

UGC NET 2023 Dec Session Exam_Dec 2023

Application No	[REDACTED]
Candidate Name	[REDACTED]
Roll No	[REDACTED]
Test Date	07/12/2023
Test Time	3:00 PM - 6:00 PM
Subject	87 Computer Science and Applications

Section : **General Paper**

Comprehension:

The following table shows the number of buildings constructed in six different towns A - F of a state S over the seven years from 2016-2022. Based on the data in the table, answer the questions that follow.

Town-wise Details of Buildings Constructed.

Year Town	2016	2017	2018	2019	2020	2021	2022
A	3000	3160	3220	3272	3300	3320	3400
B	2500	2568	2640	2670	2792	2800	2900
C	2960	3000	3090	3100	3192	3200	3268
D	3448	3500	3600	3640	3664	3760	3792
E	2040	2100	2200	2230	2320	2350	2380
F	2272	2380	2460	2480	2530	2560	2588

SubQuestion No : 1

Q.1 What is the percentage increase in the number of buildings constructed in Town D in 2018 with reference to the previous year ?

- (1) 3.85 %
- (2) 2.85 %
- (3) 4.85 %
- (4) 4 %

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024940**

Option 1 ID : **87827098449**

Option 2 ID : **87827098450**

Option 3 ID : **87827098451**

Option 4 ID : **87827098452**

Status : **Answered**

Chosen Option : **2** 

Comprehension:

The following table shows the number of buildings constructed in six different towns A - F of a state S over the seven years from 2016-2022. Based on the data in the table, answer the questions that follow.

Town-wise Details of Buildings Constructed.

Year Town	2016	2017	2018	2019	2020	2021	2022
A	3000	3160	3220	3272	3300	3320	3400
B	2500	2568	2640	2670	2792	2800	2900
C	2960	3000	3090	3100	3192	3200	3268
D	3448	3500	3600	3640	3664	3760	3792
E	2040	2100	2200	2230	2320	2350	2380
F	2272	2380	2460	2480	2530	2560	2588

SubQuestion No : 2

Q.2 Total number of buildings constructed over the years from 2020 to 2022 is more than 8500 in exactly _____ towns.

- (1) 2
- (2) 3
- (3) 4
- (4) 5

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024942**

Option 1 ID : **87827098457**

Option 2 ID : **87827098458**

Option 3 ID : **87827098459**

Option 4 ID : **87827098460**

Status : **Answered**

Chosen Option : **2**

Comprehension:

The following table shows the number of buildings constructed in six different towns A - F of a state S over the seven years from 2016-2022. Based on the data in the table, answer the questions that follow.

Town-wise Details of Buildings Constructed.

Year Town	2016	2017	2018	2019	2020	2021	2022
A	3000	3160	3220	3272	3300	3320	3400
B	2500	2568	2640	2670	2792	2800	2900
C	2960	3000	3090	3100	3192	3200	3268
D	3448	3500	3600	3640	3664	3760	3792
E	2040	2100	2200	2230	2320	2350	2380
F	2272	2380	2460	2480	2530	2560	2588

SubQuestion No : 3

Q.3 In the context of towns E and F together, what is the difference between the number of buildings constructed in 2021 and that in 2017 ?

- (1) 630
- (2) 830
- (3) 430
- (4) 410

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024941**

Option 1 ID : **87827098453**

Option 2 ID : **87827098454**

Option 3 ID : **87827098455**

Option 4 ID : **87827098456**

Status : **Answered**

Chosen Option : **3**

Comprehension:

The following table shows the number of buildings constructed in six different towns A - F of a state S over the seven years from 2016-2022. Based on the data in the table, answer the questions that follow.

Town-wise Details of Buildings Constructed.

Year Town	2016	2017	2018	2019	2020	2021	2022
A	3000	3160	3220	3272	3300	3320	3400
B	2500	2568	2640	2670	2792	2800	2900
C	2960	3000	3090	3100	3192	3200	3268
D	3448	3500	3600	3640	3664	3760	3792
E	2040	2100	2200	2230	2320	2350	2380
F	2272	2380	2460	2480	2530	2560	2588

SubQuestion No : 4

Q.4 Across the state S, the total number of buildings constructed in 2016 is approximately _____ % of the total number of buildings constructed in 2018 ?

- (1) 81
- (2) 94
- (3) 84
- (4) 74

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024938**

Option 1 ID : **87827098441**

Option 2 ID : **87827098442**

Option 3 ID : **87827098443**

Option 4 ID : **87827098444**

Status : **Answered**

Chosen Option : **2**

Comprehension:

The following table shows the number of buildings constructed in six different towns A - F of a state S over the seven years from 2016-2022. Based on the data in the table, answer the questions that follow.

Town-wise Details of Buildings Constructed.

Year Town	2016	2017	2018	2019	2020	2021	2022
A	3000	3160	3220	3272	3300	3320	3400
B	2500	2568	2640	2670	2792	2800	2900
C	2960	3000	3090	3100	3192	3200	3268
D	3448	3500	3600	3640	3664	3760	3792
E	2040	2100	2200	2230	2320	2350	2380
F	2272	2380	2460	2480	2530	2560	2588

SubQuestion No : 5

- Q.5** What is the total number of buildings constructed in Town B over all the seven years ?
- (1) 17870
 - (2) 18780
 - (3) 17780
 - (4) 18870

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024939**

Option 1 ID : **87827098445**

Option 2 ID : **87827098446**

Option 3 ID : **87827098447**

Option 4 ID : **87827098448**

Status : **Answered**

Chosen Option : **4**

Q.6 In conversations, relevancy maxim means making :

- (1) Metaphoric remarks
- (2) Allusions
- (3) Pertinent comments
- (4) Rudimentary comments

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024953**

Option 1 ID : **87827098501**

Option 2 ID : **87827098502**

Option 3 ID : **87827098503** ✓

Option 4 ID : **87827098504**

Status : **Answered**

Chosen Option : **2**

Q.7 Given below are two statements :

Statement (I) : In Round-Robin cooperative learning strategy, students work together to achieve a common goal or complete a task.

Statement (II) : In group investigation cooperative learning strategy, students take turns sharing their ideas, thoughts or solutions within their group.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024944**

Option 1 ID : **87827098465**

Option 2 ID : **87827098466**

Option 3 ID : **87827098467**

Option 4 ID : **87827098468**

Status : **Answered**

Chosen Option : **1**



Q.8 Identify the correct sequence of the missing units of data A-D that can be used to represent the size of a file, as it changes in size. The units of data increase in size from smallest to largest as given below.

bit

kilo Byte (KB)

tera Byte (TB)

(A) byte

(B) gigaByte (GB)

(C) megaByte (MB)

(D) nibble

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

(1) (D), (A), (C), (B)

(2) (A), (C), (D), (B)

(3) (D), (A), (B), (C)

(4) (A), (D), (C), (B)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024969**

Option 1 ID : **87827098565**

Option 2 ID : **87827098566**

Option 3 ID : **87827098567**

Option 4 ID : **87827098568**

Status : **Answered**

Chosen Option : **4**



- Q.9** Which of the following are true about Persistent Organic Pollutants (POPs) ?
- (A) They are extremely widespread and occur from tropics to Arctic.
 - (B) They often accumulate in food webs and reach toxic concentrations.
 - (C) Volatile Organic Compounds (VOCs) are examples of POPs.
 - (D) They are widely used as flame retardants and in deodorants.
 - (E) Some chemicals used in making non-stick, waterproof and stain-resistant products are categorized as POPs.

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024977**

Option 1 ID : **87827098597**

Option 2 ID : **87827098598**

Option 3 ID : **87827098599**

Option 4 ID : **87827098600**

Status : **Answered**

Chosen Option : **2**

Q.10 Which of the following were the recommendations of the first educational conference held at Shimla in 1901 ?

- (A) Appointment of only Indians as Vice-Chancellors of Indian Universities
- (B) Importance to teaching and research in Sanskrit
- (C) A thorough reform of Indian Universities
- (D) Appointment of a Director-General of Indian education
- (E) Co-ordination of rules for examinations

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024980**

Option 1 ID : **87827098609**

Option 2 ID : **87827098610**

Option 3 ID : **87827098611**

Option 4 ID : **87827098612**

Status : **Answered**

Chosen Option : **2**



Q.11 Which one of the following Universities was the largest in the initial years of Lord Curzon's regime ?

- (1) Calcutta
- (2) Madras
- (3) Bombay
- (4) Punjab

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024979**

Option 1 ID : **87827098605**

Option 2 ID : **87827098606**

Option 3 ID : **87827098607**

Option 4 ID : **87827098608**

Status : **Answered**

Chosen Option : **1**



Q.12 Which of the following gases has the maximum contribution to Global Warming ?

- (1) Chlorofluorocarbons (CFCs)
- (2) Methane (CH₄)
- (3) Sulfur Hexa fluoride (SF₆)
- (4) Carbon dioxide (CO₂)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024976**

Option 1 ID : **87827098593**

Option 2 ID : **87827098594**

Option 3 ID : **87827098595**

Option 4 ID : **87827098596**

Status : **Answered**

Chosen Option : **2**



Q.13 Which fallacy is committed in the following argument ?

“The universe must be spherical in form because all its constituent parts are spherical in form” ?

- (1) Circular argument
- (2) Red herring
- (3) Slippery slope
- (4) Fallacy of composition

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024965**

Option 1 ID : **87827098549**

Option 2 ID : **87827098550**

Option 3 ID : **87827098551**

Option 4 ID : **87827098552**

Status : **Answered**

Chosen Option : **4**



Q.14 Which of the following are the administrative reforms in universities suggested by the National Knowledge Commission ?

- (A) Appointment of vice-chancellors based on their academic and administrative credentials
- (B) De-politicisation of appointments
- (C) Centralised control of universities
- (D) Restrictions on academic freedom
- (E) Creation of a good research environment

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024981**

Option 1 ID : **87827098613**

Option 2 ID : **87827098614**

Option 3 ID : **87827098615**

Option 4 ID : **87827098616**

Status : **Answered**

Chosen Option : **4**



Q.15 Which of the following are the examples of Information Development Model ?

- (A) Self Awareness Model
- (B) Gagne's Information Model
- (C) Jerome Bruner's Model
- (D) Schuman's Model
- (E) Group Investigation Model

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

- (1) (A), (D) and (E) Only
- (2) (B) and (D) 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 : **87827024947**

Option 1 ID : **87827098477**

Option 2 ID : **87827098478**

Option 3 ID : **87827098479**

Option 4 ID : **87827098480**

Status : **Answered**

Chosen Option : **2**

Q.16 Given below are two statements :

Statement (I) : Truth and falsehood are attributes of individual propositions.

Statement (II) : Validity can be attributed to any single proposition by itself.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options

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



Question Type : **MCQ**

Question ID : **87827024964**

Option 1 ID : **87827098545**

Option 2 ID : **87827098546**

Option 3 ID : **87827098547**

Option 4 ID : **87827098548**

Status : **Answered**

Chosen Option : **3**

- Q.17** In which strategy of cooperative learning, students are separated into an inner and outer circle (In the inner circle, students have a discussion and students in the outer circle listen to the discussion) ?
- (1) Snow ball
 - (2) Fishbowl
 - (3) Jigsaw
 - (4) Think-pair-share

Options

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



Question Type : **MCQ**

Question ID : **87827024946**

Option 1 ID : **87827098473**

Option 2 ID : **87827098474**

Option 3 ID : **87827098475**

Option 4 ID : **87827098476**

Status : **Answered**

Chosen Option : **3**

Q.18 Given below are two statements :

Statement (I) : The monastery of Vikramasila, possessed a University with six colleges.

Statement (II) : Vikramasila was a well-known centre of Tantric Buddhism and attracted students from other countries.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024982**

Option 1 ID : **87827098617**

Option 2 ID : **87827098618**

Option 3 ID : **87827098619**

Option 4 ID : **87827098620**

Status : **Answered**

Chosen Option : **1**



Q.19

In a certain coding scheme :

'Family values are important' is written as 'pa, ya, si, sa'

'Values are generally contagious' is written as 'ya, da, ja, sa'

'Some diseases are contagious' is written as 'ka, da, sa, ro'

What are the codes for 'Contagious' and 'Values' ?

- (1) da, sa
- (2) da, si
- (3) ka, ya
- (4) da, ya

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024961**

Option 1 ID : **87827098533**

Option 2 ID : **87827098534**

Option 3 ID : **87827098535**

Option 4 ID : **87827098536**

Status : **Answered**

Chosen Option : **4**



Q.20 What is the next term in the following number series ?

