

NTA UGC NET December 2025 31st Dec to 7th Jan 2026

Application No	
Candidate Name	
Roll No.	
Test Date	02/01/2026
Test Time	9:00 AM - 12:00 PM
Subject	87 Computer Science and Applications

Section : **General Paper****Comprehension:**

Study carefully the table given below and answer the question asked here under.

In this table, number (in thousands) of five types of products (i.e. A, B, C, D, E) manufactured against their respective year of manufacturing are given.

Year	A (in thousands)	B (in thousands)	C (in thousands)	D (in thousands)	E (in thousands)
2021	29	45	26	15	32
2022	32	52	58	26	35
2023	28	54	92	24	39
2024	26	58	86	27	34
2025	23	63	82	28	34

SubQuestion No : 1

Q.1 If we consider the combined production of product C and E in each year, then what is the difference of their combined production in the years 2023 and 2025?

1. 10000
2. 15000
3. 5000
4. 20000

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872160**

Option 1 ID : **6119878409**

Option 2 ID : **6119878410**

Option 3 ID : **6119878411**

Option 4 ID : **6119878412**

Status : **Answered**

Chosen Option : **3**

Comprehension:

Study carefully the table given below and answer the question asked here under.

In this table, number (in thousands) of five types of products (i.e. A, B, C, D, E) manufactured against their respective year of manufacturing are given.

Year	A (in thousands)	B (in thousands)	C (in thousands)	D (in thousands)	E (in thousands)
2021	29	45	26	15	32
2022	32	52	58	26	35
2023	28	54	92	24	39
2024	26	58	86	27	34
2025	23	63	82	28	34

SubQuestion No : 2

Q.2 During which of the following years, product B has the lowest percentage of manufacturing with reference to combined manufacturing of that year?

1. 2021
2. 2022
3. 2023
4. 2024

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872161**

Option 1 ID : **6119878413**

Option 2 ID : **6119878414**

Option 3 ID : **6119878415**

Option 4 ID : **6119878416**

Status : **Answered**

Chosen Option : **1**

Comprehension:

Study carefully the table given below and answer the question asked here under.

In this table, number (in thousands) of five types of products (i.e. A, B, C, D, E) manufactured against their respective year of manufacturing are given.

Year	A (in thousands)	B (in thousands)	C (in thousands)	D (in thousands)	E (in thousands)
2021	29	45	26	15	32
2022	32	52	58	26	35
2023	28	54	92	24	39
2024	26	58	86	27	34
2025	23	63	82	28	34

SubQuestion No : 3

Q.3 Manufacturing of product C in the year 2023 was approximately what percent of the total production of product B in years 2022 and 2024 together?

1. 84 %
2. 80 %
3. 90 %
4. 79 %

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872159**

Option 1 ID : **6119878405**

Option 2 ID : **6119878406**

Option 3 ID : **6119878407**

Option 4 ID : **6119878408**

Status : **Answered**

Chosen Option : **4**

Comprehension:

Study carefully the table given below and answer the question asked here under.

In this table, number (in thousands) of five types of products (i.e. A, B, C, D, E) manufactured against their respective year of manufacturing are given.

Year	A (in thousands)	B (in thousands)	C (in thousands)	D (in thousands)	E (in thousands)
2021	29	45	26	15	32
2022	32	52	58	26	35
2023	28	54	92	24	39
2024	26	58	86	27	34
2025	23	63	82	28	34

SubQuestion No : 4

Q.4 During which of the following years, manufacturing of product A was approximately equal to the average production of that year?

1. 2021
2. 2022
3. 2023
4. 2024

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872158**

Option 1 ID : **6119878401**

Option 2 ID : **6119878402**

Option 3 ID : **6119878403**

Option 4 ID : **6119878404**

Status : **Answered**

Chosen Option : **3**

Comprehension:

Study carefully the table given below and answer the question asked here under.

In this table, number (in thousands) of five types of products (i.e. A, B, C, D, E) manufactured against their respective year of manufacturing are given.

Year	A (in thousands)	B (in thousands)	C (in thousands)	D (in thousands)	E (in thousands)
2021	29	45	26	15	32
2022	32	52	58	26	35
2023	28	54	92	24	39
2024	26	58	86	27	34
2025	23	63	82	28	34

SubQuestion No : 5

Q.5 Manufacturing of product D in the year 2021 is approximately less by what percent of its production in the year 2024?

1. 50 %
2. 60 %
3. 66 %
4. 44 %

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872162**

Option 1 ID : **6119878417**

Option 2 ID : **6119878418**

Option 3 ID : **6119878419**

Option 4 ID : **6119878420**

Status : **Answered**

Chosen Option : 1

Q.6 Arrange the following phrases in the vision of National Education Policy, 2020 in the correct sequence of their appearance:

- A. A conscious awareness of one's roles and responsibilities in a changing world
- B. An education system rooted in Indian Ethos
- C. Developing a deep sense of respect towards the fundamental duties and constitutional values
- D. Transforming Bharat into an equitable and vibrant knowledge society
- E. Instilling among learners a deep-rooted pride in being Indian

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872201**

Option 1 ID : **6119878573**

Option 2 ID : **6119878574**

Option 3 ID : **6119878575**

Option 4 ID : **6119878576**

Status : **Answered**

Chosen Option : 4

Q.7 The Black-foot disease is caused by the contamination of _____ in drinking water.

1. Arsenic
2. Cadmium
3. Mercury
4. Lead

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **6119872197**
Option 1 ID : **6119878557**
Option 2 ID : **6119878558**
Option 3 ID : **6119878559**
Option 4 ID : **6119878560**
Status : **Answered**
Chosen Option : **1**

Q.8 The SWAYAM was launched in _____.

1. 2015
2. 2017
3. 2019
4. 2020

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **6119872166**
Option 1 ID : **6119878433**
Option 2 ID : **6119878434**
Option 3 ID : **6119878435**
Option 4 ID : **6119878436**
Status : **Answered**
Chosen Option : **2**

Q.9 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Higher Education Institutions in the country with appropriate credit transfer mechanism are facilitating students to enroll themselves in pre-designed academic programmes.

