosen Option : 1

Q.17 A study in which the researcher directly intervenes in and / or manipulates a natural setting in order to observe what happens as a consequence of that intervention is called as:

- 1. Field simulation
- 2. Field negotiation
- 3. Field disturbance
- 4. Field investigation

Options 1. 1

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

Question Type : MCQ

Question ID : 4818046303

Option 1 ID : 48180424541

Option 2 ID : 48180424542

Option 3 ID : 48180424543

Option 4 ID : 48180424544

Status : Answered

Chosen Option : 1

Q.18

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046323

Option 1 ID : 48180424621

Option 2 ID : 48180424622

Option 3 ID : 48180424623

Option 4 ID : 48180424624

Status : Answered

Chosen Option : 1

Q.19 Arrange the following stages of transmission models of news learning mentioned in Denis Mcquail's book from start to end:

- A. Comprehension
- B. News item display
- C. Learning
- D. Actual Exposure
- E. Recall

Choose the correct answer from the options given below:

1. B, D, A, E, C

2. B, D, E, A, C

3. C, B, E, A, D

4. E, B, D, A, C

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046310

Option 1 ID : 48180424569

Option 2 ID : 48180424570

Option 3 ID : 48180424571

Option 4 ID : 48180424572

Status : Answered

Chosen Option : 2

Q.20

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046301**

Option 1 ID : **48180424533**

Option 2 ID : **48180424534**

Option 3 ID : **48180424535**

Option 4 ID : **48180424536**

Status : **Answered**

Chosen Option : **2**

Q.21 Arrange the steps followed to delete an E-mail permanently:

A. Click on Inbox of your email

B. Click delete, the e-mail will be sent to Trash folder

C. Confirm the clear/delete trash option, folder will get empty

D. Select checkbox corresponding to e-mails you want to delete

E. Click on Empty trash option

Choose the **correct** answer from the options given below:

1. A, D, B, C, E

2. A, D, B, E, C

3. A, B, D, C, E

4. A, B, D, E, C

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046324**

Option 1 ID : **48180424625**

Option 2 ID : **48180424626**

Option 3 ID : **48180424627**

Option 4 ID : **48180424628**

Status : **Answered**

Chosen Option : **2**

Q.22 Which devices are NOT used in a network?

- A. DJ45
- B. Gateway
- C. Modem
- D. RJ45
- E. Media Access Control (MAC)

Choose the **correct** answer from the options given below:

- 1. A, D only
- 2. B, C only
- 3. A, E only
- 4. D, E only

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046325**

Option 1 ID : **48180424629**

Option 2 ID : **48180424630**

Option 3 ID : **48180424631**

Option 4 ID : **48180424632**

Status : **Answered**

Chosen Option : **1**

Q.23

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

Question Type : MCQ

Question ID : 4818046327

Option 1 ID : 48180424637

Option 2 ID : 48180424638

Option 3 ID : 48180424639

Option 4 ID : 48180424640

Status : Answered

Chosen Option : 4

Q.24 Match the LIST-I with LIST-II

LIST-I	LIST-II
A. Carvak	I. First step in Pabbaja
B. Sharantrayi	II. A Upnishad
C. Kalesha	III. Nastik school of Indian philosophy
D. Mandukya	IV. Asmita-one of five affliction

Choose the **correct** answer from the options given below:

1. A-I, B-II, C-III, D-IV
2. A-III, B-I, C-IV, D-II
3. A-IV, B-II, C-I, D-III
4. A-III, B-II, C-I, D-IV

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

Question Type : MCQ

Question ID : 4818046337

Option 1 ID : 48180424677

Option 2 ID : 48180424678

Option 3 ID : 48180424679

Option 4 ID : 48180424680

Status : Answered

Chosen Option : 3

Q.25

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046328**

Option 1 ID : **48180424641**

Option 2 ID : **48180424642**

Option 3 ID : **48180424643**

Option 4 ID : **48180424644**

Status : **Answered**

Chosen Option : **1**

Q.26 Which of the following statements correctly explain the fallacy of hasty generalization?

- A. It draws a general conclusion from insufficient evidence
- B. It is also known as converse accident
- C. It relies on large and representative samples
- D. It often results in stereotypes
- E. Anecdotal evidence is sufficient to justify generalization

Choose the **correct** answer from the options given below:

- 1. A, B and D only
- 2. A, C and D only
- 3. B, C and E only
- 4. C, D and E only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046320**

Option 1 ID : **48180424609**

Option 2 ID : **48180424610**

Option 3 ID : **48180424611**

Option 4 ID : **48180424612**

Status : **Answered**

Chosen Option : **1**

Q.27 Which of the following pertain to the Denotation?

- A. Extension
- B. Intension
- C. Area
- D. Limit
- E. Aim

Choose the **correct** answer from the options given below:

- 1. A, C and D only
- 2. B, C and E only
- 3. A, D and E only
- 4. B, D and E only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046321**

Option 1 ID : **48180424613**

Option 2 ID : **48180424614**

Option 3 ID : **48180424615**

Option 4 ID : **48180424616**

Status : **Answered**

Chosen Option : **4**

Q.28 Match the LIST-I with LIST-II

If $a = \frac{\sqrt{5}-2}{\sqrt{5}+2}$, then match the following

LIST-I		LIST-II	
A.	$a + \frac{1}{a}$	I.	$8\sqrt{5}$
B.	$\frac{1}{a} - a$	II.	161
C.	$\frac{1}{2}\left(a^2 + \frac{1}{a^2}\right)$	III.	18
D.	$\frac{1}{a^2} - a^2$	IV.	$144\sqrt{5}$

Choose the **correct** answer from the options given below:

1. A-IV, B-I, C-III, D-II
2. A-III, B-I, C-II, D-IV
3. A-I, B-II, C-III, D-IV
4. A-I, B-III, C-II, D-IV

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046316**

Option 1 ID : **48180424593**

Option 2 ID : **48180424594**

Option 3 ID : **48180424595**

Option 4 ID : **48180424596**

Status : **Answered**

Chosen Option : **3**

Q.29 Which of the following defines selective exposure?

1. The idea that you are more likely to recall things that support your beliefs, values and attitude
2. The idea that you are more likely to expose yourself to that which supports your beliefs, values and attitude
3. The idea that you are more likely to perceive and focus on things that support your beliefs, values and attitudes
4. News selection

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046309**

Option 1 ID : **48180424565**

Option 2 ID : **48180424566**

Option 3 ID : **48180424567**

Option 4 ID : **48180424568**

Status : **Answered**

Chosen Option : **2**

Q.30

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046308**

Option 1 ID : **48180424561**

Option 2 ID : **48180424562**

Option 3 ID : **48180424563**

Option 4 ID : **48180424564**

Status : **Answered**

Chosen Option : **4**

Q.31 Foreign universities can now open campus in India. This is because India is a signatory of :

1. Dunkel Project (DP)

2. General Agreement on Trade in Services (GATS)

3. Sustainable Development Goals (SDGs)

4. Incheon Declarations (ID)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046333**

Option 1 ID : **48180424661**

Option 2 ID : **48180424662**

Option 3 ID : **48180424663**

Option 4 ID : **48180424664**

Status : **Answered**

Chosen Option : **1**

Q.32

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

Question Type : **MCQ**

Question ID : **4818046307**

Option 1 ID : **48180424557**

Option 2 ID : **48180424558**

Option 3 ID : **48180424559**

Option 4 ID : **48180424560**

Status : **Answered**

Chosen Option : **3**

Q.33 Arrange the steps in hypothetico-deductive model

- A. Data analysis
- B. Observation
- C. Framing hypothesis
- D. Data collection
- E. Reject/accept hypothesis

Choose the **correct** answer from the options given below:

- 1. C, B, A, D, E
- 2. B, C, D, A, E
- 3. D, A, C, B, E
- 4. A, B, C, D, E

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046304**

Option 1 ID : **48180424545**

Option 2 ID : **48180424546**

Option 3 ID : **48180424547**

Option 4 ID : **48180424548**

Status : **Answered**

Chosen Option : **3**

Q.34 Which among these are the input devices?

- A. Touch pad
- B. Touch screen
- C. Magnetic Ink Character Recognition (MICR)
- D. Optical Mark Reading and Recognition (OMR)
- E. Monitor

Choose the **correct** answer from the options given below:

- 1. A, B only
- 2. B, D & E only
- 3. A, B, C, D only
- 4. C, D, E only

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046326**

Option 1 ID : **48180424633**

Option 2 ID : **48180424634**

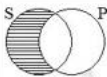
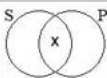
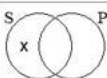
Option 3 ID : **48180424635**

Option 4 ID : **48180424636**

Status : **Answered**

Chosen Option : **3**

Q.35 Match the LIST-I with LIST-II

LIST-I	LIST-II
A. A - proposition	I. 
B. E - proposition	II. 
C. I - proposition	III. 
D. O - proposition	IV. 