3, 14, 39, 84, ?,

- (1) 176
- (2) 155
- (3) 142
- (4) 186

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024962**

Option 1 ID : **87827098537**

Option 2 ID : **87827098538**

Option 3 ID : **87827098539**

Option 4 ID : **87827098540**

Status : **Answered**

Chosen Option : **2**



Q.21 Identify the threats to the internal validity of an investigation :

- (A) History
- (B) Instrumentation
- (C) Maturation

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

- (1) (A) and (B) Only
- (2) (B) and (C) Only
- (3) (A) and (C) Only
- (4) (A), (B) and (C)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024949**

Option 1 ID : **87827098485**

Option 2 ID : **87827098486**

Option 3 ID : **87827098487**

Option 4 ID : **87827098488**

Status : **Answered**

Chosen Option : **4**

Q.22 Given below are two statements :

Statement (I) : Under Montreal protocol developed and developing nations have differentiated responsibilities.

Statement (II) : Under Kigali amendment of Montreal protocol, ChloroFluoroCarbons (CFCs) and HydroChloroFluoroCarbons (HCFCs) were to be phased out.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024974**

Option 1 ID : **87827098585**

Option 2 ID : **87827098586**

Option 3 ID : **87827098587**

Option 4 ID : **87827098588**

Status : **Answered**

Chosen Option : **3**

Q.23 The Buddhist mode of inter-personal communication emphasises :

- (A) Unfettered use of language
- (B) Unintelligible moral frames
- (C) Symmetrical relations
- (D) Consensus through interaction
- (E) Verifiability of communication

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024955**

Option 1 ID : **87827098509**

Option 2 ID : **87827098510**

Option 3 ID : **87827098511**

Option 4 ID : **87827098512**

Status : **Answered**

Chosen Option : **1**



- Q.24** Total monthly salary of a couple (husband and wife) is ₹ 2.0 lakh. Their salaries are in the ratio of 5 : 3. If husband and wife spend 40 % and 20 % of their salaries, respectively, what is the ratio of their savings ?
- (1) 3 : 2
 - (2) 5 : 3
 - (3) 5 : 4
 - (4) 3 : 1

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

Question Type : **MCQ**

Question ID : **87827024960**

Option 1 ID : **87827098529**

Option 2 ID : **87827098530**

Option 3 ID : **87827098531**

Option 4 ID : **87827098532**

Status : **Answered**

Chosen Option : **3**

Q.25 Failure to understand the cultural environment can lead to :

- (1) Information richness
- (2) Exhibitionism
- (3) High-brow communication
- (4) Miscommunication

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024954**

Option 1 ID : **87827098505**

Option 2 ID : **87827098506**

Option 3 ID : **87827098507**

Option 4 ID : **87827098508**

Status : **Answered**

Chosen Option : **3**



Q.26 Match List - I with List - II.

List - I	List - II
(Automatic data capture method)	(Description)
(A) OCR	(I) System that reads pencil or pen marks on a piece of paper in pre-determined positions
(B) OMR	(II) System that reads characters printed in a special ink, for example, the characters written at the bottom of Bank cheque
(C) RFID	(III) Reading data directly from hard copy and converting into computer-readable form
(D) MICR	(IV) Use of minute-electronic devices (containing microchip and antenna) that can read from distances upto few minutes

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024972**

Option 1 ID : **87827098577**

Option 2 ID : **87827098578**

Option 3 ID : **87827098579**

Option 4 ID : **87827098580**

Status : **Answered**

Chosen Option : **3**

Q.27 Given below are two statements :

Statement (I) : Wiki is usually represented in reverse chronological order, whereas blog has a structure determined by content and users.

Statement (II) : Blog is usually personal/someone's opinion, whereas a wiki is usually objective.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024970**

Option 1 ID : **87827098569**

Option 2 ID : **87827098570**

Option 3 ID : **87827098571**

Option 4 ID : **87827098572**

Status : **Answered**

Chosen Option : **1**



Q.28 Given below are two statements :

Statement (I) : 'Nyaya' syllogism has three propositions

Statement (II) : Aristotelian syllogism has five propositions

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options

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

Question Type : **MCQ**

Question ID : **87827024967**

Option 1 ID : **87827098557**

Option 2 ID : **87827098558**

Option 3 ID : **87827098559**

Option 4 ID : **87827098560**

Status : **Answered**

Chosen Option : **3**



Q.29 Identify the correct sequence of letters which will complete the following letter series.

aabcd - - - bcdbc - - - dcdab - - -

- (1) abaabccdd
- (2) abcabacdd
- (3) abaabdcdd
- (4) abcadbbcd

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024959**

Option 1 ID : **87827098525**

Option 2 ID : **87827098526**

Option 3 ID : **87827098527**

Option 4 ID : **87827098528**

Status : **Answered**

Chosen Option : **1**



Q.30 A milkman buys 20 litres of milk from a dairy at the cost of Rs. 50 per litre. He also purchases some mineral water at the rate of Rs 20 per litre and adds it to the milk. He then sells the adulterated milk at the rate of Rs 60 per litre and makes a profit of Rs 400. What is the amount of water he added to the milk ?

- (1) 10 litre
- (2) 8 litre
- (3) 5 litre
- (4) 4 litre

Options 1. 1

2. 2

3. 3

4. 4



Question Type : **MCQ**

Question ID : **87827024958**

Option 1 ID : **87827098521**

Option 2 ID : **87827098522**

Option 3 ID : **87827098523**

Option 4 ID : **87827098524**

Status : **Answered**

Chosen Option : **1**

Q.31 Swayam Prabha channel 07 - Kautilya is related to which of the following subjects ?

- (A) Economics
- (B) Library Science
- (C) Commerce
- (D) Finance
- (E) Mathematics

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024945**

Option 1 ID : **87827098469**

Option 2 ID : **87827098470**

Option 3 ID : **87827098471**

Option 4 ID : **87827098472**

Status : **Answered**

Chosen Option : **3**

Q.32 Given below are two statements :

Statement (I) : Naturally occurring Volatile Organic Compounds (VOCs) generally oxidize to form Carbonmonoxide (CO) and Carbondioxide (CO₂)

Statement (II) : Anthropogenically emitted VOCs play an important role in the formation of smog

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024975**

Option 1 ID : **87827098589**

Option 2 ID : **87827098590**

Option 3 ID : **87827098591**

Option 4 ID : **87827098592**

Status : **Answered**

Chosen Option : **1**



Q.33 Given below are two statements :

Statement (I) : Pearson's coefficient of correlation ' r ' is a very useful measure of the strength and direction of the relationship between two nominal variables.

Statement (II) : Pearson's coefficient of correlation ' r ' always lies between 0 and 1.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024950**

Option 1 ID : **87827098489**

Option 2 ID : **87827098490** ✓

Option 3 ID : **87827098491**

Option 4 ID : **87827098492**

Status : **Answered**

Chosen Option : **3**

Q.34 Which of the following refers to a method of sampling in which a core group of participants who are initially sampled for a research study recruit or recommend other potential participants ?

- (1) Simple random sampling
- (2) Snowball sampling
- (3) Quota sampling
- (4) Stratified random sampling

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024951**

Option 1 ID : **87827098493**

Option 2 ID : **87827098494**

Option 3 ID : **87827098495**

Option 4 ID : **87827098496**

Status : **Answered**

Chosen Option : **4**



Q.35 Given below are two statements :

Statement (I) : The process of deduction involves drawing generalizable inferences out of observations.

Statement (II) : Positivism advocates the application of the methods of the natural sciences to the study of social reality.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024948**

Option 1 ID : **87827098481**

Option 2 ID : **87827098482**

Option 3 ID : **87827098483**

Option 4 ID : **87827098484**

Status : **Answered**

Chosen Option : **2**



Q.36 Match List - I with List - II.

List - I

(Type of meta communications)

- (A) Explicit
- (B) Implicit
- (C) Verbal
- (D) Non-verbal

List - II

(Description/Example)

- (I) An aggressive gesture modified with a smile
- (II) Comments on others' communication behaviour
- (III) Sarcastic remarks
- (IV) Comments about non-verbal behaviour

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024957**

Option 1 ID : **87827098517**

Option 2 ID : **87827098518**

Option 3 ID : **87827098519**

Option 4 ID : **87827098520**

Status : **Answered**

Chosen Option : **2**

Q.37 Which of the following is arranged in order of increasing denotation ?

- (1) Cow, bovine, mammal, vertebrate, animal
- (2) Mammal, Vertebrate, bovine, animal, cow
- (3) Vertebrate, animal, mammal, bovine, cow
- (4) Animal, Vertebrate, mammal, bovine, cow

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024963**

Option 1 ID : **87827098541**

Option 2 ID : **87827098542**

Option 3 ID : **87827098543**

Option 4 ID : **87827098544**

Status : **Answered**

Chosen Option : **1**

Q.38 Which of the following statements A-E about firewalls in computer networks are true ?

- (A) Firewalls are only available as hardware devices and only examine traffic entering a network.
- (B) Firewalls allow a user to set rules for network traffic.
- (C) Firewalls will automatically stop all malicious traffic.
- (D) Firewalls backup all data that is transmitted around a network.
- (E) Firewalls can be used to block access to certain websites.

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024971**

Option 1 ID : **87827098573**

Option 2 ID : **87827098574**

Option 3 ID : **87827098575**

Option 4 ID : **87827098576**

Status : **Answered**

Chosen Option : **2**



Q.39 The Hindu College in Banares set up by Annie Besant before Independence proposed to impart :

- (1) Physical education
- (2) Religious and moral education
- (3) Western education
- (4) Medical education

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024978**

Option 1 ID : **87827098601**

Option 2 ID : **87827098602**

Option 3 ID : **87827098603**

Option 4 ID : **87827098604**

Status : **Answered**

Chosen Option : **2**



Q.40 Given below are two statements :

Statement (I) : According to UGC regulations 2018 on Prevention of Plagiarism, a student is required to give an undertaking while submitting a thesis, stating that the document is his/her original work which is free from any plagiarism.

Statement (II) : According to UGC Regulations 2018 on Prevention of Plagiarism, the research supervisor is not required to certify that the work done by the researcher under him/her is plagiarism free.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024952**

Option 1 ID : **87827098497**

Option 2 ID : **87827098498**

Option 3 ID : **87827098499**

Option 4 ID : **87827098500**

Status : **Answered**

Chosen Option : **3**



Q.41 Given below are two statements :

Statement (I) : The absence of fluoride in drinking water causes tooth decay.

Statement (II) : Absence of fluoride in drinking water causes mottling of teeth also known as dental fluorosis.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024973**

Option 1 ID : **87827098581**

Option 2 ID : **87827098582**

Option 3 ID : **87827098583**

Option 4 ID : **87827098584**

Status : **Answered**

Chosen Option : **1**



Q.42 Given below are two statements :

Statement (I) : The statement - “Pradeep’s mind is a cave : deep, dark and full of bats” is an analogy which is only descriptive in nature.

Statement (II) : The statement - “Pradeep’s mind is a cave ; deep, dark and full of bats” is an analogy which contains an argument.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024966**

Option 1 ID : **87827098553**

Option 2 ID : **87827098554**

Option 3 ID : **87827098555**

Option 4 ID : **87827098556**

Status : **Answered**

Chosen Option : **4**



Q.43 Given below are two statements :

Statement (I) : Paralinguistic features express emotions and communicate personality traits.

Statement (II) : The subtle use of vocal inflections can provide special significance to verbal messages.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024956**

Option 1 ID : **87827098513**

Option 2 ID : **87827098514**

Option 3 ID : **87827098515**

Option 4 ID : **87827098516**

Status : **Answered**

Chosen Option : **1**



Q.44 Which collaborative ICT tool allows user to create digital bulletin boards to share and gather information ?

- (1) X- mind
- (2) Padlet
- (3) Book creator
- (4) Plotagon

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024943**

Option 1 ID : **87827098461**

Option 2 ID : **87827098462**

Option 3 ID : **87827098463**

Option 4 ID : **87827098464**

Status : **Answered**

Chosen Option : **2**



Q.45 Which of the following is an online store house of all academic awards like certificates, diplomas, degrees, marksheets etc. ?