Reason R: Academic Bank of Credits (ABC) works on the principle of multiple entry-multiple exit as well as any-time, any-where, and any-level learning.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872200**

Option 1 ID : **6119878569**

Option 2 ID : **6119878570**

Option 3 ID : **6119878571**

Option 4 ID : **6119878572**

Status : **Answered**

Chosen Option : **2**

Q.10 Arrange the following fractions in descending order:

- A. $\frac{9}{11}$
- B. $\frac{8}{9}$
- C. $\frac{4}{7}$
- D. $\frac{3}{5}$
- E. $\frac{8}{15}$

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

1. $B > D > A > E > C$
2. $B > A > E > D > C$
3. $A > B > C > D > E$
4. $B > A > D > C > E$

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872180**

Option 1 ID : **6119878489**

Option 2 ID : **6119878490**

Option 3 ID : **6119878491**

Option 4 ID : **6119878492**

Status : **Answered**

Chosen Option : **4**

Q.11 Match the LIST-I with LIST-II

LIST-I (Body under HECI)		LIST-II (Function)	
A.	NHERC	I.	Accreditation of higher education Institutions
B.	NAAC	II.	Single point regulator for higher education sector
C.	HEGC	III.	Formulating a national higher education qualification framework
D.	GEC	IV.	Funding and financing of higher education

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872202**

Option 1 ID : **6119878577**

Option 2 ID : **6119878578**

Option 3 ID : **6119878579**

Option 4 ID : **6119878580**

Status : **Answered**

Chosen Option : **1**

Q.12 Which education policy first recommended 6% of GDP as public expenditure on education in India?

1. National Policy on Education, 1968
2. National Policy on Education, 1986
3. Revised NPE-Program on Action, 1992
4. National Education Policy, 2020

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872198**

Option 1 ID : **6119878561**

Option 2 ID : **6119878562**

Option 3 ID : **6119878563**

Option 4 ID : **6119878564**

Status : **Answered**

Chosen Option : **3**

Q.13 Which of the following memories/storage are volatile?

- A. RAM
- B. ROM
- C. Cache
- D. SSD
- E. HDD

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872191**

Option 1 ID : **6119878533**

Option 2 ID : **6119878534**

Option 3 ID : **6119878535**

Option 4 ID : **6119878536**

Status : **Answered**

Chosen Option : **3**

Q.14 In everyday conversation, when people make reference to paying attention, planning, forgetting, guessing, daydreaming and so on, they are invoking:

- 1. Propaganda
- 2. Cognitive Concepts
- 3. Misinformation
- 4. Disinformation

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872177**

Option 1 ID : **6119878477**

Option 2 ID : **6119878478**

Option 3 ID : **6119878479**

Option 4 ID : **6119878480**

Status : **Answered**

Chosen Option : **2**

Q.15 "Sound is eternal, because it is caused" commits the fallacy (hetvābhāsa) of:

1. Asiddha
2. Satpratipakṣa
3. Savyabhicāra
4. Viruddha

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872183**

Option 1 ID : **6119878501**

Option 2 ID : **6119878502**

Option 3 ID : **6119878503**

Option 4 ID : **6119878504**

Status : **Answered**

Chosen Option : **4**

Q.16 The incomes of A and B are in the ratio of 3:2 and their expenses are in the ratio of 5:3. If each of them saves Rs.3000, then A's income (in Rs.) is

1. ₹15000
2. ₹12000
3. ₹6000
4. ₹18000

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872178**

Option 1 ID : **6119878481**

Option 2 ID : **6119878482**

Option 3 ID : **6119878483**

Option 4 ID : **6119878484**

Status : **Answered**

Chosen Option : **1**

Q.17 Identify the correct mathematical statements:

- A. A batsman makes a score of 87 runs in the 17th inning and thus increases his average by 3. Then his average after 17th inning is 36.
- B. The value of a number subtracted from Numerator and Denominator of the fraction $6/7$ to get a fraction equal to $3/4$ is 3.
- C. If 15% of 40 is greater than 25% of a number by 2, then the number is 16.
- D. The value of $(1+1/2)(1+1/3)(1+1/4) \dots\dots (1+1/120)$ is 60.5

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872181**

Option 1 ID : **6119878493**

Option 2 ID : **6119878494**

Option 3 ID : **6119878495**

Option 4 ID : **6119878496**

Status : **Answered**

Chosen Option : **4**

Q.18 Identify the advantages of open ended questions in survey research.

- A. It is easy to process answers.
- B. Respondents can answer in their own terms.
- C. They enhance the comparability of answers.
- D. They are useful for exploring new areas or ones in which the researcher has limited knowledge.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872168**

Option 1 ID : **6119878441**

Option 2 ID : **6119878442**

Option 3 ID : **6119878443**

Option 4 ID : **6119878444**

Status : **Answered**

Chosen Option : **1**

Q.19 Whether the results of a study can be generalized beyond the specific research context, refers to

1. reliability
2. replicability
3. internal validity
4. external validity

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872172**

Option 1 ID : **6119878457**

Option 2 ID : **6119878458**

Option 3 ID : **6119878459**

Option 4 ID : **6119878460**

Status : **Answered**

Chosen Option : **4**

Q.20 Arrange the following in ascending order of their moisture content.

- A. Trash
- B. Rubbish
- C. Refuse
- D. Garbage

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872194**

Option 1 ID : **6119878545**

Option 2 ID : **6119878546**

Option 3 ID : **6119878547**

Option 4 ID : **6119878548**

Status : **Answered**

Chosen Option : **4**

Q.21 Match the LIST-I with LIST-II

LIST-I Non-probability sampling		LIST-II Characteristic	
A.	Snowball	I.	Handpicked cases on the basis of specific usability
B.	Purposive	II.	Equivalent of stratified sampling
C.	Quota	III.	Choosing the nearest individuals to serve as respondents
D.	Convenience	IV.	Identify other respondents with the help of initial respondents

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872169**

Option 1 ID : **6119878445**

Option 2 ID : **6119878446**

Option 3 ID : **6119878447**

Option 4 ID : **6119878448**

Status : **Answered**

Chosen Option : **3**

Q.22 Which of the following is **NOT** a programming language?

1. Python
2. C
3. Java
4. Google

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872189**

Option 1 ID : **6119878525**

Option 2 ID : **6119878526**

Option 3 ID : **6119878527**

Option 4 ID : **6119878528**

Status : **Answered**

Chosen Option : **4**

Q.23 In quantitative research strategy, the principal orientation to the role of theory in relation to research is

1. Inductive
2. Objectivism
3. Deductive
4. Constructionism

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872171**

Option 1 ID : **6119878453**

Option 2 ID : **6119878454**

Option 3 ID : **6119878455**

Option 4 ID : **6119878456**

Status : **Answered**

Chosen Option : **2**

Q.24 National Education Policy 2020 has entrusted _____ with the responsibility to setup the standards of content, technology and pedagogy for online/digital teaching-learning.