Choose the **correct** answer from the options given below:

1. A-IV, B-III, C-II, D-I
2. A-II, B-III, C-I, D-IV
3. A-III, B-II, C-IV, D-I
4. A-I, B-II, C-III, D-IV

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046322

Option 1 ID : 48180424617

Option 2 ID : 48180424618

Option 3 ID : 48180424619

Option 4 ID : 48180424620

Status : Answered

Chosen Option : 2

Q.36 Arrange the following in the decreasing order

A. LCM of 15, 20, 75

B. LCM of $\frac{25}{3}, \frac{40}{9}, \frac{50}{6}$

C. HCF of 600, 150, 675

D. LCM of 4, 6, 9

E. HCF of 0.5, 1.5, 3.5

Choose the **correct** answer from the options given below:

1. A>C>B>D>E

2. A>C>B>E>D

3. A>B>C>D>E

4. A>B>C>E>D

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046314**

Option 1 ID : **48180424585**

Option 2 ID : **48180424586**

Option 3 ID : **48180424587**

Option 4 ID : **48180424588**

Status : **Answered**

Chosen Option : **1**

Q.37

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

Question Type : **MCQ**

Question ID : **4818046306**

Option 1 ID : **48180424553**

Option 2 ID : **48180424554**

Option 3 ID : **48180424555**

Option 4 ID : **48180424556**

Status : **Answered**

Chosen Option : **2**

Q.38 Producing of the following items requires huge amount of fresh water. Arrange them from highest to lowest in order of water-consumption.

- A. Bread
- B. Car
- C. Jeans
- D. House
- E. T-shirt

Choose the **correct** answer from the options given below:

1. D, C, E, B, A
2. D, B, E, C, A
3. D, E, B, C, A
4. D, B, C, E, A

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

Question Type : **MCQ**

Question ID : **4818046329**

Option 1 ID : **48180424645**

Option 2 ID : **48180424646**

Option 3 ID : **48180424647**

Option 4 ID : **48180424648**

Status : **Answered**

Chosen Option : **4**

Q.39

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

Question Type : **MCQ**

Question ID : **4818046335**

Option 1 ID : **48180424669**

Option 2 ID : **48180424670**

Option 3 ID : **48180424671**

Option 4 ID : **48180424672**

Status : **Answered**

Chosen Option : **1**

Q.40 Match the LIST-I with LIST-II

LIST-I Radionuclide		LIST-II Target Tissue	
A.	Iodine - 131	I.	Spleen
B.	Strontium - 90	II.	Bones
C.	Plutonium - 239	III.	Soft tissue
D.	Caesium - 137	IV.	Liver

Choose the **correct** answer from the options given below:

1. A-I, B-II, C-IV, D-III
2. A-III, B-IV, C-II, D-I
3. A-IV, B-III, C-I, D-II
4. A-II, B-I, C-III, D-IV

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

Question Type : **MCQ**

Question ID : **4818046332**

Option 1 ID : **48180424657**

Option 2 ID : **48180424658**

Option 3 ID : **48180424659**

Option 4 ID : **48180424660**

Status : **Answered**

Chosen Option : **2**

Q.41

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

Question Type : **MCQ**

Question ID : **4818046298**

Option 1 ID : **48180424521**

Option 2 ID : **48180424522**

Option 3 ID : **48180424523**

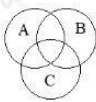
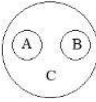
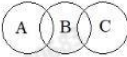
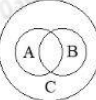
Option 4 ID : **48180424524**

Status : **Answered**

Chosen Option : **1**

Q.42 Select the Venn diagram that best illustrates the relationship among the following classes:

(A) Dogs (B) Pets (C) Cats

1. 
2. 
3. 
4. 

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

Question Type : **MCQ**

Question ID : **4818046318**

Option 1 ID : **48180424601**

Option 2 ID : **48180424602**

Option 3 ID : **48180424603**

Option 4 ID : **48180424604**

Status : **Answered**

Chosen Option : **1**

Q.43 The average test score of a class of m students is 60 and that of n students is 81. When the scores of both classes are combined, then the average is 70. In this context, which of the following statements are correct?

- A. $\frac{m+n}{m-n} = 21$
- B. $\frac{m}{m-n} = 11$
- C. $\frac{n}{n+m} = 10$
- D. $\frac{m}{m+n} = 11$
- E. $\frac{n}{m-n} = 10$

Choose the **correct** answer from the options given below:

- 1. A, B, C only
- 2. A, B, E only
- 3. C, D, E only
- 4. B, C, D only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046315**

Option 1 ID : **48180424589**

Option 2 ID : **48180424590**

Option 3 ID : **48180424591**

Option 4 ID : **48180424592**

Status : **Answered**

Chosen Option : **1**

Q.44 Match the **LIST-I** with **LIST-II**

LIST-I	LIST-II
A. $\sin^2 30^\circ + \cos^2 30^\circ + \sin 90^\circ$	I. 4
B. $\sin^2 45^\circ + \cos^2 45^\circ + \cos 90^\circ$	II. 2
C. $2 \sin^2 60^\circ + 2 \cos^2 30^\circ + \cos 0^\circ$	III. 1
D. $4 \cos 60^\circ + 2 \cos^2 30^\circ + 5 \sin^2 45^\circ$	IV. 6

Choose the **correct** answer from the options given below:

- 1. A-III, B-IV, C-I, D-II
- 2. A-II, B-III, C-I, D-IV
- 3. A-IV, B-III, C-II, D-I
- 4. A-III, B-II, C-IV, D-I

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046317**

Option 1 ID : **48180424597**

Option 2 ID : **48180424598**

Option 3 ID : **48180424599**

Option 4 ID : **48180424600**

Status : **Answered**

Chosen Option : **2**

Q.45

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046313**

Option 1 ID : **48180424581**

Option 2 ID : **48180424582**

Option 3 ID : **48180424583**

Option 4 ID : **48180424584**

Status : **Answered**

Chosen Option : **4**

Comprehension:

SubQuestion No : 46

Q.46 The prediction of diversity in the opening line of the paragraph is that the trend will:

1. Stop

2. Persist

3. Transform

4. Diverge

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046340**

Option 1 ID : **48180424685**

Option 2 ID : **48180424686**

Option 3 ID : **48180424687**

Option 4 ID : **48180424688**

Status : **Answered**

Chosen Option : **3**

Comprehension:

SubQuestion No : 47

Q.47 Organizations should provide developmental opportunities for women so as to -

1. Assist them to move up the hierarchical ladder
2. Help them to get recruited
3. Assist in childcare
4. Help them to gain visibility

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046343**

Option 1 ID : **48180424697**

Option 2 ID : **48180424698**

Option 3 ID : **48180424699**

Option 4 ID : **48180424700**

Status : **Answered**

Chosen Option : **1**

Comprehension:

SubQuestion No : 48

Q.48 What does the last line of the passage imply?

1. Diversity has a harmful effect on organizational performance.
2. There is ambiguity regarding its role for improved organisational performance.
3. Diversity does not bring change in organizational performance.
4. Diversity has a negative impact on employees.

Options

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

Question Type : **MCQ**

Question ID : **4818046341**

Option 1 ID : **48180424689**

Option 2 ID : **48180424690**

Option 3 ID : **48180424691**

Option 4 ID : **48180424692**

Status : **Answered**

Chosen Option : **2**

Comprehension:

SubQuestion No : 49

Q.49 Making it to the Fortune magazine's list of 100 best companies is one of the rewards related to:

1. Popularizing learning-related needs
2. Corporate Social Responsibility
3. Effectively managing diversity
4. Respectful treatment of employees.

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046342**

Option 1 ID : **48180424693**

Option 2 ID : **48180424694**

Option 3 ID : **48180424695**

Option 4 ID : **48180424696**

Status : **Answered**

Chosen Option : **3**

Comprehension:

SubQuestion No : 50

Q.50 The specific requirement of an ageing workforce would be related to:

1. Removal of prejudices
2. Learning-related needs
3. Cultural sensitivity
4. Racial parity

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046339**

Option 1 ID : **48180424681**

Option 2 ID : **48180424682**

Option 3 ID : **48180424683**

Option 4 ID : **48180424684**

Status : **Answered**

Chosen Option : **2**

Section : **Electronic Science**

Q.51

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046385**

Option 1 ID : **48180424865**

Option 2 ID : **48180424866**

Option 3 ID : **48180424867**

Option 4 ID : **48180424868**

Status : **Answered**

Chosen Option : **1**

Q.52 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Birds beak formation	I.	STI isolation
B.	Inverse narrow width effect	II.	Junction isolation
C.	Lowest component density	III.	LOCOS isolation
D.	Noise and Latch-up prevention	IV.	Guard Ring isolation

Choose the **correct** answer from the options given below:

1. A-I, B-III, C-II, D-IV

2. A-I, B-IV, C-III, D-II

3. A-III, B-I, C-II, D-IV

4. A-III, B-II, C-IV, D-I

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046421**

Option 1 ID : **48180425009**

Option 2 ID : **48180425010**

Option 3 ID : **48180425011**

Option 4 ID : **48180425012**

Status : **Answered**

Chosen Option : **1**

Q.53

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046363

Option 1 ID : 48180424777

Option 2 ID : 48180424778

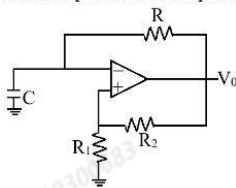
Option 3 ID : 48180424779

Option 4 ID : 48180424780

Status : Answered

Chosen Option : 3

Q.54 The time period of the output waveform of the astable multi-vibrator circuit shown below is given as