- (1) SWAYAM
- (2) National Digital Library
- (3) National Academic Library
- (4) National Academic Depository

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024968**

Option 1 ID : **87827098561**

Option 2 ID : **87827098562**

Option 3 ID : **87827098563**

Option 4 ID : **87827098564**

Status : **Answered**

Chosen Option : **4**



Comprehension:

निम्न गद्यांश को पढ़िए व उसके बाद पूछे गए प्रश्नों के उत्तर दीजिए :

ऐतिहासिक मूल्यों और संस्कृतियों व धर्मों से आप्लावित भावनाओं का देश भारत प्रत्येक मील पर बदलता है परन्तु फिर भी यह अपनी समृद्ध सांस्कृतिक विरासत के संरक्षण के लिए विख्यात है। वैश्विक पर्यटन की दिशा में अग्रसर होते हुए पत्तन, पोत-परिवहन व जलमार्ग मंत्रालय ने हाल ही में जनता के लिए एक ऐसे अनुभव की रचना की जिसने हमारी नदियों के ऐतिहासिक, सांस्कृतिक व धार्मिक महत्व को प्रदर्शित किया है। जनवरी व फरवरी में वैश्विक पर्यटन व पोत विहार क्षेत्र विश्व के सबसे लंबे पोत विहारी (कूज) एम वी गंगा विलास के समाचार से गुंजायमान था। इस पोत विहार ने गंगा ब्रह्मपुत्र नदी प्रणालियों के मार्ग से पाँच राज्यों व दो देशों की 27 नदी प्रणालियों को पार करते हुए 51 दिनों में लगभग 32,000 कि.मी. की दूरी तय की। उत्तर प्रदेश के हृदय स्थल वाराणसी से आरंभ कर असम के डिब्रुगढ़ तक इसके अनेक ठहराव थे और इसने लगभग 50 स्थानों की यात्रा की।

प्रधानमंत्री नरेन्द्र मोदी की एक्ट ईस्ट (पूर्व पर ध्यान देने) की नीति और राष्ट्रीय जलमार्गों को विकसित करने के उनके फोकस ने इस ऐतिहासिक जल यात्रा को यथार्थ बना दिया। स्वदेश में निर्मित पोत, पूर्णतया भारतीय कर्मी दल, भारतीय साज-सज्जा, भारतीय व्यंजन, भारतीय कला, शिल्प व उत्पादों के प्रदर्शन से यह आत्मनिर्भर भारत का सच्चा प्रदर्शन भी था। शून्य उत्सर्जन नीति वाले इस पोत ने डॉल्फिन निवारक युक्ति के साथ भारतीय तेल निगम द्वारा विनिर्मित हरित ईंधन का भी प्रयोग किया।

SubQuestion No : 46

Q.46 नीचे दो कथन दिए गए हैं :

कथन (I) : एम वी गंगा विलास एक पर्यावरण अनुकूल जलपोत है।

कथन (II) : एम वी गंगा विलास स्वदेश में निर्मित जलपोत नहीं है।

उपरोक्त कथन के आलोक में, नीचे दिए गए विकल्पों में से **सबसे उपयुक्त उत्तर** का चयन कीजिए :

- (1) **कथन I और कथन II** दोनों सही हैं
- (2) **कथन I और कथन II** दोनों गलत हैं
- (3) **कथन I** सही है, लेकिन **कथन II** गलत है
- (4) **कथन I** गलत है, लेकिन **कथन II** सही है

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024988**

Option 1 ID : **87827098637**

Option 2 ID : **87827098638**

Option 3 ID : **87827098639**

Option 4 ID : **87827098640**

Status : **Answered**

Chosen Option : **3**

Comprehension:

निम्न गद्यांश को पढ़िए व उसके बाद पूछे गए प्रश्नों के उत्तर दीजिए :

ऐतिहासिक मूल्यों और संस्कृतियों व धर्मों से आप्लावित भावनाओं का देश भारत प्रत्येक मील पर बदलता है परन्तु फिर भी यह अपनी समृद्ध सांस्कृतिक विरासत के संरक्षण के लिए विख्यात है। वैश्विक पर्यटन की दिशा में अग्रसर होते हुए पत्तन, पोत-परिवहन व जलमार्ग मंत्रालय ने हाल ही में जनता के लिए एक ऐसे अनुभव की रचना की जिसने हमारी नदियों के ऐतिहासिक, सांस्कृतिक व धार्मिक महत्व को प्रदर्शित किया है। जनवरी व फरवरी में वैश्विक पर्यटन व पोत विहार क्षेत्र विश्व के सबसे लंबे पोत विहारी (कूज) एम वी गंगा विलास के समाचार से गुंजायमान था। इस पोत विहार ने गंगा ब्रह्मपुत्र नदी प्रणालियों के मार्ग से पांच राज्यों व दो देशों की 27 नदी प्रणालियों को पार करते हुए 51 दिनों में लगभग 32,000 कि.मी. की दूरी तय की। उत्तर प्रदेश के हृदय स्थल वाराणसी से आरंभ कर असम के डिब्रुगढ़ तक इसके अनेक ठहराव थे और इसने लगभग 50 स्थानों की यात्रा की।

प्रधानमंत्री नरेन्द्र मोदी की एक्ट ईस्ट (पूर्व पर ध्यान देने) की नीति और राष्ट्रीय जलमार्गों को विकसित करने के उनके फोकस ने इस ऐतिहासिक जल यात्रा को यथार्थ बना दिया। स्वदेश में निर्मित पोत, पूर्णतया भारतीय कर्मों दल, भारतीय साज-सज्जा, भारतीय व्यंजन, भारतीय कला, शिल्प व उत्पादों के प्रदर्शन से यह आत्मनिर्भर भारत का सच्चा प्रदर्शन भी था। शून्य उत्सर्जन नीति वाले इस पोत ने डॉल्फिन निवारक युक्ति के साथ भारतीय तेल निगम द्वारा विनिर्मित हरित ईंधन का भी प्रयोग किया।

SubQuestion No : 47

Q.47

“ऐतिहासिक जल यात्रा” का संकेत निम्न में से किसकी ओर है?

- (1) वैश्विक पर्यटन
- (2) प्रधान मंत्री नरेन्द्र मोदी की ‘एक्ट ईस्ट’ नीति
- (3) एम वी गंगा विलास पोत विहार
- (4) राष्ट्रीय जलमार्गों का विकास

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 87827024987

Option 1 ID : 87827098633

Option 2 ID : 87827098634

Option 3 ID : 87827098635

Option 4 ID : 87827098636

Status : Answered

Chosen Option : 1

Comprehension:

निम्न गद्यांश को पढ़िए व उसके बाद पूछे गए प्रश्नों के उत्तर दीजिए :

ऐतिहासिक मूल्यों और संस्कृतियों व धर्मों से आप्लावित भावनाओं का देश भारत प्रत्येक मील पर बदलता है परन्तु फिर भी यह अपनी समृद्ध सांस्कृतिक विरासत के संरक्षण के लिए विख्यात है। वैश्विक पर्यटन की दिशा में अग्रसर होते हुए पत्तन, पोत-परिवहन व जलमार्ग मंत्रालय ने हाल ही में जनता के लिए एक ऐसे अनुभव की रचना की जिसने हमारी नदियों के ऐतिहासिक, सांस्कृतिक व धार्मिक महत्व को प्रदर्शित किया है। जनवरी व फरवरी में वैश्विक पर्यटन व पोत विहार क्षेत्र विश्व के सबसे लंबे पोत विहारी (कूज) एम वी गंगा विलास के समाचार से गुंजायमान था। इस पोत विहार ने गंगा ब्रह्मपुत्र नदी प्रणालियों के मार्ग से पांच राज्यों व दो देशों की 27 नदी प्रणालियों को पार करते हुए 51 दिनों में लगभग 32,000 कि.मी. की दूरी तय की। उत्तर प्रदेश के हृदय स्थल वाराणसी से आरंभ कर असम के डिब्रुगढ़ तक इसके अनेक ठहराव थे और इसने लगभग 50 स्थानों की यात्रा की।

प्रधानमंत्री नरेन्द्र मोदी की एक्ट ईस्ट (पूर्व पर ध्यान देने) की नीति और राष्ट्रीय जलमार्गों को विकसित करने के उनके फोकस ने इस ऐतिहासिक जल यात्रा को यथार्थ बना दिया। स्वदेश में निर्मित पोत, पूर्णतया भारतीय कर्मी दल, भारतीय साज-सज्जा, भारतीय व्यंजन, भारतीय कला, शिल्प व उत्पादों के प्रदर्शन से यह आत्मनिर्भर भारत का सच्चा प्रदर्शन भी था। शून्य उत्सर्जन नीति वाले इस पोत ने डॉल्फिन निवारक युक्ति के साथ भारतीय तेल निगम द्वारा विनिर्मित हरित ईंधन का भी प्रयोग किया।

SubQuestion No : 48**Q.48**

भारत देश के संबंध में निम्न में से क्या-क्या सही हैं ?

- (A) यह अपनी सांस्कृतिक विरासत का संरक्षण नहीं करता है।
- (B) यह संस्कृतियों से आप्लावित है।
- (C) इसमें धर्मों की विविधता नहीं है।
- (D) यह ऐतिहासिक मूल्यों का देश है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) केवल (A), (B) और (C)
- (2) केवल (C) और (D)
- (3) केवल (A) और (C)
- (4) केवल (B) और (D)

Options 1. 1

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

Question Type : **MCQ**

Question ID : **87827024984**

Option 1 ID : **87827098621**

Option 2 ID : **87827098622**

Option 3 ID : **87827098623**

Option 4 ID : **87827098624**

Status : **Answered**

Chosen Option : **4**



Comprehension:

निम्न गद्यांश को पढ़िए व उसके बाद पूछे गए प्रश्नों के उत्तर दीजिए :

ऐतिहासिक मूल्यों और संस्कृतियों व धर्मों से आप्लावित भावनाओं का देश भारत प्रत्येक मील पर बदलता है परन्तु फिर भी यह अपनी समृद्ध सांस्कृतिक विरासत के संरक्षण के लिए विख्यात है। वैश्विक पर्यटन की दिशा में अग्रसर होते हुए पत्तन, पोत-परिवहन व जलमार्ग मंत्रालय ने हाल ही में जनता के लिए एक ऐसे अनुभव की रचना की जिसने हमारी नदियों के ऐतिहासिक, सांस्कृतिक व धार्मिक महत्व को प्रदर्शित किया है। जनवरी व फरवरी में वैश्विक पर्यटन व पोत विहार क्षेत्र विश्व के सबसे लंबे पोत विहारी (कूज) एम वी गंगा विलास के समाचार से गुंजायमान था। इस पोत विहार ने गंगा ब्रह्मपुत्र नदी प्रणालियों के मार्ग से पांच राज्यों व दो देशों की 27 नदी प्रणालियों को पार करते हुए 51 दिनों में लगभग 32,000 कि.मी. की दूरी तय की। उत्तर प्रदेश के हृदय स्थल वाराणसी से आरंभ कर असम के डिब्रुगढ़ तक इसके अनेक ठहराव थे और इसने लगभग 50 स्थानों की यात्रा की।

प्रधानमंत्री नरेन्द्र मोदी की एक्ट ईस्ट (पूर्व पर ध्यान देने) की नीति और राष्ट्रीय जलमार्गों को विकसित करने के उनके फोकस ने इस ऐतिहासिक जल यात्रा को यथार्थ बना दिया। स्वदेश में निर्मित पोत, पूर्णतया भारतीय कर्मी दल, भारतीय साज-सज्जा, भारतीय व्यंजन, भारतीय कला, शिल्प व उत्पादों के प्रदर्शन से यह आत्मनिर्भर भारत का सच्चा प्रदर्शन भी था। शून्य उत्सर्जन नीति वाले इस पोत ने डॉल्फिन निवारक युक्ति के साथ भारतीय तेल निगम द्वारा विनिर्मित हरित ईंधन का भी प्रयोग किया।

SubQuestion No : 49**Q.49**

एम वी गंगा विलास आत्म निर्भर भारत का सच्चा प्रदर्शन है क्योंकि :

- (A) इसकी साज सज्जा भारतीय डिजाइनरों ने की है।
- (B) इसमें भारतीय व पश्चिमी व्यंजन, दोनों परोसे जाते हैं।
- (C) यह भारतीय कला व शिल्प को प्रदर्शित करता है।
- (D) इसका संचालन पूर्णरूपेण एक भारतीय कर्मी दल करता है।

नीचे दिए गए विकल्पों में से सही उत्तर का चयन कीजिए :

- (1) केवल (A) और (B)
- (2) (A), (B), (C) और (D)
- (3) केवल (A), (C) और (D)
- (4) केवल (B), (C) और (D)

Options 1. 1

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



Question Type : **MCQ**

Question ID : **87827024986**

Option 1 ID : **87827098629**

Option 2 ID : **87827098630**

Option 3 ID : **87827098631**

Option 4 ID : **87827098632**

Status : **Answered**

Chosen Option : **2**

Comprehension:

निम्न गद्यांश को पढ़िए व उसके बाद पूछे गए प्रश्नों के उत्तर दीजिए :