1. National Educational Technology Forum
2. Central Institute of Educational Technology
3. Consortium for Educational Communication
4. Indira Gandhi National Open University

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872199**

Option 1 ID : **6119878565**

Option 2 ID : **6119878566**

Option 3 ID : **6119878567**

Option 4 ID : **6119878568**

Status : **Answered**

Chosen Option : **1**

Q.25 Choose the correct statements among the following:

- A. Diagnosis of the learners is done in Inter-Active stage of teaching.
- B. Feedback and Testing of the learners are done in Post-Active stage of teaching.
- C. Fixing up goals and content are done in Post-Active stage of teaching.
- D. Selection of appropriate testing devices is done in Post-Active stage of teaching.
- E. Decision about strategies of teaching is done in Post-Active stage of teaching.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872163**

Option 1 ID : **6119878421**

Option 2 ID : **6119878422**

Option 3 ID : **6119878423**

Option 4 ID : **6119878424**

Status : **Answered**

Chosen Option : **3**

Q.26 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Keyboard	I.	Memory
B.	Monitor	II.	Processor
C.	CPU	III.	Output device
D.	ROM	IV.	Input device

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872190**

Option 1 ID : **6119878529**

Option 2 ID : **6119878530**

Option 3 ID : **6119878531**

Option 4 ID : **6119878532**

Status : **Answered**

Chosen Option : **1**

Q.27 Arrange the following in the ascending order of year of appearance beginning with the oldest.

- A. Radio
- B. Television
- C. Book
- D. Prototypical Newspaper
- E. Film

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872174**

Option 1 ID : **6119878465**

Option 2 ID : **6119878466**

Option 3 ID : **6119878467**

Option 4 ID : **6119878468**

Status : **Answered**

Chosen Option : **3**

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

LIST-I Types of groups in communication		LIST-II Characteristic	
A.	Primary Group	I.	Members interact with one another to benefit an audience
B.	Self-help Group	II.	Goal is to improve members' skills
C.	Learning Group	III.	Membership is based on sentiment
D.	Public Group	IV.	All members have a common problem

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872175**

Option 1 ID : **6119878469**

Option 2 ID : **6119878470**

Option 3 ID : **6119878471**

Option 4 ID : **6119878472**

Status : **Answered**

Chosen Option : **1**

Q.29 Which of the following renewable energy resources contributes highest proportion to the total installed power capacity in India?

1. Solar
2. Nuclear
3. Wind
4. Hydro

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872196**

Option 1 ID : **6119878553**

Option 2 ID : **6119878554**

Option 3 ID : **6119878555**

Option 4 ID : **6119878556**

Status : **Answered**

Chosen Option : **3**

Q.30 USB stands for _____.

1. Uniform Service Bus
2. Universal Serial Bus
3. Uniform Sector Buffer
4. Universe Service Bus

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872188**

Option 1 ID : **6119878521**

Option 2 ID : **6119878522**

Option 3 ID : **6119878523**

Option 4 ID : **6119878524**

Status : **Answered**

Chosen Option : **2**

Q.31 Complete the following series:
582, 581, 585, 576, 592, 567, _____

1. 601
2. 602
3. 603
4. 599

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872179**

Option 1 ID : **6119878485**

Option 2 ID : **6119878486**

Option 3 ID : **6119878487**

Option 4 ID : **6119878488**

Status : **Answered**

Chosen Option : **4**

Q.32 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Concept Mapping	I.	Graphical tools for organizing and representing knowledge
B.	Five E based Lesson Planning	II.	Constructive Approach
C.	Stimulus-response based lesson planning	III.	Systematic arrangement of subject matter
D.	Unit Plan	IV.	Behaviourist Approach

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

1. A-III, B-II, C-I, D-IV
2. A-I, B-II, C-IV, D-III
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 : **6119872165**

Option 1 ID : **6119878429**

Option 2 ID : **6119878430**

Option 3 ID : **6119878431**

Option 4 ID : **6119878432**

Status : **Answered**

Chosen Option : **4**

Q.33 Arrange the educational objectives of cognitive domain from lower order to higher order skills.

- A. Evaluation
- B. Synthesis
- C. Analysis
- D. Knowledge
- E. Comprehension

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872164**

Option 1 ID : **6119878425**

Option 2 ID : **6119878426**

Option 3 ID : **6119878427**

Option 4 ID : **6119878428**

Status : **Answered**

Chosen Option : **2**

Q.34 Arrange the following intervals of standard normal variate in increasing order of probabilities.

- A. $0 \leq Z \leq +1$
- B. $+1 \leq Z \leq +2$
- C. $+2 \leq Z \leq +3$
- D. $+3 \leq Z < +\infty$

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872170**

Option 1 ID : **6119878449**

Option 2 ID : **6119878450**

Option 3 ID : **6119878451**

Option 4 ID : **6119878452**

Status : **Answered**

Chosen Option : **1**

Q.35 Which of the following are TRUE:

- A. For the Nyāya, knowledge of Abhāva is acquired through Anupalabdhi Pramāṇa.
- B. The Nyāya makes a distinction between Laukika and Alaukika Pratyakṣa.
- C. The Nyāya reduces Arthāpatti to Anumāna.
- D. The Nyāya accepts the validity of Upamāna as a Pramāṇa.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872186**

Option 1 ID : **6119878513**

Option 2 ID : **6119878514**

Option 3 ID : **6119878515**

Option 4 ID : **6119878516**

Status : **Answered**

Chosen Option : **1**

Q.36 Arrange the following operating systems in correct chronological order of their development

- A. Linux
- B. MS-DOS
- C. MAC OS
- D. Windows

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872192**

Option 1 ID : **6119878537**

Option 2 ID : **6119878538**

Option 3 ID : **6119878539**

Option 4 ID : **6119878540**

Status : **Answered**

Chosen Option : **4**

Q.37 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: The influence of mass media is rarely direct.

Reason R: According to Limited Effects theories, media effects are almost always mediated by group membership or relationships.

In the light of the above statements, choose the **correct** answer from the options given below

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872173**

Option 1 ID : **6119878461**

Option 2 ID : **6119878462**

Option 3 ID : **6119878463**

Option 4 ID : **6119878464**

Status : **Answered**

Chosen Option : **1**

Q.38 Match the LIST-I with LIST-II

LIST-I Source of Knowledge		LIST-II Accepted by	
A.	Yogaja Pratyakṣa	I.	Vedāntins
B.	Kevalajñāna	II.	Cārvāka
C.	Only Pratyakṣa	III.	Jaina
D.	Aparokṣānubhūti	IV.	Nyāya

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872184**

Option 1 ID : **6119878505**

Option 2 ID : **6119878506**

Option 3 ID : **6119878507**

Option 4 ID : **6119878508**

Status : **Answered**

Chosen Option : **3**

Q.39 Match the LIST-I with LIST-II

LIST-I Convention/Protocol		LIST-II Related With	
A.	Montreal Protocol	I.	Global Warming
B.	Stockholm Convention	II.	Transboundary movements of hazardous waste
C.	Kyoto Protocol	III.	Ozone layer depletion
D.	Basel Convention	IV.	Persistent organic pollutants

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872195**

Option 1 ID : **6119878549**

Option 2 ID : **6119878550**

Option 3 ID : **6119878551**

Option 4 ID : **6119878552**

Status : **Answered**

Chosen Option : **3**

Q.40 Which of the following are TRUE:

- A. For the Cārvāka, patyakṣa is the only pramāṇa.
- B. For the Cārvāka, śabda is the only pramāṇa.
- C. For the Cārvāka, anumāna is not a pramāṇa.
- D. For the Jaina, Mati includes both perceptual and inferential knowledge.