1. $T = 2RC \ln \left[1 + \frac{2R_2}{R_1} \right]$

2. $T = 2RC \ln \left[1 + \frac{R_2}{R_1} \right]$

3. $T = 2RC \ln \left[1 + \frac{2R_1}{R_2} \right]$

4. $T = 2RC \ln \left[1 + \frac{R_1}{R_2} \right]$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046358

Option 1 ID : 48180424757

Option 2 ID : 48180424758

Option 3 ID : 48180424759

Option 4 ID : 48180424760

Status : Answered

Chosen Option : 2

Q.55

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046425**

Option 1 ID : **48180425025**

Option 2 ID : **48180425026**

Option 3 ID : **48180425027**

Option 4 ID : **48180425028**

Status : **Answered**

Chosen Option : **4**

Q.56 The minimum number of states in the state-diagram of a Mealy type finite state machine designed to detect a binary sequence 110 is

1. 5

2. 4

3. 3

4. 6

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046360**

Option 1 ID : **48180424765**

Option 2 ID : **48180424766**

Option 3 ID : **48180424767**

Option 4 ID : **48180424768**

Status : **Answered**

Chosen Option : **1**

Q.57 Match the LIST-I with LIST-II

LIST-I	LIST-II
A. $\mathcal{L}(t^4 \cdot e^{-at} \cdot u(t))$	I. $s \xrightarrow{Lt} 0 [sF(s)]$
B. $\mathcal{L}(u(t) - u(t-4))$	II. $s \xrightarrow{Lt} \infty [sF(s)]$
C. Initial value theorem $f(0^+)$	III. $\frac{1}{s}(1 - e^{-4s})$
D. Final value theorem $f(\infty)$	IV. $\frac{24}{(s+a)^5}$

Choose the **correct** answer from the options given below:

1. A-III, B-IV, C-I, D-II
2. A-IV, B-III, C-I, D-II
3. A-IV, B-II, C-III, D-I
4. A-IV, B-III, C-II, D-I

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046423**

Option 1 ID : **48180425017**

Option 2 ID : **48180425018**

Option 3 ID : **48180425019**

Option 4 ID : **48180425020**

Status : **Answered**

Chosen Option : 2

Q.58 Table gives the set of 10 measurements that were recorded in the laboratory. What is the precision of the 6th measurement?

Measurement Number	Measurement Value (x_n)
1	98
2	101
3	102
4	97
5	101
6	100
7	103
8	98
9	106
10	99

1. 0.901
2. 0.995
3. 0.899
4. 0.896

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046380**

Option 1 ID : **48180424845**

Option 2 ID : **48180424846**

Option 3 ID : **48180424847**

Option 4 ID : **48180424848**

Status : **Answered**

Chosen Option : **4**

Q.59 Arrange the following in terms of electron mobility from lowest to highest

- A. Gallium Arsenide
- B. Silicon
- C. Germanium
- D. Graphene

Choose the **correct** answer from the options given below:

- 1. B, C, A, D
- 2. B, A, C, D
- 3. D, A, B, C
- 4. C, B, D, A

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046384**

Option 1 ID : **48180424861**

Option 2 ID : **48180424862**

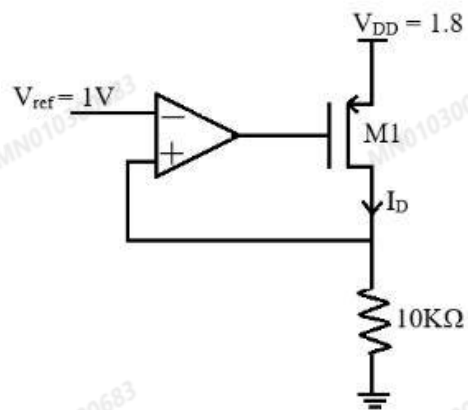
Option 3 ID : **48180424863**

Option 4 ID : **48180424864**

Status : **Answered**

Chosen Option : **4**

Q.60 Assuming an ideal op-amp, the value of drain current of M1 is



1. $100 \mu A$
2. $160 \mu A$
3. $140 \mu A$
4. $180 \mu A$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046359

Option 1 ID : 48180424761

Option 2 ID : 48180424762

Option 3 ID : 48180424763

Option 4 ID : 48180424764

Status : Answered

Chosen Option : 1

Q.61

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

Question Type : **MCQ**

Question ID : **4818046418**

Option 1 ID : **48180424997**

Option 2 ID : **48180424998**

Option 3 ID : **48180424999**

Option 4 ID : **48180425000**

Status : **Answered**

Chosen Option : **3**

Q.62 A delayed step function is defined as

1. $Ku(t-a) = Kt : t > 0$
2. $Ku(t-a) = K : t > 0$
3. $Ku(t-a) = K : t > a$
 $= 0 : t < a$
4. $Ku(t-a) = K : t < a$
 $= 0 : t > a$

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

Question Type : **MCQ**

Question ID : **4818046354**

Option 1 ID : **48180424741**

Option 2 ID : **48180424742**

Option 3 ID : **48180424743**

Option 4 ID : **48180424744**

Status : **Answered**

Chosen Option : **2**

Q.63

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

Question Type : **MCQ**

Question ID : **4818046430**

Option 1 ID : **48180425045**

Option 2 ID : **48180425046**

Option 3 ID : **48180425047**

Option 4 ID : **48180425048**

Status : **Answered**

Chosen Option : **1**

Q.64

The impulse response $h(n) = \left[\frac{1}{2}\right]^n u(n+3)$ of an LTI System is

- A. Unstable
- B. Stable
- C. Causal
- D. non-causal
- E. non-linear and time varying

Choose the **correct** answer from the options given below:

- 1. A, D Only
- 2. B, C Only
- 3. B, D Only
- 4. B, D, E Only

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046411**

Option 1 ID : **48180424969**

Option 2 ID : **48180424970**

Option 3 ID : **48180424971**

Option 4 ID : **48180424972**

Status : **Answered**

Chosen Option : **2**

Q.65 Casimir effect is associated with:

- 1. Bridges
- 2. Digital Multimeters
- 3. Transducers
- 4. MEMS

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046382**

Option 1 ID : **48180424853**

Option 2 ID : **48180424854**

Option 3 ID : **48180424855**

Option 4 ID : **48180424856**

Status : **Answered**

Chosen Option : **1**

Q.66

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046370

Option 1 ID : 48180424805

Option 2 ID : 48180424806

Option 3 ID : 48180424807

Option 4 ID : 48180424808

Status : Answered

Chosen Option : 3

Q.67 Which of the following statements are correct?

A. MOSFET is a three-terminal device.

B. Zener diode is a heavily doped diode.

C. The mobility of electrons in Germanium is higher than Silicon

D. CNTs can be used as semiconductors as well as conductors

E. The Fermi level of intrinsic semiconductor lies exactly at the centre between valence and conduction bands.

Choose the correct answer from the options given below:

1. B, C and D Only

2. A and E Only

3. A, B and C Only

4. B, C, D and E Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046409

Option 1 ID : 48180424961

Option 2 ID : 48180424962

Option 3 ID : 48180424963

Option 4 ID : 48180424964

Status : Answered

Chosen Option : 1

Q.68 Example of crossed - field tube (M type) is

- A. Reflex - Klystron
- B. TWT
- C. Magnetron
- D. Gyrotron

Choose the **correct** answer from the options given below:

- 1. A, B, C Only
- 2. C, D Only
- 3. A, B Only
- 4. B, C Only

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046415**

Option 1 ID : **48180424985**

Option 2 ID : **48180424986**

Option 3 ID : **48180424987**

Option 4 ID : **48180424988**

Status : **Answered**

Chosen Option : **3**

Q.69 A photon of 1400Å wavelength is absorbed by cold mercury vapor and two other photons are emitted. If one of these photon has a wavelength of 1850Å, what is the wave length of other photon?

- 1. 5212 Å
- 2. 5754 Å
- 3. 5617 Å
- 4. 5542 Å

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046346**

Option 1 ID : **48180424709**

Option 2 ID : **48180424710**

Option 3 ID : **48180424711**

Option 4 ID : **48180424712**

Status : **Answered**

Chosen Option : **1**

Q.70

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046350

Option 1 ID : 48180424725

Option 2 ID : 48180424726

Option 3 ID : 48180424727

Option 4 ID : 48180424728

Status : Answered

Chosen Option : 3

Q.71 Which of the following statements are correct?

- A. The superposition principle is applicable to any networks and systems.
- B. A reciprocal network comprises of linear, time-invariant, bilateral, passive elements only.
- C. Tellegen's theorem is applicable to any lumped network having linear or nonlinear elements.
- D. Thevenin's theorem is applicable to any linear network, time invariant or time varying.
- E. Norton's theorem is applicable to only time-invariant linear network.