ऐतिहासिक मूल्यों और संस्कृतियों व धर्मों से आप्लावित भावनाओं का देश भारत प्रत्येक मील पर बदलता है परन्तु फिर भी यह अपनी समृद्ध सांस्कृतिक विरासत के संरक्षण के लिए विख्यात है। वैश्विक पर्यटन की दिशा में अग्रसर होते हुए पत्तन, पोत-परिवहन व जलमार्ग मंत्रालय ने हाल ही में जनता के लिए एक ऐसे अनुभव की रचना की जिसने हमारी नदियों के ऐतिहासिक, सांस्कृतिक व धार्मिक महत्व को प्रदर्शित किया है। जनवरी व फरवरी में वैश्विक पर्यटन व पोत विहार क्षेत्र विश्व के सबसे लंबे पोत विहारी (कूज) एम वी गंगा विलास के समाचार से गुंजायमान था। इस पोत विहार ने गंगा ब्रह्मपुत्र नदी प्रणालियों के मार्ग से पांच राज्यों व दो देशों की 27 नदी प्रणालियों को पार करते हुए 51 दिनों में लगभग 32,000 कि.मी. की दूरी तय की। उत्तर प्रदेश के हृदय स्थल वाराणसी से आरंभ कर असम के डिब्रुगढ़ तक इसके अनेक ठहराव थे और इसने लगभग 50 स्थानों की यात्रा की।

प्रधानमंत्री नरेन्द्र मोदी की एक्ट ईस्ट (पूर्व पर ध्यान देने) की नीति और राष्ट्रीय जलमार्गों को विकसित करने के उनके फोकस ने इस ऐतिहासिक जल यात्रा को यथार्थ बना दिया। स्वदेश में निर्मित पोत, पूर्णतया भारतीय कर्मों दल, भारतीय साज-सज्जा, भारतीय व्यंजन, भारतीय कला, शिल्प व उत्पादों के प्रदर्शन से यह आत्मनिर्भर भारत का सच्चा प्रदर्शन भी था। शून्य उत्सर्जन नीति वाले इस पोत ने डॉल्फिन निवारक युक्ति के साथ भारतीय तेल निगम द्वारा विनिर्मित हरित ईंधन का भी प्रयोग किया।

SubQuestion No : 50**Q.50**

एम वी गंगा विलास के बारे में निम्न विकल्पों में से कौन सा सही है?

- (1) यह एक पर्यटन स्थल है।
- (2) इसने हरिद्वार से चलना शुरू किया।
- (3) यह विश्व का सबसे लंबा नदी विहार है।
- (4) इसने 27 दिनों में लगभग 32,000 कि.मी. की दूरी तय की।

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827024985**Option 1 ID : **87827098625**Option 2 ID : **87827098626**Option 3 ID : **87827098627**Option 4 ID : **87827098628**Status : **Answered**Chosen Option : **3**

Q.51 Which of the following statements are CORRECT ?

- (A) A process always check state of currently executing process to enter critical schema.
- (B) Spin locks uses busy waiting.
- (C) Periodically testing a variable until some value appear is known as busy waiting.
- (D) Critical region is a part of program, where shared memory is kept.
- (E) Printer daemon, continuously checks to see if there are any file to be printed.

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025041**

Option 1 ID : **87827098849**

Option 2 ID : **87827098850**

Option 3 ID : **87827098851**

Option 4 ID : **87827098852**

Status : **Answered**

Chosen Option : **2**

Q.52 Consider the three points $P_1(1, 2, 0)$, $P_2(3, 6, 20)$ and $P_3(2, 4, 6)$ and a view point $C(0, 0, -10)$.

Choose the correct options.

- (A) P_1 obscure P_2 , if viewed from C .
- (B) P_2 obscure P_1 , if viewed from C .
- (C) P_3 does not obscure P_1 , if viewed from C .
- (D) P_2 does not obscure P_3 , if viewed from C .

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

- (1) (A), (B) and (C) Only
- (2) (A), (C) and (D) Only
- (3) (B), (C) and (D) Only
- (4) (A), (B) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025035**

Option 1 ID : **87827098825**

Option 2 ID : **87827098826**

Option 3 ID : **87827098827**

Option 4 ID : **87827098828**

Status : **Answered**

Chosen Option : **3**



Q.53 Match List - I with List - II.

List - I

- (A) Greedy Best first search
- (B) A*
- (C) Recursive best first search
- (D) SMA*

List - II

- (I) The space complexity as $O(d)$ where d = depth of the deepest optimal solution
- (II) Incomplete even if the search space is finite
- (III) Optimal if optimal solution is reachable otherwise return the best reachable optimal solution
- (IV) Computation and space complexity is two light

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025061**

Option 1 ID : **87827098929**

Option 2 ID : **87827098930**

Option 3 ID : **87827098931**

Option 4 ID : **87827098932**

Status : **Answered**

Chosen Option : **2**



Q.54 Which of the following statement are truth statements if universe of discourse is set of integers :

- (A) $\forall n(n^2 \geq 0)$
- (B) $\exists n(n^2 = 2)$
- (C) $\forall n(n^2 \geq n)$
- (D) $\exists n(n^2 < 0)$

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

- (1) (A) and (B) Only
- (2) (B) and (C) Only
- (3) (C) and (D) Only
- (4) (A) and (C) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025045**

Option 1 ID : **87827098865**

Option 2 ID : **87827098866**

Option 3 ID : **87827098867**

Option 4 ID : **87827098868**

Status : **Answered**

Chosen Option : **1**



Q.55

The Hue of a colour is related to its :

- (1) Luminance
- (2) Saturation
- (3) Incandescence
- (4) Wavelength

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025000**

Option 1 ID : **87827098685**

Option 2 ID : **87827098686**

Option 3 ID : **87827098687**

Option 4 ID : **87827098688**

Status : **Answered**

Chosen Option : **3**



Q.56 The head of a moving head disk with 200 tracks, numbered 0 to 199, has just finished a request at track 125, and currently serving a request at track 143. The queue of requests is given in the FIFO order as 86, 147, 91, 177, 94, 150, 102, 175, 130. What will be the total number of head movements required to satisfy these requests for SCAN algorithm ?

- (1) 259 cylinders
- (2) 169 cylinders
- (3) 154 cylinders
- (4) 264 cylinders

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025005**

Option 1 ID : **87827098705**

Option 2 ID : **87827098706**

Option 3 ID : **87827098707**

Option 4 ID : **87827098708**

Status : **Answered**

Chosen Option : **4**



Q.57

An Address in main memory is called :

- (1) Virtual address
- (2) Memory address
- (3) Logical address
- (4) Physical address

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827025002**Option 1 ID : **87827098693**Option 2 ID : **87827098694**Option 3 ID : **87827098695**Option 4 ID : **87827098696**Status : **Answered**Chosen Option : **2**

Q.58 Which of the following is TRUE ?

- (1) The cost of searching an AVL tree is $\theta(\log n)$ but that of binary search is $O(n)$
- (2) The cost of searching an AVL tree is $\theta(\log n)$ but that of complete binary tree is $\theta(n \log n)$
- (3) The cost of searching a binary tree is $O(\log n)$ but that of AVL tree is $\theta(n)$
- (4) The cost of searching an AVL tree is $\theta(n \log n)$ but that of binary search tree is $O(n)$

Options 1. 1

2. 2

3. 3

4. 4



Question Type : **MCQ**

Question ID : **87827024991**

Option 1 ID : **87827098649**

Option 2 ID : **87827098650**

Option 3 ID : **87827098651**

Option 4 ID : **87827098652**

Status : **Answered**

Chosen Option : **2**

Q.59 Match List - I with List - II.

List - I

- (A) Hill climbing
- (B) Best first search
- (C) A* Search
- (D) Depth first search

List - II

- (I) $O(b^d)$
- (II) $O(bd)$
- (III) $O(1)$
- (IV) $O(b^m)$

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

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

Options

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

Question Type : **MCQ**

Question ID : **87827025063**

Option 1 ID : **87827098937**

Option 2 ID : **87827098938**

Option 3 ID : **87827098939**

Option 4 ID : **87827098940**

Status : **Answered**

Chosen Option : **1**



Q.60 2-3-4 trees are B - trees of order 4. They are isometric of _____ trees.

- (1) AVL
- (2) AA
- (3) 2-3
- (4) Red-Black

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025016**

Option 1 ID : **87827098749**

Option 2 ID : **87827098750**

Option 3 ID : **87827098751**

Option 4 ID : **87827098752**

Status : **Answered**

Chosen Option : **2**



Q.61 A program that is used by other routines to accomplish a particular task, is called :

- (1) Micro program
- (2) Micro operation
- (3) Routine
- (4) Subroutine

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



Question Type : **MCQ**

Question ID : **87827024996**

Option 1 ID : **87827098669**

Option 2 ID : **87827098670**

Option 3 ID : **87827098671**

Option 4 ID : **87827098672**

Status : **Answered**

Chosen Option : **1**

Q.62 Match List - I with List - II.

List - I

List - II

(A) $\phi \cap \{\phi\} =$

(I) ϕ

(B) $\{\phi\} \cap \{\phi\} =$

(II) $\{\phi\}$

(C) $\{\phi, \{\phi\}\} - \phi =$

(III) $\{\{\phi\}\}$

(D) $\phi \cup \{\{\phi\}\} =$

(IV) $\{\phi, \{\phi\}\}$

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

(1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

(2) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)

(3) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

(4) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)

Options 1. 1

2. 2

3. 3

4. 4



Question Type : **MCQ**

Question ID : **87827025054**

Option 1 ID : **87827098901**

Option 2 ID : **87827098902**

Option 3 ID : **87827098903**

Option 4 ID : **87827098904**

Status : **Answered**

Chosen Option : **4**

Q.63 The interface(s) that provide(s) I/O transfer of data directly to and from the memory unit peripheral is/are termed as :

- (A) DMA (Direct Memory Access)
- (B) IOP (Input-Output Processor)
- (C) Serial Interface
- (D) Parallel Interface

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

- (1) (A) Only
- (2) (B) Only
- (3) (A) and (B) Only
- (4) (C) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025032**

Option 1 ID : **87827098813**

Option 2 ID : **87827098814**

Option 3 ID : **87827098815**

Option 4 ID : **87827098816**

Status : **Answered**

Chosen Option : **4**

Q.64 Three address codes can be represented in special structures known as :

- (A) Quadruples
- (B) Triples
- (C) Patterns
- (D) Indirect Triples

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

- (1) (A) and (B) Only
- (2) (A), (B) and (D) Only
- (3) (B) and (C) Only
- (4) (B), (C) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025042**

Option 1 ID : **87827098853**

Option 2 ID : **87827098854**

Option 3 ID : **87827098855**

Option 4 ID : **87827098856**

Status : **Answered**

Chosen Option : **2**



Q.65 Arrange the following levels of interrupt protection within the Linux Kernel, in the order of increasing priority.

- (A) user mode programs
- (B) bottom half interrupt handlers
- (C) kernel system service routines
- (D) top half interrupt handlers

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

- (1) (A), (B), (D), (C)
- (2) (A), (C), (B), (D)
- (3) (A), (C), (D), (B)
- (4) (D), (A), (C), (B)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025068**

Option 1 ID : **87827098957**

Option 2 ID : **87827098958**

Option 3 ID : **87827098959**

Option 4 ID : **87827098960**

Status : **Answered**

Chosen Option : **4**



Q.66 What is the generic structure of Multi Agent System (MAS) ?

- (1) Single agent with multiple objectives
- (2) Multiagents with a single objectives
- (3) Multiagents with diverse objectives and communication abilities
- (4) Multiagent with two objectives

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025025**

Option 1 ID : **87827098785**

Option 2 ID : **87827098786**

Option 3 ID : **87827098787**

Option 4 ID : **87827098788**

Status : **Answered**

Chosen Option : **3**



Q.67 Arrange the following encoding strategies used in Genetic Algorithms (GAs) in the correct sequence starting from the initial step and ending with the final representation of solutions :

- (A) Binary Encoding
- (B) Real valued Encoding
- (C) Permutation Encoding
- (D) Gray coding

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

- (1) (D), (B), (A), (C)
- (2) (B), (D), (A), (C)
- (3) (C), (D), (A), (B)
- (4) (B), (C), (A), (D)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025071**

Option 1 ID : **87827098969**

Option 2 ID : **87827098970**

Option 3 ID : **87827098971**

Option 4 ID : **87827098972**

Status : **Answered**

Chosen Option : **2**



Q.68

Consider the following functions :

$$f(n) = 3n^{\sqrt{n}}$$

$$g(n) = 2^{\sqrt{n}} \log_2^n$$

$$h(n) = n!$$

Which of the following is true ?

- (1) $h(n)$ is $O(f(n))$
- (2) $h(n)$ is $O(g(n))$
- (3) $g(n)$ is not $O(f(n))$
- (4) $f(n)$ is $O(g(n))$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025015**

Option 1 ID : **87827098745**

Option 2 ID : **87827098746**

Option 3 ID : **87827098747**

Option 4 ID : **87827098748**

Status : **Answered**

Chosen Option : **2**

Q.69 In the content of Alpha Beta pruning in game trees which of the following statements are correct regarding cut off procedures ?