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872187**

Option 1 ID : **6119878517**

Option 2 ID : **6119878518**

Option 3 ID : **6119878519**

Option 4 ID : **6119878520**

Status : **Answered**

Chosen Option : **1**

Q.41 Which of the following is NOT the criticism of behaviourist model of teaching?

1. It doesn't take into account important internal processes that take place in mind.
2. It is not appropriate for higher order learning.
3. It is not appropriate for lower order learning.
4. Learning is sometimes beyond the association between stimulus and response.

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **6119872167**
Option 1 ID : **6119878437**
Option 2 ID : **6119878438**
Option 3 ID : **6119878439**
Option 4 ID : **6119878440**
Status : **Answered**
Chosen Option : **4**

Q.42 A person who believes that all social, political, economic and cultural change is inevitably based on the development and diffusion of technology, is a

1. Technological Determinist
2. Cultural Determinist
3. Technological Sceptic
4. Economic Determinist

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **6119872176**
Option 1 ID : **6119878473**
Option 2 ID : **6119878474**
Option 3 ID : **6119878475**
Option 4 ID : **6119878476**
Status : **Answered**
Chosen Option : **4**

Q.43 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Validity can never apply to any single proposition by itself.

Reason R: Validity and invalidity are attribute of arguments.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872185**

Option 1 ID : **6119878509**

Option 2 ID : **6119878510**

Option 3 ID : **6119878511**

Option 4 ID : **6119878512**

Status : **Answered**

Chosen Option : 2

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

LIST-I Word		LIST-II Code	
A.	CRAB	I.	32
B.	BARK	II.	49
C.	OVER	III.	24
D.	SING	IV.	60

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872182**

Option 1 ID : **6119878497**

Option 2 ID : **6119878498**

Option 3 ID : **6119878499**

Option 4 ID : **6119878500**

Status : **Answered**

Chosen Option : 3

Q.45 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Eutrophication leads to depletion of dissolved oxygen in a lake.

Reason R: Dissolved oxygen in water decreases with increase in temperature.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options

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

Question Type : **MCQ**

Question ID : **6119872193**

Option 1 ID : **6119878541**

Option 2 ID : **6119878542**

Option 3 ID : **6119878543**

Option 4 ID : **6119878544**

Status : **Answered**

Chosen Option : **4**

Comprehension:

Read the passage given below and answer the questions 46-50:

The use of the term dharma for law, nevertheless, was neither universal nor inevitable. This is borne out by the first century C.E. author Kautilya's compendium *Treatise on Politics* (Arthasāstra). The significance of Kautilya's work for the history of law in India rests primarily on the fact that it provides a different and in many respects unique lens into that history. His treatise belongs to a distinct scholarly tradition with social and political priorities different from those represented by the science of dharma (dharmaśāstra), the primary discipline devoted to jurisprudential reflection within the Brahmanical scholastic tradition. Kautilya makes no attempt to reduce the variety of laws within society into the single category of dharma. Indeed, we do not find a single comprehensive term within the *Treatise on Politics* to refer to law as such, or even to the broad areas of religious and secular norms covered by the term dharma within the discourse of the science of dharma. What is clear, however, is that Kautilya, both formally and in *obiter dicta*, argues for the plurality of law; law is not one but multiple. Although his text is later than the earliest documents of the science of dharma, it nevertheless taps into an alternate intellectual history that probably ran parallel to the one represented by the science of dharma.

SubQuestion No : 46

Q.46 In simple terms, the first line of the given passage means:

1. There was nothing unavoidable or locally acceptable about the use of the word 'law' for 'dharma', anyway.
2. There was nothing inevitable or meaningful about the use of the word 'dharma' for law, anyway.
3. There was nothing unavoidable or globally acceptable about the use of the word 'dharma' for 'law', anyway.
4. There was nothing permanent or unavoidable about the use of the word 'dharma' for law, anyway.

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872204**

Option 1 ID : **6119878581**

Option 2 ID : **6119878582**

Option 3 ID : **6119878583**

Option 4 ID : **6119878584**

Status : **Answered**

Chosen Option : **3**

Comprehension:

Read the passage given below and answer the questions 46-50:

The use of the term dharma for law, nevertheless, was neither universal nor inevitable. This is borne out by the first century C.E. author Kautilya's compendium *Treatise on Politics* (Arthasāstra). The significance of Kautilya's work for the history of law in India rests primarily on the fact that it provides a different and in many respects unique lens into that history. His treatise belongs to a distinct scholarly tradition with social and political priorities different from those represented by the science of dharma (dharmaśāstra), the primary discipline devoted to jurisprudential reflection within the Brahmanical scholastic tradition. Kautilya makes no attempt to reduce the variety of laws within society into the single category of dharma. Indeed, we do not find a single comprehensive term within the *Treatise on Politics* to refer to law as such, or even to the broad areas of religious and secular norms covered by the term dharma within the discourse of the science of dharma. What is clear, however, is that Kautilya, both formally and in *obiter dicta*, argues for the plurality of law; law is not one but multiple. Although his text is later than the earliest documents of the science of dharma, it nevertheless taps into an alternate intellectual history that probably ran parallel to the one represented by the science of dharma.

SubQuestion No : 47

Q.47 The work of Kautilya is of significance because:

1. It works as a complete view of the history of law.
2. It works as an alternate view of the history of law in India.
3. It works as a scholar's view that is identical to the science of dharma.
4. It works as a perspective that fits into contemporary ideas on dharma of his time.