Choose the **correct** answer from the options given below:

1. A, B and D Only

2. B, D and E Only

3. B, C and D Only

4. A, C and E Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046401

Option 1 ID : 48180424929

Option 2 ID : 48180424930

Option 3 ID : 48180424931

Option 4 ID : 48180424932

Status : Answered

Chosen Option : 1

Q.72

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046345

Option 1 ID : 48180424705

Option 2 ID : 48180424706

Option 3 ID : 48180424707

Option 4 ID : 48180424708

Status : Answered

Chosen Option : 2

Q.73 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Maxwell's Bridge	I.	Measurement of unknown capacitance
B.	Schering's Bridge	II.	Measurement of low value resistance
C.	Wien's Bridge	III.	Measurement of unknown inductance
D.	Kelvin's Bridge	IV.	Measurement of unknown frequency

Choose the **correct** answer from the options given below:

1. A-IV, B-III, C-II, D-I

2. A-I, B-III, C-IV, D-II

3. A-III, B-I, C-IV, D-II

4. A-I, B-IV, C-III, D-II

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046433

Option 1 ID : 48180425057

Option 2 ID : 48180425058

Option 3 ID : 48180425059

Option 4 ID : 48180425060

Status : Answered

Chosen Option : 2

Q.74

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046365

Option 1 ID : 48180424785

Option 2 ID : 48180424786

Option 3 ID : 48180424787

Option 4 ID : 48180424788

Status : Answered

Chosen Option : 3

Q.75 In a Timer mode (TMOD) register, when

- A. $C/T = 0$, the timer gets pulse from the crystal.
- B. $C/T = 1$, the timer gets pulse from outside 8051.
- C. $C/T = 1$, the timer is used as a counter.
- D. $C/T = 0$, the timer get pulse from outside 8051.
- E. $C/T = 0$, the timer is used as a counter.

Choose the **correct** answer from the options given below:

- 1. B, D, E Only
- 2. C, D, E Only
- 3. B, C, D Only
- 4. A, B, C Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046404

Option 1 ID : 48180424941

Option 2 ID : 48180424942

Option 3 ID : 48180424943

Option 4 ID : 48180424944

Status : Answered

Chosen Option : 1

Q.76

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046367**

Option 1 ID : **48180424793**

Option 2 ID : **48180424794**

Option 3 ID : **48180424795**

Option 4 ID : **48180424796**

Status : **Answered**

Chosen Option : **4**

Q.77 Arrange the sequence of SCON (serial control) register from LSB to MSB

A. REN

B. RB8

C. TB8

D. RI

E. TI

Choose the **correct** answer from the options given below:

1. A, B, C, D, E

2. C, B, E, A, D

3. D, E, B, C, A

4. E, D, C, B, A

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046391**

Option 1 ID : **48180424889**

Option 2 ID : **48180424890**

Option 3 ID : **48180424891**

Option 4 ID : **48180424892**

Status : **Answered**

Chosen Option : **2**

Q.78

Options 1. 1

2. 2
3. 3
4. 4

Question Type : MCQ

Question ID : 4818046406

Option 1 ID : 48180424949

Option 2 ID : 48180424950

Option 3 ID : 48180424951

Option 4 ID : 48180424952

Status : Answered

Chosen Option : 1

Q.79 The sequence of convolution process to find output response $y[n]$ of a system having impulse response $h[n]$ and input signal $x[n]$ is

- A. Folding $h[k]$ about origin and get $h[-k]$
- B. Time shifting $h[k]$ to the right
- C. Multiplication of input and time shifted impulse signal
- D. Summation of all values of product to obtain output

Choose the correct answer from the options given below:

1. A, B, C, D
2. A, C, B, D
3. B, A, C, D
4. C, B, A, D

Options 1. 1

2. 2
3. 3
4. 4

Question Type : MCQ

Question ID : 4818046387

Option 1 ID : 48180424873

Option 2 ID : 48180424874

Option 3 ID : 48180424875

Option 4 ID : 48180424876

Status : Answered

Chosen Option : 1

Q.80

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046403**

Option 1 ID : **48180424937**

Option 2 ID : **48180424938**

Option 3 ID : **48180424939**

Option 4 ID : **48180424940**

Status : **Answered**

Chosen Option : **1**

Q.81 A feedback control system having transfer function

$$F(s) = \frac{K(s+2)}{s^2(s^2+s+2)(s+1)}$$

is a:

1. First - order system

2. Second - order system

3. Fourth - order system

4. Fifth - order system

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046377**

Option 1 ID : **48180424833**

Option 2 ID : **48180424834**

Option 3 ID : **48180424835**

Option 4 ID : **48180424836**

Status : **Answered**

Chosen Option : **2**

Q.82 Which of the following statements are correct?

- A. Piezo electric sensors are passive type sensors.
- B. The gauge factor is defined as the ratio of change in resistance ($\Delta R/R$) to the change in length ($\Delta L/L$).
- C. For a given amount of illumination on a very small area, the photodiode provides a much larger output current than that available from a phototransistor.
- D. In a spectrum analyzer, the saw-tooth wave is applied only to the horizontal plates.
- E. Hall effect can be used for the measurement of magnetic field.

Choose the **correct** answer from the options given below:

- 1. A and B Only
- 2. C and D Only
- 3. B and C Only
- 4. B and E Only

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046408**

Option 1 ID : **48180424957**

Option 2 ID : **48180424958**

Option 3 ID : **48180424959**

Option 4 ID : **48180424960**

Status : **Answered**

Chosen Option : **3**

Q.83 Match the **LIST-I** (Special function register of 8051) with **LIST-II** (Addresses)

LIST-I		LIST-II	
A.	Accumulator (A)	I.	98 H
B.	Stack Pointer (SP)	II.	81 H
C.	TMOD	III.	89 H
D.	SCON	IV.	0E0H

Choose the **correct** answer from the options given below:

- 1. A-II, B-III, C-IV, D-I
- 2. A-IV, B-I, C-III, D-II
- 3. A-IV, B-II, C-III, D-I
- 4. A-II, B-I, C-IV, D-III

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046427**

Option 1 ID : **48180425033**

Option 2 ID : **48180425034**

Option 3 ID : **48180425035**

Option 4 ID : **48180425036**

Status : **Answered**

Chosen Option : **2**

Q.84 Arrange the following regions of operation of a MOSFET in the increasing order of its output conductance (g_{ds}).

- A. Triode region
- B. Deep triode region
- C. Saturation region
- D. Edge of saturation

Choose the **correct** answer from the options given below:

- 1. B, A, D, C
- 2. C, D, A, B
- 3. B, A, C, D
- 4. A, B, C, D

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046389**

Option 1 ID : **48180424881**

Option 2 ID : **48180424882**

Option 3 ID : **48180424883**

Option 4 ID : **48180424884**

Status : **Answered**

Chosen Option : **3**

Q.85 The Laplace transform of a damped sinusoidal function $f(t) = e^{-at} \sin(\omega t)$ is

- 1. $\frac{\omega}{(s+a)^2 + \omega^2}$
- 2. $\frac{s+a}{(s+a)^2 + \omega^2}$
- 3. $\frac{s}{(s+a)^2 + \omega^2}$
- 4. $\frac{s}{(s-a)^2 + \omega^2}$

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046352**

Option 1 ID : **48180424733**

Option 2 ID : **48180424734**

Option 3 ID : **48180424735**

Option 4 ID : **48180424736**

Status : **Answered**

Chosen Option : **4**

Q.86 Which of the following statements are correct?

- A. Snubber circuits are used for the protection of thyristors against over voltage and over current
- B. In a UPS, if the main supply fails, the load gets its input from a secondary ac-supply.
- C. The number of poles at origin determines the type of a system
- D. The Mason's Gain equation is given by $\frac{C(s)}{R(s)} = \frac{\sum F_i \cdot \Delta_i}{\sum F_i}$
- E. A thyristor can be turned ON if the rate of rise of the anode-cathode voltage is high

Choose the **correct** answer from the options given below:

- 1. A, C and D Only
- 2. A, B and C Only
- 3. A, C and E Only
- 4. A, B and E Only

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046417**

Option 1 ID : **48180424993**

Option 2 ID : **48180424994**

Option 3 ID : **48180424995**

Option 4 ID : **48180424996**

Status : **Answered**

Chosen Option : **4**

Q.87 Arrange the following blocks of ECG machine in the order in which they are connected from electrodes to pen motor

- A. Power amplifier
- B. Bridge output circuit
- C. Lead selector
- D. Pre-amplifier

Choose the **correct** answer from the options given below:

- 1. A, B, C, D
- 2. B, C, D, A
- 3. C, D, A, B
- 4. D, A, C, B

Options 1. 1

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

Question Type : **MCQ**

Question ID : **4818046397**

Option 1 ID : **48180424913**

Option 2 ID : **48180424914**

Option 3 ID : **48180424915**

Option 4 ID : **48180424916**

Status : **Answered**

Chosen Option : **2**

Q.88

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046392

Option 1 ID : 48180424893

Option 2 ID : 48180424894

Option 3 ID : 48180424895

Option 4 ID : 48180424896

Status : Answered

Chosen Option : 3

Q.89 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	ZnO	I.	Sp ² hybridization
B.	Graphene	II.	Isoelectronic centre for GaP in GaAsP LEDs
C.	SiC	III.	Step staircase density of state function
D.	Quantum Well	IV.	wide bandgap material

Choose the **correct** answer from the options given below:

1. A-III, B-I, C-II, D-IV

2. A-II, B-IV, C-I, D-III

3. A-I, B-III, C-IV, D-II

4. A-II, B-I, C-IV, D-III

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046420

Option 1 ID : 48180425005

Option 2 ID : 48180425006

Option 3 ID : 48180425007

Option 4 ID : 48180425008

Status : Answered

Chosen Option : 4

Q.90

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046347**

Option 1 ID : **48180424713**

Option 2 ID : **48180424714**

Option 3 ID : **48180424715**

Option 4 ID : **48180424716**

Status : **Answered**

Chosen Option : **4**

Q.91 TEM mode is supported by _____

1. Rectangular waveguide

2. Cylindrical waveguide

3. Coaxial Transmission line

4. Microstrip line

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046371**

Option 1 ID : **48180424809**

Option 2 ID : **48180424810**

Option 3 ID : **48180424811**

Option 4 ID : **48180424812**

Status : **Answered**

Chosen Option : **3**

Q.92

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

Question Type : MCQ

Question ID : 4818046368

Option 1 ID : 48180424797

Option 2 ID : 48180424798

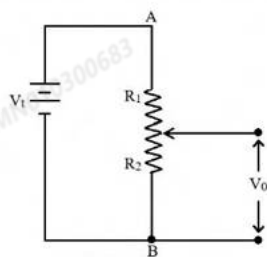
Option 3 ID : 48180424799

Option 4 ID : 48180424800

Status : Answered

Chosen Option : 2

Q.93 A displacement transducer, with a shaft stroke of 3.0 inches is applied to the circuit of figure given below. The total resistance of the potentiometer is $5\text{ k}\Omega$. The applied voltage V_t is 5V. When the wiper is 0.9 inches from B, what is the value of the output voltage?



1. 2 V
2. 1.5 V
3. 3 V
4. 3.5 V

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

Question Type : MCQ

Question ID : 4818046383

Option 1 ID : 48180424857

Option 2 ID : 48180424858

Option 3 ID : 48180424859

Option 4 ID : 48180424860

Status : Answered

Chosen Option : 2

Q.94

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046432**

Option 1 ID : **48180425053**

Option 2 ID : **48180425054**

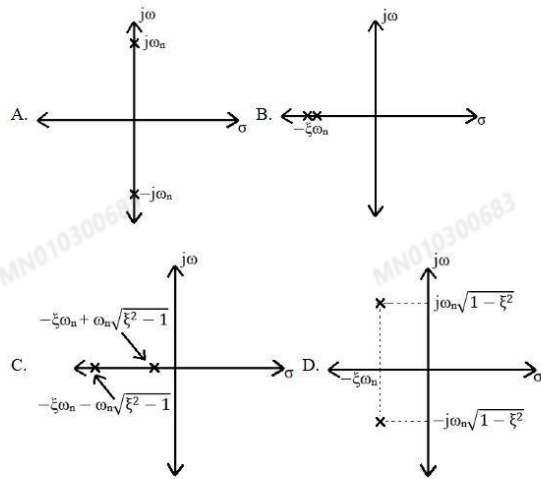
Option 3 ID : **48180425055**

Option 4 ID : **48180425056**

Status : **Answered**

Chosen Option : **2**

Q.95 The poles locations of a second order system are given below where ζ is the damping factor and ω_n is the natural frequency. Arrange the plots in decreasing value of ζ



Choose the **correct** answer from the options given below:

1. A, B, C, D
2. C, B, D, A
3. B, A, D, C
4. D, B, A, C

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046396**

Option 1 ID : **48180424909**

Option 2 ID : **48180424910**

Option 3 ID : **48180424911**

Option 4 ID : **48180424912**

Status : **Answered**

Chosen Option : **2**

Q.96

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046410**

Option 1 ID : **48180424965**

Option 2 ID : **48180424966**

Option 3 ID : **48180424967**

Option 4 ID : **48180424968**

Status : **Answered**

Chosen Option : **2**

Q.97 Arrange the following series of TTL logic family in the increasing order of propagation delay.

- A. Standard 74 series
- B. Advanced Schottky 74 AS series
- C. Schottky 74 S series
- D. Low power 74 L series

Choose the **correct** answer from the options given below:

1. A, D, C, B
2. D, A, C, B
3. B, C, A, D
4. A, B, C, D

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046390**

Option 1 ID : **48180424885**

Option 2 ID : **48180424886**

Option 3 ID : **48180424887**

Option 4 ID : **48180424888**

Status : **Answered**

Chosen Option : **2**

Q.98

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046378**

Option 1 ID : **48180424837**

Option 2 ID : **48180424838**

Option 3 ID : **48180424839**

Option 4 ID : **48180424840**

Status : **Answered**

Chosen Option : **2**

Q.99 Arrange the following loads of a CMOS cascode amplifier in the increasing order of output voltage swing .
(Assume all the transistors operating with the same overdrive voltage V_{ov}).

- A. Simple current source load
- B. Simple cascode current source load
- C. Low voltage cascode current source load
- D. Ideal current source load

Choose the **correct** answer from the options given below:

1. A, B, C, D

2. C, A, B, D

3. D, C, B, A

4. B, C, A, D

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046388**

Option 1 ID : **48180424877**

Option 2 ID : **48180424878**

Option 3 ID : **48180424879**

Option 4 ID : **48180424880**

Status : **Answered**

Chosen Option : **2**

Q.100 Which of the following statements are correct?

- A. Phase locked loops can be used for frequency synthesis.
- B. Astable multivibrators generate free running waveform.
- C. Second order low-pass filter has a gain roll-off of 60 dB/decade
- D. A voltage-to-frequency converter is an integral part of PLL.
- E. XOR gate can be used as phase frequency detector (PFD)

Choose the **correct** answer from the options given below:

- 1. A, C and E Only
- 2. A, B and D Only
- 3. A, D and E Only
- 4. B, C and D Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046402**

Option 1 ID : **48180424933**

Option 2 ID : **48180424934**

Option 3 ID : **48180424935**

Option 4 ID : **48180424936**

Status : **Answered**

Chosen Option : **3**

Q.101 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Dynamic hazards	I.	synchronous sequential circuit
B.	Set-up time violation	II.	bi-stable circuit
C.	semiconductor memories	III.	combinational circuit
D.	Demultiplexer	IV.	asynchronous sequential circuit

Choose the **correct** answer from the options given below:

- 1. A-IV, B-I, C-II, D-III
- 2. A-III, B-I, C-IV, D-II
- 3. A-I, B-IV, C-III, D-II
- 4. A-II, B-III, C-IV, D-I

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046426**

Option 1 ID : **48180425029**

Option 2 ID : **48180425030**

Option 3 ID : **48180425031**

Option 4 ID : **48180425032**

Status : **Answered**

Chosen Option : **3**

Q.102

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046361**

Option 1 ID : **48180424769**

Option 2 ID : **48180424770**

Option 3 ID : **48180424771**

Option 4 ID : **48180424772**

Status : **Answered**

Chosen Option : **4**

Q.103 Which of the following parameters are associated with Antenna

A. Gain

B. Modulation Index

C. Cross-Polarization

D. Balanced Modulator

E. Directivity

Choose the **correct** answer from the options given below:

1. B, C, D Only

2. C, D, E Only

3. A, C, E Only

4. B, D, E Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046405**

Option 1 ID : **48180424945**

Option 2 ID : **48180424946**

Option 3 ID : **48180424947**

Option 4 ID : **48180424948**

Status : **Answered**

Chosen Option : **4**

Q.104

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046372**

Option 1 ID : **48180424813**

Option 2 ID : **48180424814**

Option 3 ID : **48180424815**

Option 4 ID : **48180424816**

Status : **Answered**

Chosen Option : **2**

Q.105 To generate pulse code modulation (PCM), which of the following blocks are required

A. Lowpass filter (LPF)

B. Sampler

C. Integrator

D. Phase Shifter

E. Quantizer

Choose the **correct** answer from the options given below:

1. B, C, D Only

2. C, D, E Only

3. A, C, D Only

4. A, B, E Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046416**

Option 1 ID : **48180424989**

Option 2 ID : **48180424990**

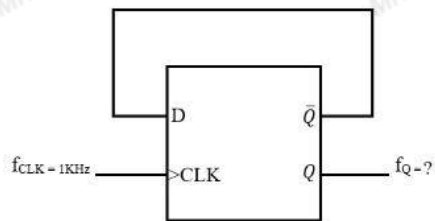
Option 3 ID : **48180424991**

Option 4 ID : **48180424992**

Status : **Answered**

Chosen Option : **1**

Q.106 The frequency of the waveform obtained at Q output in the following circuit is



1. 2 KHz
2. 0.5 KHz
3. 1.5 KHz
4. 2.5 KHz

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046362**

Option 1 ID : **48180424773**

Option 2 ID : **48180424774**

Option 3 ID : **48180424775**

Option 4 ID : **48180424776**

Status : **Answered**

Chosen Option : **3**

Q.107 Which of the following is the most prevalent lithography technique for mask making?