- (A) Alpha Beta pruning can eliminate subtrees with certainty when the value of a node exceeds both the alpha and beta bonds.
- (B) The primarily purpose of Alpha-Beta pruning is to save computation time by searching fewer nodes in the same tree.
- (C) Alpha Beta pruning guarantees the optimal solution in all cases by exploring the entire game tree.
- (D) Alpha and Beta bonds are initialized to negative and positive infinity respectively at the root node.

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

- (1) (A), (C), (D) Only
- (2) (B), (C), (D) Only
- (3) (A), (B), (D) Only
- (4) (C), (B) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025053**

Option 1 ID : **87827098897**

Option 2 ID : **87827098898**

Option 3 ID : **87827098899**

Option 4 ID : **87827098900**

Status : **Answered**

Chosen Option : **2**



Q.70 What is the result of evaluating the postfix expression " $43*25*+b-$ " ?

- (1) 8
- (2) 14
- (3) 10
- (4) 5

Options

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

Q wrong?

Question Type : **MCQ**

Question ID : **87827024992**

Option 1 ID : **87827098653**

Option 2 ID : **87827098654**

Option 3 ID : **87827098655**

Option 4 ID : **87827098656**

Status : **Answered**

Chosen Option : **3**



Q.71 The average time required to search a storage location in memory and obtain its contents is called :

- (1) Access time
- (2) Latency time
- (3) Response time
- (4) Reading time

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025017**

Option 1 ID : **87827098753**

Option 2 ID : **87827098754**

Option 3 ID : **87827098755**

Option 4 ID : **87827098756**

Status : **Answered**

Chosen Option : **2**

Q.72

In a genetic algorithm optimization problem the fitness function is defined as $f(x) = x^2 - 4x + 4$.
Given a population of four individuals with values of x : {1.5, 2.0, 3.0, 4.5}
What is the fitness value of the individual that will be selected as the parent for reproduction in one generation ?

- (1) 2.25
- (2) 6.0
- (3) 0.0
- (4) 6.25

Options

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

Question Type : **MCQ**Question ID : **87827025027**Option 1 ID : **87827098793**Option 2 ID : **87827098794**Option 3 ID : **87827098795**Option 4 ID : **87827098796**Status : **Answered**Chosen Option : **3**

Q.73 Which of the following is not a palindromic subsequence of the string "ababcdabba" ?

- (1) abcba
- (2) abba
- (3) abbbba
- (4) adba

Options 1. 1

2. 2

3. 3

4. 4



Question Type : **MCQ**

Question ID : **87827024990**

Option 1 ID : **87827098645**

Option 2 ID : **87827098646**

Option 3 ID : **87827098647**

Option 4 ID : **87827098648**

Status : **Answered**

Chosen Option : **4**

Q.74 If the universe of disclosure is set of integers, then which of the followings are TRUE ?

- (A) $\forall n \exists m (n^2 < m)$
- (B) $\exists n \forall m (n < m^2)$
- (C) $\exists n \forall m (nm = m)$
- (D) $\exists n \exists m (n^2 + m^2 = 6)$
- (E) $\exists n \exists m (n + m = 4 \wedge n - m = 1)$

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025030**

Option 1 ID : **87827098805**

Option 2 ID : **87827098806**

Option 3 ID : **87827098807**

Option 4 ID : **87827098808**

Status : **Answered**

Chosen Option : **1**



Q.75 Given below are two statements :

Statement (I) : In Reuse Oriented Model, Modification of the old system parts appropriate to the new requirements.

Statement (II) : In Reuse Oriented Model, Integration of the modified parts are not possible into the new systems.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025077**

Option 1 ID : **87827098993**

Option 2 ID : **87827098994**

Option 3 ID : **87827098995**

Option 4 ID : **87827098996**

Status : **Answered**

Chosen Option : **3**

Q.76 Let $L = \{ab, aa, baa\}$. Which of the following strings are not in L^* .

- (1) abaabaaabaa
- (2) aaaabaaaa
- (3) baaaaabaaaab
- (4) baaaaabaa

Options

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

Question Type : **MCQ**

Question ID : **87827025009**

Option 1 ID : **87827098721**

Option 2 ID : **87827098722**

Option 3 ID : **87827098723**

Option 4 ID : **87827098724**

Status : **Answered**

Chosen Option : **3**

Q.77 In most general case, the computer needs to process each instruction with the following sequence of steps :

- (A) Calculate the effective address
- (B) Execute the instruction
- (C) Fetch the instruction from memory
- (D) Fetch the operand from memory
- (E) Decode the instruction

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

- (1) (A), (B), (C), (D), (E)
- (2) (A), (B), (C), (E), (D)
- (3) (C), (E), (A), (D), (B)
- (4) (C), (E), (D), (A), (B)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025065**

Option 1 ID : **87827098945**

Option 2 ID : **87827098946**

Option 3 ID : **87827098947**

Option 4 ID : **87827098948**

Status : **Answered**

Chosen Option : **1**



Q.78 The prototyping model has the sequence :

- (A) Customer Evaluation
- (B) Quick design
- (C) Requirements
- (D) Implement
- (E) Design

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

- (1) (C)→(A)→(D)→(B)→(E)
- (2) (B)→(C)→(A)→(D)→(E)
- (3) (C)→(B)→(D)→(A)→(E)
- (4) (E)→(B)→(C)→(D)→(A)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025070**

Option 1 ID : **87827098965**

Option 2 ID : **87827098966**

Option 3 ID : **87827098967**

Option 4 ID : **87827098968**

Status : **Answered**

Chosen Option : **3**

Q.79 Which of the following are tautology ?

- (A) $(P \rightarrow (P \wedge Q)) \rightarrow (P \rightarrow Q)$
- (B) $((P \rightarrow Q) \rightarrow Q) \rightarrow (P \vee Q)$
- (C) $((P \vee \neg P) \rightarrow Q) \rightarrow ((P \vee \neg P) \rightarrow R)$
- (D) $(Q \rightarrow (P \wedge \neg P)) \rightarrow (R \rightarrow (P \wedge \neg P))$

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

- (1) (A) Only
- (2) (B) Only
- (3) (A) and (B) Only
- (4) (C) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025034**

Option 1 ID : **87827098821**

Option 2 ID : **87827098822**

Option 3 ID : **87827098823**

Option 4 ID : **87827098824**

Status : **Answered**

Chosen Option : **2**



Q.80 Arrange the following phases of a compiler as per their order of execution (start to end)

- (A) Target code generation
- (B) Syntax Analysis
- (C) Code optimization
- (D) Semantic Analysis
- (E) Lexical Analysis

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

- (1) (B), (E), (D), (A), (C)
- (2) (E), (D), (B), (A), (C)
- (3) (E), (B), (D), (C), (A)
- (4) (B), (D), (E), (A), (C)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025069**

Option 1 ID : **87827098961**

Option 2 ID : **87827098962**

Option 3 ID : **87827098963**

Option 4 ID : **87827098964**

Status : **Answered**

Chosen Option : **4**

Q.81 Which of the following statements is/are NOT CORRECT about NUMA ?

- (A) LOAD and STORE instructions are used to access remote memory.
- (B) There is a single address space visible to all CPU.
- (C) Access to local memory is slower than access to remote memory.
- (D) When the access time to remote memory is hidden, the system is called NC - NUMA.
- (E) In CC - NUMA, Coherent caches are present.

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025039**

Option 1 ID : **87827098841**

Option 2 ID : **87827098842**

Option 3 ID : **87827098843**

Option 4 ID : **87827098844**

Status : **Answered**

Chosen Option : **4**



Q.82

Arrange the following in ascending order :

- (A) Remainder of 49^{16} when divided by 17
- (B) Remainder of 2^{446} when divided by 9
- (C) Remainder of 155^{17} when divided by 17
- (D) Last digits of the number 7^{45}

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

- (1) (A), (B), (C), (D)
- (2) (A), (B), (D), (C)
- (3) (A), (C), (B), (D)
- (4) (D), (C), (B), (A)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025064**

Option 1 ID : **87827098941**

Option 2 ID : **87827098942**

Option 3 ID : **87827098943**

Option 4 ID : **87827098944**

Status : **Answered**

Chosen Option : **3**

Q.83 The selection of Spiral Model based on characteristics of requirements :

- (A) Are requirements easily understandable and defined ?
- (B) Do we change requirements quite often ?
- (C) Can we define requirements early in the cycle ?
- (D) Requirements are indicating a complex to be built

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

- (1) (C) Only
- (2) (B) Only
- (3) (B) and (D) Only
- (4) (A) and (C) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025048**

Option 1 ID : **87827098877**

Option 2 ID : **87827098878**

Option 3 ID : **87827098879**

Option 4 ID : **87827098880**

Status : **Answered**

Chosen Option : **2**

Q.84 Consider a triangle PQR with coordinates as P(0,0), Q(2,2) and R(10,4). If this triangle is to be magnified to four times its size while keeping R(10, 4) fixed, then the coordinates of the magnified triangle are :

- (1) (-20, -12), Q(-20, -4) and R(10, 4)
- (2) (-30, -12), Q(-22, -4) and R(10, 4)
- (3) (-25, -10), Q(22, -4) and R(10, 4)
- (4) (30, -12), Q(-22, 4) and R(10, 4)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024997**

Option 1 ID : **87827098673**

Option 2 ID : **87827098674**

Option 3 ID : **87827098675**

Option 4 ID : **87827098676**

Status : **Answered**

Chosen Option : **3**



Q.85 Let $A=\{a, b\}$ and $L=A^*$. Let $x=\{a^n b^n, n>0\}$. The languages $L \cup X$ and X are respectively :

- (1) Not regular, Regular
- (2) Regular, Regular
- (3) Regular, Not regular
- (4) Not Regular, Not Regular

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025010**

Option 1 ID : **87827098725**

Option 2 ID : **87827098726**

Option 3 ID : **87827098727**

Option 4 ID : **87827098728**

Status : **Answered**

Chosen Option : **4**



Q.86 Given as 4 GB ($\approx 4.3 \times 10^9$ bytes) of virtual space and typical page size of 4 KB and each page table entry is 5 bytes. How many virtual pages would this imply ? What is the size of whole page table ?

- (1) 107500 and 20480 bytes
- (2) 215000 and 40960 bytes
- (3) 10750 and 10240 bytes
- (4) 43000 and 1024 bytes

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025006**

Option 1 ID : **87827098709**

Option 2 ID : **87827098710**

Option 3 ID : **87827098711**

Option 4 ID : **87827098712**

Status : **Answered**

Chosen Option : **3**



Q.87 Match List - I with List - II.

- | List - I | List - II |
|--------------|--|
| (A) BCNF iff | (I) every JD is implied by the candidate keys |
| (B) 5 NF iff | (II) all underlying domains contain scalar values only |
| (C) 1 NF iff | (III) every MVD is implied by the candidate keys |
| (D) 4 NF iff | (IV) every FD is implied by the candidate keys |

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025057**

Option 1 ID : **87827098913**

Option 2 ID : **87827098914**

Option 3 ID : **87827098915**

Option 4 ID : **87827098916**

Status : **Answered**

Chosen Option : **2**



Q.88 Which of the following is/are NOT CORRECT statement ?

- (A) The first record in each block of the data file is known as actor record.
- (B) Dense index has index entries for every search key value in the data file.
- (C) Searching is harder in the B^+ tree than $B-$ tree as the all external nodes linked to each other.
- (D) In extendible hashing the size of directory is just an array of 2^{d-1} , where d is global depth.

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

- (1) (A), (B) and (C) Only
- (2) (A), (C) and (D) Only
- (3) (A), (B) and (D) Only
- (4) (A), (B), (C) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025038**

Option 1 ID : **87827098837**

Option 2 ID : **87827098838**

Option 3 ID : **87827098839**

Option 4 ID : **87827098840**

Status : **Answered**

Chosen Option : **4**

Q.89 In "bit stuffing", each frame begins and ends with a bit pattern in hexadecimal ?

- (1) 0x8C
- (2) 0x6F
- (3) 0xFF
- (4) 0x7E

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025023**

Option 1 ID : **87827098777**

Option 2 ID : **87827098778**

Option 3 ID : **87827098779**

Option 4 ID : **87827098780**

Status : **Answered**

Chosen Option : **3**

Q.90

In Linux, where is the user password stored ?

- (1) /etc/password
- (2) /root/password
- (3) /etc/passwd
- (4) /root/passwd

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827025007**Option 1 ID : **87827098713**Option 2 ID : **87827098714**Option 3 ID : **87827098715**Option 4 ID : **87827098716**Status : **Answered**Chosen Option : **4**

Q.91 Match List - I with List - II.