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872205**

Option 1 ID : **6119878585**

Option 2 ID : **6119878586**

Option 3 ID : **6119878587**

Option 4 ID : **6119878588**

Status : **Answered**

Chosen Option : **1**

Comprehension:

Read the passage given below and answer the questions 46-50:

The use of the term dharma for law, nevertheless, was neither universal nor inevitable. This is borne out by the first century C.E. author Kautilya's compendium *Treatise on Politics* (Arthasāstra). The significance of Kautilya's work for the history of law in India rests primarily on the fact that it provides a different and in many respects unique lens into that history. His treatise belongs to a distinct scholarly tradition with social and political priorities different from those represented by the science of dharma (dharmaśāstra), the primary discipline devoted to jurisprudential reflection within the Brahmanical scholastic tradition. Kautilya makes no attempt to reduce the variety of laws within society into the single category of dharma. Indeed, we do not find a single comprehensive term within the *Treatise on Politics* to refer to law as such, or even to the broad areas of religious and secular norms covered by the term dharma within the discourse of the science of dharma. What is clear, however, is that Kautilya, both formally and in *obiter dicta*, argues for the plurality of law; law is not one but multiple. Although his text is later than the earliest documents of the science of dharma, it nevertheless taps into an alternate intellectual history that probably ran parallel to the one represented by the science of dharma.

SubQuestion No : 48

Q.48 Which of the following is concerned primarily with jurisprudential reflection according to Brahmanical scholastic tradition?

1. Arthasastra
2. Nitisastra
3. Dharmaśāstra
4. Treatise on Politics

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872208**

Option 1 ID : **6119878597**

Option 2 ID : **6119878598**

Option 3 ID : **6119878599**

Option 4 ID : **6119878600**

Status : **Answered**

Chosen Option : **3**

Comprehension:

Read the passage given below and answer the questions 46-50:

The use of the term dharma for law, nevertheless, was neither universal nor inevitable. This is borne out by the first century C.E. author Kautilya's compendium *Treatise on Politics* (Arthasāstra). The significance of Kautilya's work for the history of law in India rests primarily on the fact that it provides a different and in many respects unique lens into that history. His treatise belongs to a distinct scholarly tradition with social and political priorities different from those represented by the science of dharma (dharmaśāstra), the primary discipline devoted to jurisprudential reflection within the Brahmanical scholastic tradition. Kautilya makes no attempt to reduce the variety of laws within society into the single category of dharma. Indeed, we do not find a single comprehensive term within the *Treatise on Politics* to refer to law as such, or even to the broad areas of religious and secular norms covered by the term dharma within the discourse of the science of dharma. What is clear, however, is that Kautilya, both formally and in *obiter dicta*, argues for the plurality of law; law is not one but multiple. Although his text is later than the earliest documents of the science of dharma, it nevertheless taps into an alternate intellectual history that probably ran parallel to the one represented by the science of dharma.

SubQuestion No : 49

Q.49 The passage tells the reader that Kautilya "makes no attempt to reduce the variety of laws within society to the single category of dharma". This demonstrates his argument for the _____ of law.

1. Plurality
2. Jurisprudence
3. Scientific View
4. Scholastic base

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

Question Type : **MCQ**
Question ID : **6119872207**
Option 1 ID : **6119878593**
Option 2 ID : **6119878594**
Option 3 ID : **6119878595**
Option 4 ID : **6119878596**
Status : **Answered**
Chosen Option : **2**

Comprehension:

Read the passage given below and answer the questions 46-50:

The use of the term dharma for law, nevertheless, was neither universal nor inevitable. This is borne out by the first century C.E. author Kautilya's compendium *Treatise on Politics* (Arthasāstra). The significance of Kautilya's work for the history of law in India rests primarily on the fact that it provides a different and in many respects unique lens into that history. His treatise belongs to a distinct scholarly tradition with social and political priorities different from those represented by the science of dharma (dharmaśāstra), the primary discipline devoted to jurisprudential reflection within the Brahmanical scholastic tradition. Kautilya makes no attempt to reduce the variety of laws within society into the single category of dharma. Indeed, we do not find a single comprehensive term within the *Treatise on Politics* to refer to law as such, or even to the broad areas of religious and secular norms covered by the term dharma within the discourse of the science of dharma. What is clear, however, is that Kautilya, both formally and in *obiter dicta*, argues for the plurality of law; law is not one but multiple. Although his text is later than the earliest documents of the science of dharma, it nevertheless taps into an alternate intellectual history that probably ran parallel to the one represented by the science of dharma.

SubQuestion No : 50

Q.50 The word "comprehensive" in the passage can be replaced by the word _____.

1. alternative
2. intriguing
3. amazing
4. all-embracing

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872206**

Option 1 ID : **6119878589**

Option 2 ID : **6119878590**

Option 3 ID : **6119878591**

Option 4 ID : **6119878592**

Status : **Answered**

Chosen Option : **1**

Section : **Computer Science and Applications**

Q.51 Which of the following statements are correct?

- A. The HAVING CLAUSE is an optional clause which tells Oracle to group rows based on distinct values that exist for specified columns.
- B. Unions can be used in subqueries.
- C. The intersect clause outputs only rows produced by both the queries intersected.
- D. The statement containing a subquery is called a parent statement.
- E. If a select statement is defined as a subquery, the innermost select statement gets executed first.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872236**

Option 1 ID : **6119878709**

Option 2 ID : **6119878710**

Option 3 ID : **6119878711**

Option 4 ID : **6119878712**

Status : **Answered**

Chosen Option : **3**

Q.52 Arrange the following steps of the Map reduce framework

- A. Input Splitting
- B. Reducing
- C. Mapping
- D. Shuffling & Sorting

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872232**

Option 1 ID : **6119878693**

Option 2 ID : **6119878694**

Option 3 ID : **6119878695**

Option 4 ID : **6119878696**

Status : **Answered**

Chosen Option : **1**

Q.53 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: If L is regular, then its complement L' is necessarily regular.

Reason R: Complement of a language can be obtained by swapping final and non-final states in a DFA.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872259**

Option 1 ID : **6119878801**

Option 2 ID : **6119878802**

Option 3 ID : **6119878803**

Option 4 ID : **6119878804**

Status : **Answered**

Chosen Option : **3**

Q.54 A phase of a compiler which produce the symbol table is

1. Syntax analysis
2. Semantic analysis
3. Target code generation
4. Code optimization

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872258**

Option 1 ID : **6119878797**

Option 2 ID : **6119878798**

Option 3 ID : **6119878799**

Option 4 ID : **6119878800**

Status : **Answered**

Chosen Option : **3**

Q.55 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: HDFS follows a master-slave architecture with Name Node and Data Nodes.

Reason R: Name Node stores metadata, while Data Nodes store actual data blocks.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872234**

Option 1 ID : **6119878701**

Option 2 ID : **6119878702**

Option 3 ID : **6119878703**

Option 4 ID : **6119878704**

Status : **Answered**

Chosen Option : **3**

Q.56 Which of the following statements are true if universe of discourse for all variables consist of all integers?