1. EUV lithography
2. Ion lithography
3. Electron beam lithography
4. X-ray lithography

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046349**

Option 1 ID : **48180424721**

Option 2 ID : **48180424722**

Option 3 ID : **48180424723**

Option 4 ID : **48180424724**

Status : **Answered**

Chosen Option : **3**

Q.108

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046431

Option 1 ID : 48180425049

Option 2 ID : 48180425050

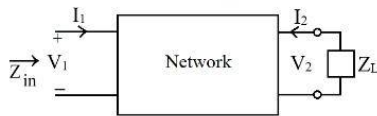
Option 3 ID : 48180425051

Option 4 ID : 48180425052

Status : Answered

Chosen Option : 2

Q.109 The input impedance of a two port network in terms of transmission parameters in figure below is



1. $Z_{in} = \frac{A + BZ_L}{C + DZ_L}$

2. $Z_{in} = \frac{AZ_L + C}{BZ_L + D}$

3. $Z_{in} = \frac{A + CZ_L}{B + DZ_L}$

4. $Z_{in} = \frac{AZ_L + B}{CZ_L + D}$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046355

Option 1 ID : 48180424745

Option 2 ID : 48180424746

Option 3 ID : 48180424747

Option 4 ID : 48180424748

Status : Answered

Chosen Option : 2

Q.110

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046381**

Option 1 ID : **48180424849**

Option 2 ID : **48180424850**

Option 3 ID : **48180424851**

Option 4 ID : **48180424852**

Status : **Answered**

Chosen Option : **4**

Q.111 In thermocouples, arrange the following materials with descending order of highest temperature measured (°C).

- A. Iron / Constantan
- B. Chromel / Alumel
- C. Copper / Constantan
- D. Chromel / Constantan

Choose the **correct** answer from the options given below:

1. D, B, C, A

2. C, D, B, A

3. A, B, C, D

4. B, A, D, C

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046398**

Option 1 ID : **48180424917**

Option 2 ID : **48180424918**

Option 3 ID : **48180424919**

Option 4 ID : **48180424920**

Status : **Answered**

Chosen Option : **2**

Q.112

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046364

Option 1 ID : 48180424781

Option 2 ID : 48180424782

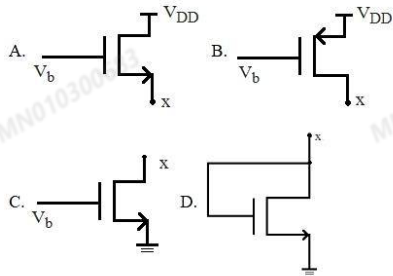
Option 3 ID : 48180424783

Option 4 ID : 48180424784

Status : Answered

Chosen Option : 1

Q.113 Which of the following MOSFET configurations can be used as a current source? Assume V_b and V_{DD} are fixed.



Choose the **correct** answer from the options given below:

1. A, B and C Only

2. C and D Only

3. B and C Only

4. A and D Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046412

Option 1 ID : 48180424973

Option 2 ID : 48180424974

Option 3 ID : 48180424975

Option 4 ID : 48180424976

Status : Answered

Chosen Option : 2

Q.114 Match the LIST-I with LIST-II

LIST-I	LIST-II
A. Discrete time unit step $u[n]$	I. $\frac{1}{2} [f[n] + f[-n]]$
B. Discrete time unit impulse $\delta[n]$	II. $u[n] - u[n-1]$
C. Discrete time even function	III. $\sum_{m=-\infty}^n \delta[m]$
D. Discrete time odd function	IV. $\frac{1}{2} [f[n] - f[-n]]$

Choose the **correct** answer from the options given below:

1. A-III, B-II, C-I, D-IV
2. A-II, B-III, C-I, D-IV
3. A-III, B-II, C-IV, D-I
4. A-IV, B-I, C-II, D-III

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046422**

Option 1 ID : **48180425013**

Option 2 ID : **48180425014**

Option 3 ID : **48180425015**

Option 4 ID : **48180425016**

Status : **Answered**

Chosen Option : **2**

Q.115 In an optic fibre, the refractive index of core, $\mu_1 = 1.55$ and refractive index of cladding, $\mu_2 = 1.5$, what are the values of numerical aperture (NA) and acceptance angle (θ_0)

1. NA = 0.494, $\theta_0 = 46^\circ$
2. NA = 0.494, $\theta_0 = 23.2^\circ$
3. NA = 0.394, $\theta_0 = 23.2^\circ$
4. NA = 0.394, $\theta_0 = 46^\circ$

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046373**

Option 1 ID : **48180424817**

Option 2 ID : **48180424818**

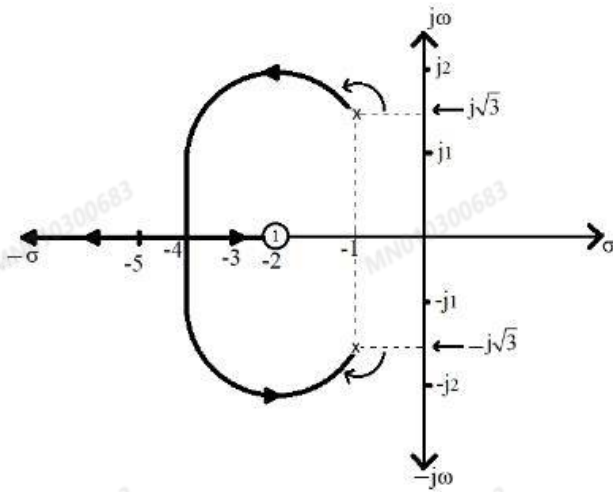
Option 3 ID : **48180424819**

Option 4 ID : **48180424820**

Status : **Answered**

Chosen Option : **1**

Q.116 In a system with given root locus for open-loop transfer function.



- A. Number of loci is 3.
- B. Number of loci at ∞ is 1.
- C. Number of asymptotes are 1.
- D. Angle of departure is 150° .
- E. Centroid lies at $S = -4$

Choose the **correct** answer from the options given below:

- 1. A, B and C Only
- 2. B, C and D Only
- 3. B, C and E Only
- 4. A, C and E Only

Options 1. 1

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

Question Type : MCQ

Question ID : 4818046407

Option 1 ID : 48180424953

Option 2 ID : 48180424954

Option 3 ID : 48180424955

Option 4 ID : 48180424956

Status : Answered

Chosen Option : 4

Q.117

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046395

Option 1 ID : 48180424905

Option 2 ID : 48180424906

Option 3 ID : 48180424907

Option 4 ID : 48180424908

Status : Answered

Chosen Option : 3

Q.118 Which of the following Boolean equations can be implemented using 2-to-1 multiplexers?

A. $F = A \oplus B$

B. $F = A \cdot \overline{B} + C \cdot B$

C. $F = \overline{A+B}$

D. $F = A \cdot \overline{B}$

E. $Q_{n+1} = Q_n \cdot \overline{E_n} + D \cdot E_n$

Choose the **correct** answer from the options given below:

1. B Only

2. B, C and D Only

3. A, B, C and D Only

4. A, B, C, D and E

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046413

Option 1 ID : 48180424977

Option 2 ID : 48180424978

Option 3 ID : 48180424979

Option 4 ID : 48180424980

Status : Answered

Chosen Option : 3

Q.119

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046351**

Option 1 ID : **48180424729**

Option 2 ID : **48180424730**

Option 3 ID : **48180424731**

Option 4 ID : **48180424732**

Status : **Answered**

Chosen Option : **2**

Q.120 Which of the following statements are correct?

- A. Limited source diffusion results into Gaussian distribution profile
- B. Constant source diffusion results into Error function distribution profile
- C. Ion implantation results into Error function distribution profile
- D. Ion implantation results into Gaussian distribution profile
- E. Limited source diffusion results into Error function distribution profile

Choose the **correct** answer from the options given below:

1. A, B and D Only

2. A and C Only

3. A and D Only

4. C and E Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046400**

Option 1 ID : **48180424925**

Option 2 ID : **48180424926**

Option 3 ID : **48180424927**

Option 4 ID : **48180424928**

Status : **Answered**

Chosen Option : **2**

Q.121 In 8051 microcontroller, what will be the content of Accumulate (A) register and CY flag status after the execution of the following instructions?

CLR C

MOV A, #3FH

MOV R3, #23H

SUBB A, R3

1. A = 2C, CY = 0
2. A = 1C, CY = 1
3. A = 2C, CY = 1
4. A = 1C, CY = 0

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046366**

Option 1 ID : **48180424789**

Option 2 ID : **48180424790**

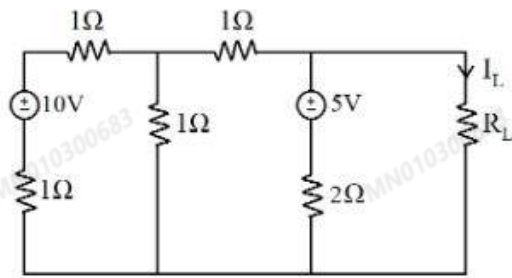
Option 3 ID : **48180424791**

Option 4 ID : **48180424792**

Status : **Answered**

Chosen Option : **2**

Q.122 The current in the resistance $R_L = 2\Omega$ in the given network is



1. 3.25 A

2. 1.41 A

3. 2.50 A

4. 0.25 A

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046353

Option 1 ID : 48180424737

Option 2 ID : 48180424738

Option 3 ID : 48180424739

Option 4 ID : 48180424740

Status : Answered

Chosen Option : 1

Q.123

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

Question Type : **MCQ**

Question ID : **4818046369**

Option 1 ID : **48180424801**

Option 2 ID : **48180424802**

Option 3 ID : **48180424803**

Option 4 ID : **48180424804**

Status : **Answered**

Chosen Option : **4**

Q.124 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A. Schottky diode		I. Voltage regulator	
B. Tunnel diode		II. High Speed Switch	
C. Zener diode		III. Voltage tuning of an LC resonator circuit	
D. Varactor diode		IV. use in low voltage and high current rectifier circuit	

Choose the **correct** answer from the options given below:

1. A-I, B-II, C-III, D-IV
2. A-IV, B-II, C-III, D-I
3. A-III, B-II, C-IV, D-I
4. A-IV, B-II, C-I, D-III

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

Question Type : **MCQ**

Question ID : **4818046419**

Option 1 ID : **48180425001**

Option 2 ID : **48180425002**

Option 3 ID : **48180425003**

Option 4 ID : **48180425004**

Status : **Answered**

Chosen Option : **2**

Q.125 Which of the following statements are correct?