List - I

- (A) Monoalphabetic Cipher
- (B) DES
- (C) Stream Cipher
- (D) Polyalphabetic Cipher

List - II

- (I) Round key
- (II) One-to-many relationship
- (III) One-to-one relationship
- (IV) Feedback mechanism

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

- (1) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (2) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
- (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 : **87827025062**

Option 1 ID : **87827098933**

Option 2 ID : **87827098934**

Option 3 ID : **87827098935**

Option 4 ID : **87827098936**

Status : **Answered**

Chosen Option : **1**

- Q.92** Has functions are used to produce the message digests which are then encrypted with a private key to get :
- (1) Public key
 - (2) Digital signature
 - (3) Cipher text
 - (4) Data Encryption Standard

Options

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

Question Type : **MCQ**

Question ID : **87827025008**

Option 1 ID : **87827098717**

Option 2 ID : **87827098718**

Option 3 ID : **87827098719**

Option 4 ID : **87827098720**

Status : **Answered**

Chosen Option : **3**



Q.93 Which of the following(s) are main memory ?

- (A) Virtual memory
- (B) Cache memory
- (C) RAM
- (D) SSD

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

- (1) (A) and (C) Only
- (2) (B) and (C) Only
- (3) (C) and (D) Only
- (4) (A), (B) and (C) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025033**

Option 1 ID : **87827098817**

Option 2 ID : **87827098818**

Option 3 ID : **87827098819**

Option 4 ID : **87827098820**

Status : **Answered**

Chosen Option : **2**

Q.94 Which of the statement is/are CORRECT ?

- (A) Moore and Mealy machines are finite state machines with output capabilities.
- (B) Any given Moore machine has an equivalent Mealy machine.
- (C) Any given Mealy machine has an equivalent Moore machine.
- (D) Moore machine is not a finite state machine.

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

- (1) (A) and (B) Only
- (2) (A), (B) and (C) Only
- (3) (B) and (D) Only
- (4) (A), (B) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025043**

Option 1 ID : **87827098857**

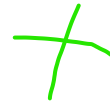
Option 2 ID : **87827098858**

Option 3 ID : **87827098859**

Option 4 ID : **87827098860**

Status : **Answered**

Chosen Option : **4**



Q.95 Which of the following statement/s is/are NOT CORRECT ?

- (A) OSPF is based on distance-vector routing protocol.
- (B) Both link-state and distance-vector routing are based on the least cost goal.
- (C) BGP4 is based on the path-vector algorithm.
- (D) The three-node instability can be avoided using split horizon combined with poison reverse.
- (E) RIP is based on link state algorithm.

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025050**

Option 1 ID : **87827098885**

Option 2 ID : **87827098886**

Option 3 ID : **87827098887**

Option 4 ID : **87827098888**

Status : **Answered**

Chosen Option : **3**



Q.96 Which one of the following statements are CORRECT ?

- (A) Granularity is the size of data item in a database.
- (B) Two operations in a schedule are said to be conflict if they belong to same transaction.
- (C) Two schedulers are said to be conflict equivalent if the order of any two conflicting operations is the same in both schedules.
- (D) Write operations which are performed without performing the write operation are known as Blind Writes.

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

- (1) (A) and (B) Only
- (2) (A), (B) and (C) Only
- (3) (A), (B) and (D) Only
- (4) (B) and (C) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025037**

Option 1 ID : **87827098833**

Option 2 ID : **87827098834**

Option 3 ID : **87827098835**

Option 4 ID : **87827098836**

Status : **Answered**

Chosen Option : **2**

Q.97

Level - 0 DFD is also called as :

- (1) Use case Diagram
- (2) Sequence Diagram
- (3) Context Diagram
- (4) Prototype Diagram

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827025024**Option 1 ID : **87827098781**Option 2 ID : **87827098782**Option 3 ID : **87827098783**Option 4 ID : **87827098784**Status : **Answered**Chosen Option : **1**

Q.98

Test suite is consist of :

- (1) Set of defect cases
- (2) Set of boundary cases
- (3) Set of test cases
- (4) Set of nest cases

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827025020**Option 1 ID : **87827098765**Option 2 ID : **87827098766**Option 3 ID : **87827098767**Option 4 ID : **87827098768**Status : **Answered**Chosen Option : **3**

Q.99 Which of the statement are CORRECT ?

- (A) Constructors are invoked automatically when the objects are created.
- (B) Constructors do not have return types, not even void and therefore they cannot return values.
- (C) Constructors cannot be inherited though a derived class can call the base class constructors.
- (D) Constructors can be declared as virtual.

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

- (1) (A), (B) and (D) Only
- (2) (A), (B) and (C) Only
- (3) (B), (C) and (D) Only
- (4) (A), (C) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025036**

Option 1 ID : **87827098829**

Option 2 ID : **87827098830**

Option 3 ID : **87827098831**

Option 4 ID : **87827098832**

Status : **Answered**

Chosen Option : **2**



Q.100 Which collision resolution technique involves maintaining a linked list of collided keys ?

- (1) Linear probing
- (2) Quadratic probing
- (3) Chaining
- (4) Double hashing

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025014**

Option 1 ID : **87827098741**

Option 2 ID : **87827098742**

Option 3 ID : **87827098743**

Option 4 ID : **87827098744**

Status : **Answered**

Chosen Option : **1**



- Q.101** If $N^2 = N \times N$, N is set of natural numbers and R is relation on N^2 , s.t. $R \subset N^2 \times N^2$ i.e. $\langle x, y \rangle R \langle u, v \rangle \Leftrightarrow xv = yu$, then which of the followings are TRUE ?
- (A) Reflexive
 - (B) Symmetric
 - (C) Transitive
 - (D) Assymmetric
- Choose the **correct** answer from the options given below :
- (1) (A) and (B) Only
 - (2) (B) and (C) Only
 - (3) (A), (C) and (D) Only
 - (4) (A), (B) and (C) Only

Options

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

Question Type : **MCQ**

Question ID : **87827025031**

Option 1 ID : **87827098809**

Option 2 ID : **87827098810**

Option 3 ID : **87827098811**

Option 4 ID : **87827098812**

Status : **Answered**

Chosen Option : **3**



Q.102 A system bus in which each data item is transferred during a time slice known in advance to both units source and destination is called :

- (1) MIMD
- (2) DMA
- (3) asynchronous bus
- (4) synchronous bus

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025003**

Option 1 ID : **87827098697**

Option 2 ID : **87827098698**

Option 3 ID : **87827098699**

Option 4 ID : **87827098700**

Status : **Answered**

Chosen Option : **3**



Q.103 Which of the following statements is TRUE ?

- (1) Virtual functions do not implement polymorphism
- (2) Virtual functions do not permit calling of derived class functions using a base class pointer
- (3) We can never build an object from a class containing a pure virtual function
- (4) Pure virtual functions can never have a body

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024998**

Option 1 ID : **87827098677**

Option 2 ID : **87827098678**

Option 3 ID : **87827098679**

Option 4 ID : **87827098680**

Status : **Answered**

Chosen Option : **3**



Q.104 Which of the following symbol table implementation is best suited if access time is to be minimum ?

- (1) Linear list
- (2) Search tree
- (3) Hash Table
- (4) Self organisation list

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025011**

Option 1 ID : **87827098729**

Option 2 ID : **87827098730**

Option 3 ID : **87827098731**

Option 4 ID : **87827098732**

Status : **Answered**

Chosen Option : **3**



Q.105 Match List - I with List - II.

List - I

- (A) Bresenham
- (B) Cohen-Sutherland
- (C) Sutherland-Hodgeman
- (D) Z-Buffer

List - II

- (I) Hidden surface removal
- (II) Line drawing algorithm
- (III) Line clipping algorithm
- (IV) Polygon clipping algorithm

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

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

Options

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

Question Type : **MCQ**

Question ID : **87827025056**

Option 1 ID : **87827098909**

Option 2 ID : **87827098910**

Option 3 ID : **87827098911**

Option 4 ID : **87827098912**

Status : **Answered**

Chosen Option : 1



- Q.106** One of the purposes of using intermediate code in compilers is to :
- (1) make parsing and semantic analysis simpler
 - (2) improve error recovery and error reporting
 - (3) increase the chances of reusing the machine independent code optimizer in other compilers
 - (4) improve the register allocation

Options

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

Question Type : **MCQ**

Question ID : **87827025018**

Option 1 ID : **87827098757**

Option 2 ID : **87827098758**

Option 3 ID : **87827098759**

Option 4 ID : **87827098760**

Status : **Answered**

Chosen Option : **4**

Q.107 A _____ point of fuzzy set A is a point $x \in X$ at which $\mu_A(x) = 0.5$

- (1) Core
- (2) Support
- (3) Crossover
- (4) α - cut

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025026**

Option 1 ID : **87827098789**

Option 2 ID : **87827098790**

Option 3 ID : **87827098791**

Option 4 ID : **87827098792**

Status : **Answered**

Chosen Option : **4**



Q.108 The steps for analysis and design of object oriented system.

- (A) Draw interaction diagrams
- (B) Draw state chart and object diagram
- (C) Draw use case and activity diagram
- (D) Draw component and deployment diagram
- (E) Draw class diagram

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

- (1) (E)→(B)→(A)→(C)→(D)
- (2) (B)→(A)→(E)→(D)→(C)
- (3) (E)→(C)→(B)→(D)→(A)
- (4) (C)→(A)→(E)→(B)→(D)

Options 1. 1

2. 2

3. 3

4. 4



Question Type : **MCQ**

Question ID : **87827025067**

Option 1 ID : **87827098953**

Option 2 ID : **87827098954**

Option 3 ID : **87827098955**

Option 4 ID : **87827098956**

Status : **Answered**

Chosen Option : **4**

Q.109 Which data structure is typically used to implement hash table ?

- (1) Linked list
- (2) Array
- (3) Binary Tree
- (4) Stack

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025013**

Option 1 ID : **87827098737**

Option 2 ID : **87827098738**

Option 3 ID : **87827098739**

Option 4 ID : **87827098740**

Status : **Answered**

Chosen Option : **2**



Q.110 A multiplexes combines for 100 Kbps channels using a time slot of 2 bits. What is the bit rate ?

- (1) 100 Kbps
- (2) 200 Kbps
- (3) 40 Kbps
- (4) 1000 Kbps

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025021**

Option 1 ID : **87827098769**

Option 2 ID : **87827098770**

Option 3 ID : **87827098771**

Option 4 ID : **87827098772**

Status : **Answered**

Chosen Option : **2**



Q.111 The work done by UDP is/are :

- (A) Congestion control
- (B) Flow control
- (C) Retransmission
- (D) Segments transmission

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

- (1) (A) and (D) Only
- (2) (C) Only
- (3) (D) Only
- (4) (B) and (C) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025049**

Option 1 ID : **87827098881**

Option 2 ID : **87827098882**

Option 3 ID : **87827098883**

Option 4 ID : **87827098884**

Status : **Answered**



Chosen Option : **4**

Q.112 What is the probability that a positive integer selected at random from the set of positive integer not exceeding 100 is divisible by either 2 or 5 ?