- A. $\forall n \exists m (n^2 < m)$
- B. $\exists n \exists m (n+m = 4 \wedge n-m = 2)$
- C. $\exists n \exists m (n^2 + m^2 = 5)$
- D. $\exists m \forall n (m+n = 0)$
- E. $\forall m \exists n (m+n = 0)$

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872213**

Option 1 ID : **6119878617**

Option 2 ID : **6119878618**

Option 3 ID : **6119878619**

Option 4 ID : **6119878620**

Status : **Answered**

Chosen Option : **2**

Q.57 In transactions, a write-item (X) command includes the following steps. Arrange the following steps in correct sequence.

- A. Copy item X from the program variable named X into its correct location in the buffer.
- B. Store the updated block from the buffer back to disk.
- C. Find the address of the disk block that contains item.
- D. Copy that disk block into a buffer in main memory.

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872233**

Option 1 ID : **6119878697**

Option 2 ID : **6119878698**

Option 3 ID : **6119878699**

Option 4 ID : **6119878700**

Status : **Answered**

Chosen Option : **1**

Q.58 The inorder and preorder traversal of binary tree are d, b, e, a, f, c, g and a, b, d, e, c, f, g respectively. The postorder traversal of the binary tree is

1. d, e, b, f, g, c, a
2. e, d, b, g, f, c, a
3. e, d, b, f, g, c, a
4. d, e, f, g, b, c, a

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872245**

Option 1 ID : **6119878745**

Option 2 ID : **6119878746**

Option 3 ID : **6119878747**

Option 4 ID : **6119878748**

Status : **Answered**

Chosen Option : **2**

Q.59 Which of the following languages cannot be accepted by push down automata?

- A. $L = \{ a^n b^n c^n : n \geq 0 \}$
 B. $L = \{ a^p : p \text{ is Prime} \}$
 C. $L = \{ w c w^R : w \in (a, b)^* \}$
 D. $L = \{ w \in (a, b)^* : n_a(w) = n_b(w) \}$
 E. $L = \{ a^n b^m c^{n+m} : n \geq 0, m \geq 0 \}$

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872264**

Option 1 ID : **6119878821**

Option 2 ID : **6119878822**

Option 3 ID : **6119878823**

Option 4 ID : **6119878824**

Status : **Answered**

Chosen Option : **3**

Q.60 Match the LIST-I with LIST-II

LIST-I		LIST-II	
Grammar		All productions are of the form	
A.	Regular Grammar	I.	$A \rightarrow aX$, where $a \in T$ and $X \in V^*$
B.	Unrestricted Grammar	II.	$A \rightarrow xB$, $A \rightarrow x$ or $A \rightarrow Bx$, $A \rightarrow x$ where $A, B \in V$ and $x \in T^*$
C.	Chomsky Normal Form	III.	$x \rightarrow y$, where $x \in (VUT)^+$ and $y \in (VUT)^*$
D.	Greibach Normal Form	IV.	$A \rightarrow BC$ or $A \rightarrow a$, where A, B, C are in V and a is in T .

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872266**

Option 1 ID : **6119878829**

Option 2 ID : **6119878830**

Option 3 ID : **6119878831**

Option 4 ID : **6119878832**

Status : **Answered**

Chosen Option : **2**

Q.61 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	V-Model	I.	Trigger transition
B.	Incremental process model	II.	Classic life cycle
C.	Spiral Model	III.	Risk Driven
D.	Concurrent Model	IV.	Core product

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872298**

Option 1 ID : **6119878957**

Option 2 ID : **6119878958**

Option 3 ID : **6119878959**

Option 4 ID : **6119878960**

Status : **Answered**

Chosen Option : **3**

Q.62 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Short term scheduler	I.	Determine which process are added to the system for execution level place them in ready queue.
B.	Medium term scheduler	II.	Select which process should be executed next and allocate CPU time.
C.	Long term scheduler	III.	Manage the degree of multi programming by swapping processes between main memory and disk storage
D.	I/O Scheduler	IV.	Order the input/output requests from processes waiting for I/O operations.

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872243**

Option 1 ID : **6119878737**

Option 2 ID : **6119878738**

Option 3 ID : **6119878739**

Option 4 ID : **6119878740**

Status : **Answered**

Chosen Option : **2**

Q.63 If a transaction t_a holds a lock on some data item d in shared and intention-exclusive (SIX) mode, then which of the following is true for another transaction t_b ?

1. t_b can lock d in shared (S) mode
2. t_b can lock d in exclusive (X) mode
3. t_b can lock d in intention-exclusive (IX) mode
4. t_b can lock d in intention-shared (IS) mode

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

Question Type : **MCQ**
Question ID : **6119872230**
Option 1 ID : **6119878685**
Option 2 ID : **6119878686**
Option 3 ID : **6119878687**
Option 4 ID : **6119878688**
Status : **Answered**
Chosen Option : **2**

Q.64 In a multi-agent system(MAS), what are the key characteristics of individual agents?

- A. They must be identical in their capabilities and goals.
- B. They are autonomous and act independently.
- C. They interact with each other and their environment.
- D. They are controlled by a single, centralized authority at all times.

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

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

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

Question Type : **MCQ**
Question ID : **6119872283**
Option 1 ID : **6119878897**
Option 2 ID : **6119878898**
Option 3 ID : **6119878899**
Option 4 ID : **6119878900**
Status : **Answered**
Chosen Option : **2**

Q.65 How many number of comparison are required in worst case to find out second smallest element of n elements list?

1. $n + \lceil \log n \rceil - 1$
2. $n + \lfloor \log n \rfloor$
3. $\lfloor \log n \rfloor$
4. $n + \lfloor \log n \rfloor - 2$

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872248**

Option 1 ID : **6119878757**

Option 2 ID : **6119878758**

Option 3 ID : **6119878759**

Option 4 ID : **6119878760**

Status : **Answered**

Chosen Option : **4**

Q.66 Consider the following statements about reinforcement learning.

- A. The adaptive dynamic programming agent leaves the transition model between states utilizes to solve the corresponding Markov decision process using dynamic programming.
- B. Temporal difference needs a transition model to perform its updates.
- C. The prioritized sweeping heuristic focuses on adjusting states with successors that have undergone significant changes in utility estimates.
- D. The approach of modified policy iteration involves adopting a simplified value utility estimates following each change to the learned model.

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872282**

Option 1 ID : **6119878893**

Option 2 ID : **6119878894**

Option 3 ID : **6119878895**

Option 4 ID : **6119878896**

Status : **Answered**

Chosen Option : **4**

Q.67 Arrange the following steps for Pulse Code Modulation (PCM).