A. The electron concentration in intrinsic semiconductor under thermal equilibrium is

$$n_0 = N_c \exp \left[\frac{-(E_c - E_{fi})}{KT} \right]$$

B. Tunnel diode is a degenerately doped diode

C. Fill factor of solar cell is $FF = \frac{I_{sc} \cdot V_{oc}}{V_m \cdot I_m}$

D. In a Schottky barrier diode, a rectifying contact is achieved for the metal-n-type semiconductor contact if metal work function (Φ_m) is less than semiconductor work function (Φ_s)

E. The diffusion capacitance of diode is $C_D = \frac{C(0)}{\left(1 + \left|\frac{V_R}{V_K}\right|\right)^n}$

Choose the correct answer from the options given below:

1. A and E Only
2. D and E Only
3. A and B Only
4. B and C Only

Options 1. 1

2. 2
3. 3
4. 4

Question Type : MCQ

Question ID : 4818046399

Option 1 ID : 48180424921

Option 2 ID : 48180424922

Option 3 ID : 48180424923

Option 4 ID : 48180424924

Status : Answered

Chosen Option : 1

Q.126

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046374**

Option 1 ID : **48180424821**

Option 2 ID : **48180424822**

Option 3 ID : **48180424823**

Option 4 ID : **48180424824**

Status : **Answered**

Chosen Option : **1**

Q.127 M1 and M0 are the mode select bits in a TMOD register.

- A. Mode 0 is a 13 bit timer mode
- B. Mode 1 is a 8 bit auto reload timer / counter
- C. Mode 0 is a 16 bit timer mode
- D. Mode 2 is a 8 bit auto reload timer / counter.
- E. Mode 1 is a 16 bit timer mode

Choose the **correct** answer from the options given below:

- 1. A, D, E Only
- 2. A, B, D Only
- 3. B, C Only
- 4. A, B Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046414**

Option 1 ID : **48180424981**

Option 2 ID : **48180424982**

Option 3 ID : **48180424983**

Option 4 ID : **48180424984**

Status : **Answered**

Chosen Option : **2**

Q.128

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046428**

Option 1 ID : **48180425037**

Option 2 ID : **48180425038**

Option 3 ID : **48180425039**

Option 4 ID : **48180425040**

Status : **Answered**

Chosen Option : **3**

Q.129 Arrange the following material and device structure innovations in chronological order.

- A. Gate all around (GAA) FET
- B. High-K metal gate
- C. Strained silicon
- D. FinFET

Choose the **correct** answer from the options given below:

1. C, B, D, A
2. D, A, C, B
3. D, A, B, C
4. B, C, D, A

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046386**

Option 1 ID : **48180424869**

Option 2 ID : **48180424870**

Option 3 ID : **48180424871**

Option 4 ID : **48180424872**

Status : **Answered**

Chosen Option : **3**

Q.130 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Hertzian Dipole Antenna	I.	$R_{\text{rad}} = \frac{320 \pi^4 s^2}{\lambda^4}$
B.	Half wave Dipole Antenna	II.	$R_{\text{rad}} = 80 \pi^2 \left(\frac{d\ell}{\lambda}\right)^2$
C.	Quarter wave monopole Antenna	III.	$R_{\text{rad}} \approx 36 \cdot 5 \Omega$
D.	Small loop Antenna	IV.	$R_{\text{rad}} = 73 \Omega$

Choose the **correct** answer from the options given below:

1. A-IV, B-III, C-II, D-I
2. A-II, B-IV, C-III, D-I
3. A-I, B-II, C-III, D-IV
4. A-II, B-I, C-III, D-IV

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046429**

Option 1 ID : **48180425041**

Option 2 ID : **48180425042**

Option 3 ID : **48180425043**

Option 4 ID : **48180425044**

Status : **Answered**

Chosen Option : **4**

Q.131 Arrange the following components of two cavity klystron amplifier from input to output.

- A. Catcher cavity
- B. Buncher cavity
- C. Cathode
- D. Anode
- E. Collector

Choose the **correct** answer from the options given below:

1. C, A, D, B, E
2. C, D, B, A, E
3. E, D, C, B, A
4. A, B, C, D, E

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046393**

Option 1 ID : **48180424897**

Option 2 ID : **48180424898**

Option 3 ID : **48180424899**

Option 4 ID : **48180424900**

Status : **Answered**

Chosen Option : **1**

Q.132

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046348

Option 1 ID : 48180424717

Option 2 ID : 48180424718

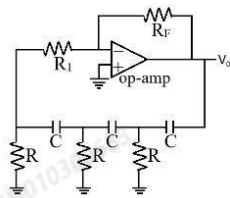
Option 3 ID : 48180424719

Option 4 ID : 48180424720

Status : Answered

Chosen Option : 3

Q.133 In the given circuit of phase shift oscillator, the frequency of oscillation and relation between R_F and R_1 is given as



1. $f_0 = \frac{1}{2\pi\sqrt{RC}}$ and $\left|\frac{R_F}{R_1}\right| = 9$

2. $f_0 = \frac{1}{2\pi\sqrt{6 \cdot RC}}$ and $\left|\frac{R_F}{R_1}\right| = 29$

3. $f_0 = \frac{1}{2\pi\sqrt{6 \cdot RC}}$ and $\left|\frac{R_F}{R_1}\right| = 9$

4. $f_0 = \frac{1}{2\pi\sqrt{6RC}}$ and $\left|\frac{R_F}{R_1}\right| = 29$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046357

Option 1 ID : 48180424753

Option 2 ID : 48180424754

Option 3 ID : 48180424755

Option 4 ID : 48180424756

Status : Answered

Chosen Option : 4

Q.134 The closed loop transfer function of a system is:

$$\frac{C(s)}{R(s)} = \frac{K}{s(s^2 + s + 1)(s + 4) + K}$$

The range of K for which the system is stable is

1. $0 < K < \frac{84}{5}$
2. $0 < K < \frac{84}{25}$
3. $1 < K < \frac{84}{5}$
4. $1 < K < \frac{84}{25}$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046376

Option 1 ID : 48180424829

Option 2 ID : 48180424830

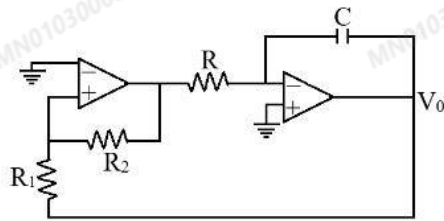
Option 3 ID : 48180424831

Option 4 ID : 48180424832

Status : Answered

Chosen Option : 3

Q.135 The output frequency of a triangular wave generator circuit as shown below is



1. $f = \frac{R_1 R_2}{4RC}$
2. $f = \frac{R_2}{4R_1 RC}$
3. $f = \frac{4R_1 R_2}{RC}$
4. $f = \frac{4RC}{R_1 R_2}$

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046356**

Option 1 ID : **48180424749**

Option 2 ID : **48180424750**

Option 3 ID : **48180424751**

Option 4 ID : **48180424752**

Status : **Answered**

Chosen Option : **1**

Q.136 Which of following semiconductors for LED gives the lowest wavelength of emission?