- (1) $10/5$
- (2) $3/5$
- (3) $2/5$
- (4) $1/5$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024989**

Option 1 ID : **87827098641**

Option 2 ID : **87827098642**

Option 3 ID : **87827098643**

Option 4 ID : **87827098644**

Status : **Answered**

Chosen Option : **2**



Q.113 Given below are two statements :

Statement (I) : A thread is a dispatchable unit of work that does not executes sequentially and is not interruptible

Statement (II) : It is not possible to alter the behaviour of a thread by altering its context when thread is suspended

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025076**

Option 1 ID : **87827098989**

Option 2 ID : **87827098990**

Option 3 ID : **87827098991**

Option 4 ID : **87827098992**

Status : **Answered**

Chosen Option : **3**



Q.114 Given below are two statements :

Statement (I) : If H is non empty finite subset of a group G and $abeH \forall a, b \in H$, then H is also a group

Statement (II) : There is no homomorphism exist from $(\mathbb{Z}, +)$ to $(\mathbb{Q}, +)$; where $\mathbb{Z}$ is set of integers and $\mathbb{Q}$ is set of rational number.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025074**

Option 1 ID : **87827098981**

Option 2 ID : **87827098982**

Option 3 ID : **87827098983**

Option 4 ID : **87827098984**

Status : **Answered**

Chosen Option : **2**



Q.115 Given below are two statements :

Statement (I) : In datagram networks - routers hold state information about connections

Statement (II) : In virtual circuit network- each virtual circuit requires router table space per connection

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025078**

Option 1 ID : **87827098997**

Option 2 ID : **87827098998**

Option 3 ID : **87827098999**

Option 4 ID : **87827099000**

Status : **Answered**

Chosen Option : **1**



Q.116 The statement $P(x) : "x = x^2"$. If the universe of discourse consists of integers, what are the following have truth values :

- (A) $P(0)$
- (B) $P(1)$
- (C) $P(2)$
- (D) $\exists x P(x)$
- (E) $\forall x P(x)$

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025044**

Option 1 ID : **87827098861**

Option 2 ID : **87827098862**

Option 3 ID : **87827098863**

Option 4 ID : **87827098864**

Status : **Answered**

Chosen Option : **3**



- Q.117** Consider a Grammar $E \rightarrow E + n \mid E \times n \mid n$ for a sentence $n + n \times n$, the handles in the right-sentential form of the reduction are ?
- (1) $n, E + n$ and $E + n \times n$
 - (2) $n, E + n$ and $E + E \times n$
 - (3) $n, n + n$ and $n + n \times n$
 - (4) $n, E + n$ and $E \times n$

Options

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

Question Type : **MCQ**

Question ID : **87827025012**

Option 1 ID : **87827098733**

Option 2 ID : **87827098734**

Option 3 ID : **87827098735**

Option 4 ID : **87827098736**

Status : **Answered**

Chosen Option : **2**



- Q.118** The sum of minimum and maximum number of final states for a Deterministic Finite Automata (DFA) having 'P' state is equal to :
- (1) p
 - (2) $p - 1$
 - (3) $p + 1$
 - (4) $p + 2$

Options

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

Question Type : **MCQ**

Question ID : **87827025019**

Option 1 ID : **87827098761**

Option 2 ID : **87827098762**

Option 3 ID : **87827098763**

Option 4 ID : **87827098764**

Status : **Answered**

Chosen Option : **1**



Q.119 Which of the following circuit is used to store one bit of data ?

- (1) Encoder
- (2) Decoder
- (3) Flip-Flop
- (4) Register

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024993**

Option 1 ID : **87827098657**

Option 2 ID : **87827098658**

Option 3 ID : **87827098659**

Option 4 ID : **87827098660**

Status : **Answered**

Chosen Option : **4**



Q.120 Indexed/grouped allocation is useful as :

- (A) It supports both sequential and direct access.
- (B) Entire block is available for data.
- (C) It does not require lots of space for keeping pointers.
- (D) No external fragmentation.

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

- (1) (A) Only
- (2) (B) and (C) Only
- (3) (B) Only
- (4) (A), (B) and (D) Only

Options

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

Question Type : **MCQ**

Question ID : **87827025040**

Option 1 ID : **87827098845**

Option 2 ID : **87827098846**

Option 3 ID : **87827098847**

Option 4 ID : **87827098848**

Status : **Answered**

Chosen Option : **4**



Q.121 "CREATE TABLE T" in SQL is an example of :

- (1) Normalization
- (2) DML
- (3) DDL
- (4) Primary key

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025001**

Option 1 ID : **87827098689**

Option 2 ID : **87827098690**

Option 3 ID : **87827098691**

Option 4 ID : **87827098692**

Status : **Answered**

Chosen Option : **3**

Q.122

What is the output of the following program ?

```
#include<stdio.h>
```

```
int main( )
```

```
{ int i=3;
```

```
while (i --)
```

```
{ int i=10;
```

```
    i --;
```

```
    printf("%d", i);
```

```
    }
```

```
    printf("%d", i);
```

```
    }
```

(1) 990

(2) 9990

(3) 999-1

(4) 99-1

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827024999**Option 1 ID : **87827098681**Option 2 ID : **87827098682**Option 3 ID : **87827098683**Option 4 ID : **87827098684**Status : **Answered**Chosen Option : **3**

Q.123 The microoperation which divides a signed binary number by 2 is :

- (1) Circular shift
- (2) Logical shift
- (3) Arithmetic shift right
- (4) Arithmetic shift left

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827024995**Option 1 ID : **87827098665**Option 2 ID : **87827098666**Option 3 ID : **87827098667**Option 4 ID : **87827098668**Status : **Answered**Chosen Option : **3**

Q.124 Arrange the following steps in the correct order for a DHCP Client to renew its IP lease with a DHCP server :

- (A) DHCP client sends a DHCPREQUEST message
- (B) DHCP server acknowledges the renewal with a DHCPACK message
- (C) DHCP client checks the local lease timer and initiates renewal
- (D) DHCP server updates its lease database

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

- (1) (A), (B), (C), (D)
- (2) (C), (D), (B), (A)
- (3) (C), (B), (A), (D)
- (4) (C), (A), (B), (D)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025072**

Option 1 ID : **87827098973**

Option 2 ID : **87827098974**

Option 3 ID : **87827098975**

Option 4 ID : **87827098976**

Status : **Answered**

Chosen Option : **1**

Q.125 Match List - I with List - II.

List - I

- (A) LRU
- (B) Demand cleaning
- (C) Long term scheduling
- (D) Medium term scheduling

List - II

- (I) A page is written to secondary memory only when it has been selected for replacement
- (II) A page that has not been referenced for the longest time is replaced
- (III) The decision to add to the number of processes that are partially or fully in main memory
- (IV) The decision to add to the pool of processes to be executed

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025058**

Option 1 ID : **87827098917**

Option 2 ID : **87827098918**

Option 3 ID : **87827098919**

Option 4 ID : **87827098920**

Status : **Answered**

Chosen Option : **2**

Q.126

What is the output of the following program ?

```
# include <stdio.h>
# define SQR(x) (x*x)
int main ( )
{ int a, b=3;
  a = SQR(b + 2);
  printf("%d",a);
  return 0;
}
```

- (1) 25
- (2) 11
- (3) Garbage value
- (4) 24

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 87827025004

Option 1 ID : 87827098701

Option 2 ID : 87827098702

Option 3 ID : 87827098703

Option 4 ID : 87827098704

Status : Answered

Chosen Option : 3

Q.127 Match List - I with List - II according to input to the compiler phase that process it :

List - I

List - II

- | | |
|---------------------------------|------------------------|
| (A) Syntax tree | (I) Code generator |
| (B) Intermediate representation | (II) Semantic analyzer |
| (C) Token stream | (III) Lexical analyze |
| (D) Character stream | (IV) Syntax analyser |

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025059**

Option 1 ID : **87827098921**

Option 2 ID : **87827098922**

Option 3 ID : **87827098923**

Option 4 ID : **87827098924**

Status : **Answered**

Chosen Option : **1**

Q.128

Identify the code sequence :

1010

1011

1001

1000

(1) BCD

(2) Excess-3

(3) Gray

(4) Excess-3 gray

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827024994**Option 1 ID : **87827098661**Option 2 ID : **87827098662**Option 3 ID : **87827098663**Option 4 ID : **87827098664**Status : **Answered**Chosen Option : **1**

Q.129 Consider the following code segment :

```
int arr [ ] = {0, 1, 2, 3, 4};
```

```
int i=1, *ptr;
```

```
ptr = arr + 2;
```

arrange the following printf statements in the increasing order of their output.

(A) printf ("%d", ptr[i]);

(B) printf ("%d", ptr[i + 1]);

(C) printf ("%d", ptr[-i]);

(D) printf ("%d", ptr[-i + 1]);

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

(1) (C), (A), (B), (D)

(2) (C), (D), (A), (B)

(3) (D), (A), (B), (C)

(4) (A), (B), (D), (C)

Options 1. 1

2. 2

3. 3

4. 4



Question Type : **MCQ**

Question ID : **87827025066**

Option 1 ID : **87827098949**

Option 2 ID : **87827098950**

Option 3 ID : **87827098951**

Option 4 ID : **87827098952**

Status : **Answered**

Chosen Option : **1**

Q.130 If universe of discourse are all real numbers, then which of the following are true ?

- (A) $\exists x \forall y (x + y = y)$
- (B) $\forall x \forall y (((x \geq 0) \wedge (y < 0)) \rightarrow (x - y > 0))$
- (C) $\exists x \exists y (((x \leq 0) \wedge (y \leq 0)) \wedge (x - y > 0))$
- (D) $\forall x \forall y ((x \neq 0) \wedge (y \neq 0) \leftrightarrow (xy \neq 0))$

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

- (1) (A) and (B) Only
- (2) (A), (C) and (D) Only
- (3) (A), (B) and (D) Only
- (4) (A), (B), (C) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025029**

Option 1 ID : **87827098801**

Option 2 ID : **87827098802**

Option 3 ID : **87827098803**

Option 4 ID : **87827098804**

Status : **Answered**

Chosen Option : **4**

Q.131 Arrange the following steps in the correct sequence for applying an unsupervised learning technique such as K-means clustering is to a data set :

- (A) Randomly initialize cluster centroids
- (B) Assign each data point to nearest cluster centroid
- (C) Update the cluster centroids based on the mean of data points assigned to each cluster
- (D) Specify the number of clusters (K) to partition the data into
- (E) Repeat steps B and C until convergence criteria are met

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

- (1) (D), (A), (B), (C), (E)
- (2) (A), (B), (C), (D), (E)
- (3) (C), (B), (A), (D), (E)
- (4) (D), (C), (A), (B), (E)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025073**

Option 1 ID : **87827098977**

Option 2 ID : **87827098978**

Option 3 ID : **87827098979**

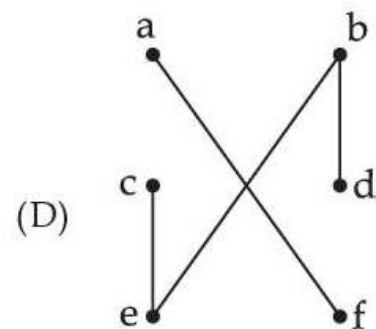
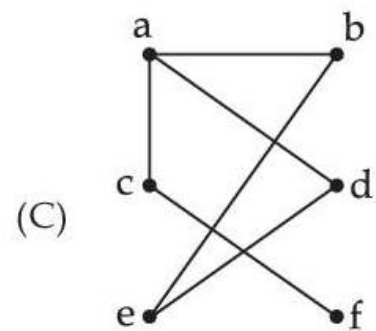
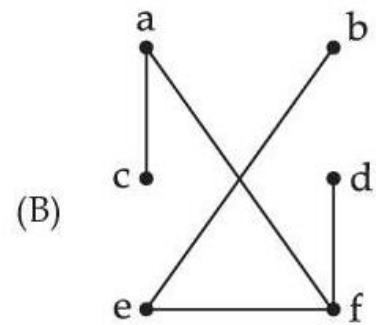
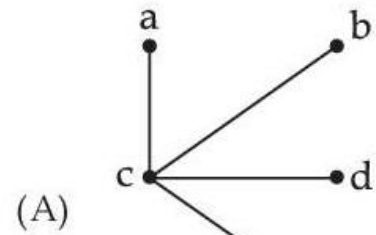
Option 4 ID : **87827098980**

Status : **Answered**

Chosen Option : **2**

Q.132

Which of the following graphs are trees ?



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

- (1) (A) and (B) Only
- (2) (A), (B) and (D) Only
- (3) (A) and (D) Only
- (4) (A), (B), (C) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025046**

Option 1 ID : **87827098869**

Option 2 ID : **87827098870**

Option 3 ID : **87827098871**

Option 4 ID : **87827098872**

Status : **Answered**

Chosen Option : **4**

Q.133 Which of the following are example of CSMA channel sensing methods ?

- (A) 1-persistent
- (B) 2-persistent
- (C) p-persistent
- (D) o-persistent

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 (D) Only
- (4) (A), (B) and (C) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025047**

Option 1 ID : **87827098873**

Option 2 ID : **87827098874**

Option 3 ID : **87827098875**

Option 4 ID : **87827098876**

Status : **Answered**

Chosen Option : **4**



Q.134 Which of the following statement/s are CORRECT ?

- (A) NRZ is a bipolar scheme in which the positive voltage define bit is 0 (zero).
- (B) NRZ-L and NRZ-I both have an average signal rate of $N/2$.
- (C) The idea of RZ and NRZ-L are combined into Manchester scheme.
- (D) NRZ-L and NRZ-I both have DC component problems.
- (E) The minimum bandwidth of Manchester and differential Manchester is 3 times that of NRZ.

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025051**

Option 1 ID : **87827098889**

Option 2 ID : **87827098890**

Option 3 ID : **87827098891**

Option 4 ID : **87827098892**

Status : **Answered**

Chosen Option : **4**

Q.135 Which of the following are commonly used parsing techniques in NLP (Natural Language Processing) for syntatic analysis.