- A. Sampling
- B. Low-Pass filter
- C. Encoding
- D. Quantization

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872276**

Option 1 ID : **6119878869**

Option 2 ID : **6119878870**

Option 3 ID : **6119878871**

Option 4 ID : **6119878872**

Status : **Answered**

Chosen Option : **3**

Q.68 Arrange the following tasks of Lexical Analyzer in correct sequence:

- A. Token Generation.
- B. Removal of comments/White space.
- C. Buffering and reading source characters.
- D. Return token stream to parser.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872262**

Option 1 ID : **6119878813**

Option 2 ID : **6119878814**

Option 3 ID : **6119878815**

Option 4 ID : **6119878816**

Status : **Answered**

Chosen Option : **3**

Q.69 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Let $R \subseteq A \times A$ be a binary relation as defined below:

$A = \mathbb{N} \times \mathbb{N}$; $((a,b), (c,d)) \in R$ if only if $a \leq c$ or $b \leq d$. This binary relation R is a partial order.

Reason R: A binary relation will be a partial order if this satisfy reflexive, anti-symmetric and transitive property.

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

- 1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
- 2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
- 3. **A** is correct but **R** is not correct
- 4. **A** is not correct but **R** is correct

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872212**

Option 1 ID : **6119878613**

Option 2 ID : **6119878614**

Option 3 ID : **6119878615**

Option 4 ID : **6119878616**

Status : **Answered**

Chosen Option : **1**

Q.70 Which of the following statements are true for link state routing

- A. Link state Routing is suffer from count-to-infinity problem.
- B. Link state Routing uses flooding in the network to distribute link state packets.
- C. Each router creates its own link state packet.
- D. Every router has exactly the same link state database.
- E. Each router finds its own shortest paths to the other routers by using distance vector routing.

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

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

Options 1. 1

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

Question Type : **MCQ**
Question ID : **6119872269**
Option 1 ID : **6119878841**
Option 2 ID : **6119878842**
Option 3 ID : **6119878843**
Option 4 ID : **6119878844**
Status : **Answered**
Chosen Option : **4**

Q.71 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Higher cyclomatic complexity indicates a more complex program.

Reason R: It is calculated based on the number of independent execution path in the program.

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

- 1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
- 2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
- 3. **A** is correct but **R** is not correct
- 4. **A** is not correct but **R** is correct

Options 1. 1

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

Question Type : **MCQ**
Question ID : **6119872295**
Option 1 ID : **6119878945**
Option 2 ID : **6119878946**
Option 3 ID : **6119878947**
Option 4 ID : **6119878948**
Status : **Answered**
Chosen Option : **2**

Q.72 Arrange the following prefix expressions in ascending order on the basis of their values.

- A. $- * 2 / 8 4 3$
- B. $\uparrow - * 3 6 * 4 2 5$
- C. $+ - \uparrow 3 2 \uparrow 2 3 / 6 - 4 2$
- D. $* + 3 + 3 \uparrow 3 + 1 1 3$

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872216**

Option 1 ID : **6119878629**

Option 2 ID : **6119878630**

Option 3 ID : **6119878631**

Option 4 ID : **6119878632**

Status : **Answered**

Chosen Option : **2**

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

LIST-I		LIST-II	
A.	Address resolution protocol	I.	Map physical address to IP address
B.	Reverse address resolution protocol	II.	Used by host and router to send notification of datagram problem back to the sender.
C.	Internet control message protocol	III.	Help a multi-cast router identify host in a LAN
D.	Internet Group message protocol	IV.	Map IP address to physical address.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872292**

Option 1 ID : **6119878933**

Option 2 ID : **6119878934**

Option 3 ID : **6119878935**

Option 4 ID : **6119878936**

Status : **Answered**

Chosen Option : **4**

Q.74 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Dynamic programming	I.	Floyd Warshall Shortest path
B.	Greedy	II.	Huffman coding
C.	Back tracking	III.	Hamiltonian cycle problem
D.	Branch and bound	IV.	Travelling salesman (TSP) using lower bound

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872255**

Option 1 ID : **6119878785**

Option 2 ID : **6119878786**

Option 3 ID : **6119878787**

Option 4 ID : **6119878788**

Status : **Answered**

Chosen Option : **1**

Q.75 Which of the following is FALSE?

1. Every field is an integral domain.
2. Every integral domain is field
3. Finite integral domain is field.
4. The ring Z_p of integers module p is field iff p is prime.

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872209**

Option 1 ID : **6119878601**

Option 2 ID : **6119878602**

Option 3 ID : **6119878603**

Option 4 ID : **6119878604**

Status : **Answered**

Chosen Option : **4**

Q.76 Consider the following set of processes assumed to have arrived at time 0 in order P_1, P_2, P_3, P_4 and P_5 with the length of CPU burst given in Milliseconds.

Process	Burst Time	Priority
P_1	10	3
P_2	1	1
P_3	2	4
P_4	1	5
P_5	5	2

What is the average waiting time (in milliseconds) using priority scheduling.

1. 8
2. 8.2
3. 8.3
4. 8.4

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
 Question ID : **6119872239**
 Option 1 ID : **6119878721**
 Option 2 ID : **6119878722**
 Option 3 ID : **6119878723**
 Option 4 ID : **6119878724**
 Status : **Answered**
 Chosen Option : **3**

Q.77 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: The order of the group (Z_5, \times) divides the order of the group (Z_{13}, \times)

Reason R: The order of a subgroup of a group divides the order of the group.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
 Question ID : **6119872211**
 Option 1 ID : **6119878609**
 Option 2 ID : **6119878610**
 Option 3 ID : **6119878611**
 Option 4 ID : **6119878612**
 Status : **Answered**
 Chosen Option : **1**

Q.78 Assume a signal travels through a transmission medium and its power is reduced to one-half of means $P_2 = \frac{1}{2} P_1$. What is the power loss in attenuation?

1. -6 db
2. -3 db
3. -1.5 db
4. -1 db

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **6119872268**
Option 1 ID : **6119878837**
Option 2 ID : **6119878838**
Option 3 ID : **6119878839**
Option 4 ID : **6119878840**
Status : **Answered**
Chosen Option : **3**

Q.79 Which logic is designed to address the problem of referential opacity in propositional attitudes?

1. Regular Logic
2. Modal Logic
3. First-order logic
4. Predicate logic

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **6119872278**
Option 1 ID : **6119878877**
Option 2 ID : **6119878878**
Option 3 ID : **6119878879**
Option 4 ID : **6119878880**
Status : **Answered**
Chosen Option : **3**

Q.80 Which of the following statements about DFS are correct?

- A. It can detect cycles in a graph
- B. It can be used to find connected components.
- C. It works for both directed and undirected graph.
- D. Guarantees shortest path in unweighted graphs.