1. AlGaAs
2. InAlGaP
3. InGaN
4. GaAsP

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046344**

Option 1 ID : **48180424701**

Option 2 ID : **48180424702**

Option 3 ID : **48180424703**

Option 4 ID : **48180424704**

Status : **Answered**

Chosen Option : **3**

Q.137

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046375**

Option 1 ID : **48180424825**

Option 2 ID : **48180424826**

Option 3 ID : **48180424827**

Option 4 ID : **48180424828**

Status : **Answered**

Chosen Option : **2**

Q.138 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Common emitter amplifier	I.	Voltage gain less than unity
B.	Common Collector amplifier	II.	High input resistance
C.	Common base amplifier	III.	Low input resistance
D.	Common emitter amplifier with emitter resistance R_E	IV.	Low nonlinear distortion

Choose the **correct** answer from the options given below:

1. A-II, B-III, C-I, D-IV

2. A-II, B-I, C-III, D-IV

3. A-III, B-I, C-II, D-IV

4. A-IV, B-III, C-I, D-II

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046424**

Option 1 ID : **48180425021**

Option 2 ID : **48180425022**

Option 3 ID : **48180425023**

Option 4 ID : **48180425024**

Status : **Answered**

Chosen Option : **2**

Q.139

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046394**

Option 1 ID : **48180424901**

Option 2 ID : **48180424902**

Option 3 ID : **48180424903**

Option 4 ID : **48180424904**

Status : **Answered**

Chosen Option : 2

Q.140 The size of the transformer is reduced in:

1. Switched-mode AC power supplies

2. Resonant AC Power supplies

3. Bidirectional AC Power supplies

4. Switched-mode and Resonant AC power supplies

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046379**

Option 1 ID : **48180424841**

Option 2 ID : **48180424842**

Option 3 ID : **48180424843**

Option 4 ID : **48180424844**

Status : **Answered**

Chosen Option : 2

Comprehension:

SubQuestion No : 141

Q.141 Let the carrier voltage (V_c) and modulating voltage (V_m), be represented by $V_c = A_c \sin \omega_c t$ and $V_m = A_m \sin \omega_m t$, respectively.

The correct expression for the modulation index (m) is _____

1. $m = \frac{A_c}{A_m}$

2. $m = \frac{A_m}{A_c}$

3. $m = \frac{A_c^2}{A_m^2}$

4. $m = \frac{1}{A_c}$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **4818046437**

Option 1 ID : **48180425069**

Option 2 ID : **48180425070**

Option 3 ID : **48180425071**

Option 4 ID : **48180425072**

Status : **Answered**

Chosen Option : **1**

Comprehension:

SubQuestion No : 142

Q.142 In a hexagonal cellular system, the following information is provided:

D = minimum distance between centres of cells that use the same frequency band (co channels)

R = Radius of a cell

N = Number of cells in a repetitious pattern, so $\frac{D}{R} = \underline{\hspace{2cm}}$

1. 5 N
2. $\frac{1}{3N}$
3. 3N
4. $\sqrt{3N}$

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046439**

Option 1 ID : **48180425077**

Option 2 ID : **48180425078**

Option 3 ID : **48180425079**

Option 4 ID : **48180425080**

Status : **Answered**

Chosen Option : **2**

Comprehension:

SubQuestion No : 143

Q.143 _____ modulation technique is used for transmission of picture signals in television.

1. PM
2. FM
3. AM
4. VSB

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046435**

Option 1 ID : **48180425061**

Option 2 ID : **48180425062**

Option 3 ID : **48180425063**

Option 4 ID : **48180425064**

Status : **Answered**

Chosen Option : **1**

Comprehension:

SubQuestion No : 144

Q.144 A 400 W carrier is modulated to a depth of 75%, the total power in the amplitude modulated wave is _____

1. 512.5 W
2. 242 W
3. 378 W
4. 400 W

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046438**

Option 1 ID : **48180425073**

Option 2 ID : **48180425074**

Option 3 ID : **48180425075**

Option 4 ID : **48180425076**

Status : **Answered**

Chosen Option : **1**

Comprehension:

SubQuestion No : 145

Q.145 A certain transmitter radiates 9 kW with the carrier unmodulated and 10.125 kW when the carrier is sinusoidally modulated. If another sine wave is simultaneously transmitted with modulation index 0.4, determine the total radiated power.

1. 7.45 kW
2. 10.84 kW
3. 9.90 kW
4. 12.74 kW

Options

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

Question Type : **MCQ**

Question ID : **4818046436**

Option 1 ID : **48180425065**

Option 2 ID : **48180425066**

Option 3 ID : **48180425067**

Option 4 ID : **48180425068**

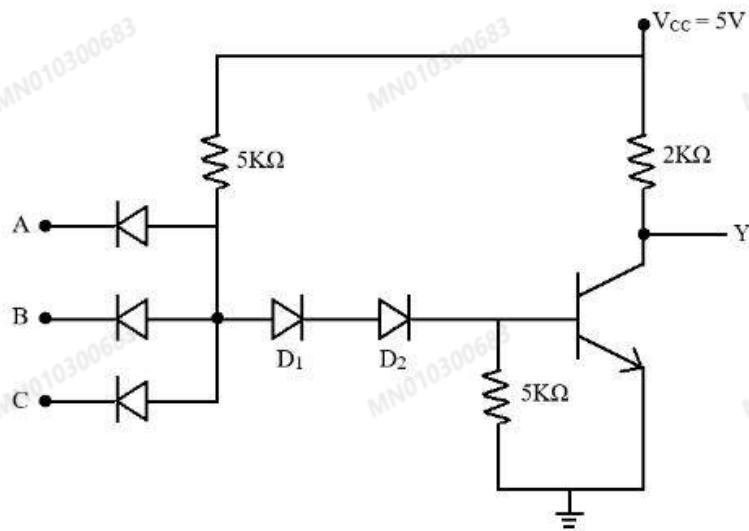
Status : **Answered**

Chosen Option : **4**

Comprehension:

SubQuestion No : 146

Q.146 What logic function is implemented by the following circuit?



1. $Y = \overline{A+B+C}$
2. $Y = \overline{A \cdot B \cdot C}$
3. $Y = A+B+C$
4. $Y = A \cdot B \cdot C$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046441

Option 1 ID : 48180425081

Option 2 ID : 48180425082

Option 3 ID : 48180425083

Option 4 ID : 48180425084

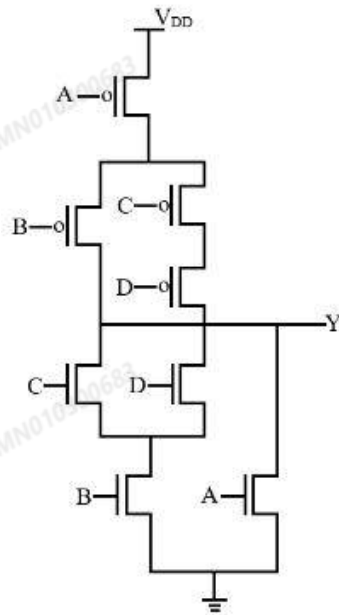
Status : Answered

Chosen Option : 1

Comprehension:

SubQuestion No : 147

Q.147 What logic function is implemented by the given circuit?



1. $A + B \cdot (C + D)$
2. $\bar{A} \cdot (\bar{B} + \bar{C} + \bar{D})$
3. $\bar{A} \cdot (\bar{B} + C \cdot D)$
4. $(A + B) (C + D)$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 4818046444

Option 1 ID : 48180425093

Option 2 ID : 48180425094

Option 3 ID : 48180425095

Option 4 ID : 48180425096

Status : Answered

Comprehension:**SubQuestion No : 148**

Q.148 The input and output voltage ranges of a standard TTL NAND gate are: $V_{OH} = 2.4$ V, $V_{OL} = 0.4$ V, $V_{IH} = 2$ V and $V_{IL} = 0.8$ V. The high state noise margin (NM_{IH}) of this gate is

1. 1.6 V
2. 1.2 V
3. 0.4 V
4. 2.2 V

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046443**

Option 1 ID : **48180425089**

Option 2 ID : **48180425090**

Option 3 ID : **48180425091**

Option 4 ID : **48180425092**

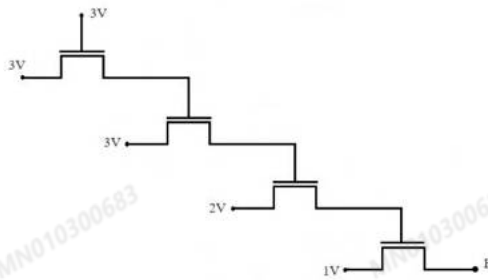
Status : **Answered**

Chosen Option : **4**

Comprehension:

SubQuestion No : 149

Q.149 What will be the voltage (V_F) at the output node F? Assume the body bias effect is negligible and the threshold voltage of the transistors is $V_{TN} = 0.5$ V.



1. $V_F = 1$ V
2. $V_F = 1.5$ V
3. $V_F = 2$ V
4. $V_F = 2.5$ V

Options 1. 1

2. 2
3. 3
4. 4

Question Type : MCQ

Question ID : 4818046445

Option 1 ID : 48180425097

Option 2 ID : 48180425098

Option 3 ID : 48180425099

Option 4 ID : 48180425100

Status : Answered

Chosen Option : 2

Comprehension:

SubQuestion No : 150

Q.150 The standard TTL gates have the following values for the current: $I_{OH} = 400 \mu A$, $I_{IH} = 40 \mu A$, $I_{OL} = 16 \text{ mA}$ and $I_{IL} = 1.6 \text{ mA}$

What is the fan-out of this gate?

1. 5
2. 40
3. 4
4. 10

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **4818046442**

Option 1 ID : **48180425085**

Option 2 ID : **48180425086**

Option 3 ID : **48180425087**

Option 4 ID : **48180425088**

Status : **Answered**

Chosen Option : **3**

Exam Summary

Electronic Science and General Paper

Section Name	No. of Questions	Answered	Not Answered	Marked for Review	Answered & Marked for Review	Not Visited
General Paper	50	50	0	0	0	0
Electronic Science	100	100	0	0	0	0