- (A) Top down parsing
- (B) Bottom Up parsing
- (C) Dependency parsing
- (D) Statistical machine translation
- (E) Earley parsing

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025052**

Option 1 ID : **87827098893**

Option 2 ID : **87827098894**

Option 3 ID : **87827098895**

Option 4 ID : **87827098896**

Status : **Answered**

Chosen Option : **3**



Q.136 Which of the following is not a field in TCP header ?

- (1) Sequence Number
- (2) Checksum
- (3) Fregmentation offset
- (4) Window size

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025022**

Option 1 ID : **87827098773**

Option 2 ID : **87827098774**

Option 3 ID : **87827098775**

Option 4 ID : **87827098776**

Status : **Answered**

Chosen Option : **2**

Q.137 Match List - I with List - II.**List - I**

- (A) SZA
- (B) SKI
- (C) SNA
- (D) ISZ

List - II

- (I) Increment M and skip it zero
- (II) Skip if AC is negative
- (III) Skip if input flag is on
- (IV) Skip if AC is Zero

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025055**

Option 1 ID : **87827098905**

Option 2 ID : **87827098906**

Option 3 ID : **87827098907**

Option 4 ID : **87827098908**

Status : **Answered**

Chosen Option : **3**



Q.138 Given below are two statements :

Statement (I) : The friend function and the member functions of a friend class directly access the private and protected data.

Statement (II) : The friend function can access the private data through the member functions of the base class

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025075**

Option 1 ID : **87827098985**

Option 2 ID : **87827098986**

Option 3 ID : **87827098987**

Option 4 ID : **87827098988**

Status : **Answered**

Chosen Option : **4**



Q.139 Match List - I with List - II.

List - I	List - II
Propositions	Disjunctive Normal Form (DNF)
(A) $P \wedge (P \rightarrow Q)$	(I) $P \vee Q$
(B) $\neg(P \vee Q) \rightarrow (P \wedge Q)$	(II) $(P \wedge \neg P) \vee (P \wedge Q)$
(C) $P \rightarrow Q$	(III) $(\neg P) \vee Q$
(D) $P \vee (Q \wedge R)$	(IV) $(P \wedge P) \vee (P \wedge Q) \vee (P \wedge R) \vee (Q \wedge R)$

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

- (1) (A)-(I), (B)-(II), (C)-(III), (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)-(II), (D)-(I)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025060**

Option 1 ID : **87827098925**

Option 2 ID : **87827098926**

Option 3 ID : **87827098927**

Option 4 ID : **87827098928**

Status : **Answered**

Chosen Option : **1**

Q.140 In a feed forward neural network with the following specifications :
Input layer has 4 neurons, hidden layer has 3 neurons and output layer has 2 neurons using the sigmoid activation function for given input values [0.5, 0.8, 0.2, 0.6] as well as the initial weights for the connections.

W1 : [0.1, 0.3, 0.5, 0.2]
W2 : [0.2, 0.4, 0.6, 0.2]
W3 : [0.3, 0.5, 0.7, 0.2] } Input layer to hidden layer weights

W4 : [0.4, 0.1, 0.3]
W5 : [0.5, 0.2, 0.4] } Hidden layer to output layer weights

What is the output of the output layer when the given input values are passed through neural network ? Round the answer to two decimal places :

- (1) [0.62, 0.68]
- (2) [0.72, 0.78]
- (3) [0.82, 0.88]
- (4) [0.92, 0.98]

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025028**

Option 1 ID : **87827098797**

Option 2 ID : **87827098798**

Option 3 ID : **87827098799**

Option 4 ID : **87827098800**

Status : **Answered**

Chosen Option : **2**

Comprehension:

Food X contains 6 units of Vitamin D per gram and 7 units of Vitamin E per gram and cost is Rs 12 per gram. Food Y contains 8 units of vitamin D per gram and 12 units of Vitamin E per gram and cost is Rs 20 per gram. The daily minimum requirements of vitamin D and E are 100 units and 120 units respectively.

Suppose x is quantity (in gram) of food X, y is quantity (in gram) of food Y.

Answering the following question based on the above paragraph given.

SubQuestion No : 141

Q.141 Which of the following constrains when formulating the LPP ?

- (1) $6x + 7y \leq 100, 8x + 12y \leq 120, x, y \geq 0$
- (2) $6x + 8y \leq 100, 7x + 12y \leq 120, x, y \geq 0$
- (3) $6x + 7y \geq 100, 8x + 12y \geq 120, x, y \geq 0$
- (4) $6x + 8y \geq 100, 7x + 12y \geq 120, x, y \geq 0$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025081**

Option 1 ID : **87827099005**

Option 2 ID : **87827099006**

Option 3 ID : **87827099007**

Option 4 ID : **87827099008**

Status : **Answered**

Chosen Option : **3**

Comprehension:

Food X contains 6 units of Vitamin D per gram and 7 units of Vitamin E per gram and cost is Rs 12 per gram. Food Y contains 8 units of vitamin D per gram and 12 units of Vitamin E per gram and cost is Rs 20 per gram. The daily minimum requirements of vitamin D and E are 100 units and 120 units respectively.

Suppose x is quantity (in gram) of food X, y is quantity (in gram) of food Y.

Answering the following question based on the above paragraph given.

SubQuestion No : 142**Q.142**

The minimum cost of food is :

- (1) 205
- (2) 250
- (3) 330
- (4) 200

Options

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

Question Type : **MCQ**Question ID : **87827025084**Option 1 ID : **87827099017**Option 2 ID : **87827099018**Option 3 ID : **87827099019**Option 4 ID : **87827099020**Status : **Answered**Chosen Option : **2**

Comprehension:

Food X contains 6 units of Vitamin D per gram and 7 units of Vitamin E per gram and cost is Rs 12 per gram. Food Y contains 8 units of vitamin D per gram and 12 units of Vitamin E per gram and cost is Rs 20 per gram. The daily minimum requirements of vitamin D and E are 100 units and 120 units respectively.

Suppose x is quantity (in gram) of food X, y is quantity (in gram) of food Y.

Answering the following question based on the above paragraph given.

SubQuestion No : 143**Q.143**

The cost funtion of total food is :

(1) $Z = 6x + 7y$

(2) $Z = 8x + 12y$

(3) $Z = 12x + 20y$

(4) $Z = 20x + 12y$

Options

1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827025080**Option 1 ID : **87827099001**Option 2 ID : **87827099002**Option 3 ID : **87827099003**Option 4 ID : **87827099004**Status : **Answered**Chosen Option : **1**

Comprehension:

Food X contains 6 units of Vitamin D per gram and 7 units of Vitamin E per gram and cost is Rs 12 per gram. Food Y contains 8 units of vitamin D per gram and 12 units of Vitamin E per gram and cost is Rs 20 per gram. The daily minimum requirements of vitamin D and E are 100 units and 120 units respectively.

Suppose x is quantity (in gram) of food X, y is quantity (in gram) of food Y.

Answering the following question based on the above paragraph given.

SubQuestion No : 144

Q.144 Which of the following are quantities (in grams) of food X and Y respectively when the cost of food is minimum :

- (1) 0 and $12\frac{1}{2}$
- (2) 15 and $\frac{5}{4}$
- (3) $\frac{120}{7}$ and 0
- (4) 0 and 10

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025082**

Option 1 ID : **87827099009**

Option 2 ID : **87827099010**

Option 3 ID : **87827099011**

Option 4 ID : **87827099012**

Status : **Answered**

Chosen Option : **2**



Comprehension:

Food X contains 6 units of Vitamin D per gram and 7 units of Vitamin E per gram and cost is Rs 12 per gram. Food Y contains 8 units of vitamin D per gram and 12 units of Vitamin E per gram and cost is Rs 20 per gram. The daily minimum requirements of vitamin D and E are 100 units and 120 units respectively.

Suppose x is quantity (in gram) of food X, y is quantity (in gram) of food Y.

Answering the following question based on the above paragraph given.

SubQuestion No : 145

Q.145

The dual of the formulated LPP is :

(1) $\text{Max } Z = 100u + 120v$

s.t.

$$6u + 7v \leq 12$$

$$8u + 12v \leq 20$$

$$u, v \geq 0$$

(2) $\text{Max } Z = 12u + 20u$

s.t.

$$6u + 7v \leq 100$$

$$8u + 12v \leq 120$$

$$u, v \geq 0$$

(3) $\text{Max } Z = 100u + 120v$

s.t.

$$6u + 7u \leq 12$$

$$8u + 7v \leq 20$$

u, v are unrestricted

(4) $\text{Max } Z = 100u + 120u$

s.t.

$$6u + 7v \geq 12$$

$$8u + 12v \geq 20$$

$$u, v \geq 0$$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025083**

Option 1 ID : **87827099013**

Option 2 ID : **87827099014**

Option 3 ID : **87827099015**

Option 4 ID : **87827099016**

Status : **Answered**

Chosen Option : **3**



Comprehension:

Consider the following relations X (S, Si, C) and Y (S, P, D).

X

S	Si	C
J	1	M
B	2	N
R	3	H
T	4	G

Y

S	P	D
J	S ₁	CA
B	P ₁	AB
R	D ₁	DC
A	H ₁	MD

SubQuestion No : 146

Q.146 Number of tuples obtained by applying cartesian product over X and Y are :

- (1) 16
- (2) 12
- (3) 04
- (4) 32

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025090**

Option 1 ID : **87827099037**

Option 2 ID : **87827099038**

Option 3 ID : **87827099039**

Option 4 ID : **87827099040**

Status : **Answered**

Chosen Option : **3**

Comprehension:

Consider the following relations X (S, Si, C) and Y (S, P, D).

X

S	Si	C
J	1	M
B	2	N
R	3	H
T	4	G

Y

S	P	D
J	S ₁	CA
B	P ₁	AB
R	D ₁	DC
A	H ₁	MD

SubQuestion No : 147

Q.147 Number of tuples by applying right outer join on relation X and Y is/are :

- (1) 16
- (2) 5
- (3) 3
- (4) 4

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025089**

Option 1 ID : **87827099033**

Option 2 ID : **87827099034**

Option 3 ID : **87827099035**

Option 4 ID : **87827099036**

Status : **Answered**

Chosen Option : **2**

Comprehension:

Consider the following relations X (S, Si, C) and Y (S, P, D).

X

S	Si	C
J	1	M
B	2	N
R	3	H
T	4	G

Y

S	P	D
J	S ₁	CA
B	P ₁	AB
R	D ₁	DC
A	H ₁	MD

SubQuestion No : 148

Q.148

Result of $X \bowtie_{x.s=y.s} Y$ is :

(1)

S	Si	C	P	D
J	1	M	S ₁	CA
B	2	N	P ₁	AB
R	3	H	D ₁	DC
T	4	G	Null	Null

(2)

S	Si	C	P	D
J	1	M	S ₁	CA
B	2	N	P ₁	AB
R	3	H	D ₁	DC
A	Null	Null	H ₁	MD

(3)

S	Si	C	P	D
J	1	M	S ₁	CA
B	2	N	P ₁	AB
R	3	H	D ₁	DC
T	4	G	Null	MD
A	Null	Null	H ₁	Null

(4) None of these

Options 1. 1

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

Question Type : **MCQ**
Question ID : **87827025087**
Option 1 ID : **87827099025**
Option 2 ID : **87827099026**
Option 3 ID : **87827099027**
Option 4 ID : **87827099028**
Status : **Answered**
Chosen Option : **1**



Comprehension:

Consider the following relations X (S, Si, C) and Y (S, P, D).

X

S	Si	C
J	1	M
B	2	N
R	3	H
T	4	G

Y

S	P	D
J	S ₁	CA
B	P ₁	AB
R	D ₁	DC
A	H ₁	MD

SubQuestion No : 149**Q.149**

Find the number of tuples by applying the operation $X \bowtie_{X.S=Y.S} Y$

- (1) 1
- (2) 3
- (3) 4
- (4) 6

Options

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

Question Type : **MCQ**Question ID : **87827025086**Option 1 ID : **87827099021**Option 2 ID : **87827099022**Option 3 ID : **87827099023**Option 4 ID : **87827099024**Status : **Answered**Chosen Option : **2**

Comprehension:

Consider the following relations X (S, Si, C) and Y (S, P, D).

X

S	Si	C
J	1	M
B	2	N
R	3	H
T	4	G

Y

S	P	D
J	S ₁	CA
B	P ₁	AB
R	D ₁	DC
A	H ₁	MD

SubQuestion No : 150

Q.150 Which of the following join is used to get all the tuples of relation X and Y with Null values of corresponding missing values ?

- (1) Left outer join
- (2) Right outer join
- (3) Natural join
- (4) Full outer join

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025088**

Option 1 ID : **87827099029**

Option 2 ID : **87827099030**

Option 3 ID : **87827099031**

Option 4 ID : **87827099032**

Status : **Answered**

Chosen Option : 1