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872253**

Option 1 ID : **6119878777**

Option 2 ID : **6119878778**

Option 3 ID : **6119878779**

Option 4 ID : **6119878780**

Status : **Answered**

Chosen Option : **3**

Q.81 Which of the followings logical implications are tautology?

A. $[\sim p \wedge (p \vee q)] \rightarrow q$

B. $\sim p \rightarrow (p \rightarrow q)$

C. $[p \wedge (p \rightarrow q)] \rightarrow q$

D. $\sim (p \rightarrow q) \rightarrow q$

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872214**

Option 1 ID : **6119878621**

Option 2 ID : **6119878622**

Option 3 ID : **6119878623**

Option 4 ID : **6119878624**

Status : **Answered**

Chosen Option : **2**

Q.82 Match the LIST-I with LIST-II

LIST-I		LIST-II	
Input		Compiler Phase	
A.	Syntax Tree	I.	Code Generator
B.	Character Stream	II.	Syntax Analyzer
C.	Intermediate Representation	III.	Semantic Analyzer
D.	Token Stream	IV.	Lexical Analyzer

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872265**

Option 1 ID : **6119878825**

Option 2 ID : **6119878826**

Option 3 ID : **6119878827**

Option 4 ID : **6119878828**

Status : **Answered**

Chosen Option : **1**

Q.83 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: The control points have only local control over the shape of the B-Splines.

Reason R: Bezier curves do have local control.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872221**

Option 1 ID : **6119878649**

Option 2 ID : **6119878650**

Option 3 ID : **6119878651**

Option 4 ID : **6119878652**

Status : **Answered**

Chosen Option : **4**

Q.84 Which statements are true for digital to digital Encoding schemes.

- A. Unipolar encoding uses one level of value.
- B. Unipolar encoded signal contains a direct current component(a component with zero frequency)
- C. In NRZ- L, the level of the signal is dependent upon the state of the bit.
- D. In NRZ-I, the signal is not inverted of a 1 is an encountered.
- E. RZ encoding scheme removes both DC components and problem of synchronization.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872270**

Option 1 ID : **6119878845**

Option 2 ID : **6119878846**

Option 3 ID : **6119878847**

Option 4 ID : **6119878848**

Status : **Answered**

Chosen Option : **4**

Q.85 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: 1-persistent CSMA provides low delay under low load conditions.

Reason R: When the channel is free, stations transmits immediately without any random delay, ensuring quick access and minimal delay.

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

- 1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
- 2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
- 3. **A** is correct but **R** is not correct
- 4. **A** is not correct but **R** is correct

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872272**

Option 1 ID : **6119878853**

Option 2 ID : **6119878854**

Option 3 ID : **6119878855**

Option 4 ID : **6119878856**

Status : **Answered**

Chosen Option : **2**

Q.86 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Class diagram	I.	subset
B.	Package diagram	II.	relationship
C.	Object diagram	III.	dependencies
D.	Component diagram	IV.	static structure

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

1. A-II, B-III, C-IV, D-I
2. A-IV, B-I, C-III, D-II
3. A-IV, B-I, C-II, 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 : **6119872237**

Option 1 ID : **6119878713**

Option 2 ID : **6119878714**

Option 3 ID : **6119878715**

Option 4 ID : **6119878716**

Status : **Answered**

Chosen Option : **1**

Q.87 Which of the following statements are true.

- A. Painters' algorithm is also called depth sort algorithm.
- B. Gourad shading is on interpolating shading method.
- C. Gourad shading is an averaging shading method.
- D. The Z-buffer algorithm finds the largest depth value Z.

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872226**

Option 1 ID : **6119878669**

Option 2 ID : **6119878670**

Option 3 ID : **6119878671**

Option 4 ID : **6119878672**

Status : **Answered**

Chosen Option : **4**

Q.88 Dialog control is a function of the which layer

1. Network Layer
2. Transport Layer
3. Session Layer
4. Presentation Layer

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872267**

Option 1 ID : **6119878833**

Option 2 ID : **6119878834**

Option 3 ID : **6119878835**

Option 4 ID : **6119878836**

Status : **Answered**

Chosen Option : **3**

Q.89 Arrange the following sequence related to FASTUS system:

- A. Basic-group handling
- B. Structure merging
- C. Tokenization
- D. Complex phrase handling
- E. Complex word handling

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

1. C, A, D, E, B
2. E, A, C, D, B
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 : **6119872284**

Option 1 ID : **6119878901**

Option 2 ID : **6119878902**

Option 3 ID : **6119878903**

Option 4 ID : **6119878904**

Status : **Answered**

Chosen Option : **1**

Q.90

If the set $S = \left\{ \begin{pmatrix} a & 0 \\ 0 & b \end{pmatrix} : a, b \in \mathbb{Z} \right\}$ is subring of the ring M_2 of 2×2 matrices over the integers then S is a

1. left ideal but not right ideal.
2. right ideal but not left ideal.
3. both left and right ideal.
4. neither left ideal nor right ideal.

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**Question ID : **6119872210**Option 1 ID : **6119878605**Option 2 ID : **6119878606**Option 3 ID : **6119878607**Option 4 ID : **6119878608**Status : **Answered**Chosen Option : **4****Q.91** If r_1 and r_2 are regular expressions, then which of the following are correct.

- A. $L(r_1 + r_2) = L(r_1) \cup L(r_2)$
- B. $L(r_1 \cdot r_2) = L(r_1) L(r_2)$
- C. $L((r_1)) = L(r_1)$
- D. $L(r_1^*) = (L(r_1))^*$

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**Question ID : **6119872263**Option 1 ID : **6119878817**Option 2 ID : **6119878818**Option 3 ID : **6119878819**Option 4 ID : **6119878820**Status : **Answered**Chosen Option : **1**

Q.92 Match the LIST-I with LIST-II

LIST-I		LIST-II	
file mode parameters		Meaning	
A.	ios::ate	I.	Go to end of file on opening
B.	ios::in	II.	Open fails if the file already exists.
C.	ios::nocreate	III.	Open file for reading only
D.	ios::noreplace	IV.	Open fails if the file does not exist.

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872228**

Option 1 ID : **6119878677**

Option 2 ID : **6119878678**

Option 3 ID : **6119878679**

Option 4 ID : **6119878680**

Status : **Answered**

Chosen Option : **2**

Q.93 Which of the following statements are True?

- A. The ++ operator can be overloaded to perform decrementation of a variable.
- B. It is necessary that a constructor in a class should always be public.
- C. Size of an object is equal to sum of sizes of data members and member functions within the class.
- D. A static data member is useful when all objects of a class are to share a common item of information.
- E. The this pointer always contains the address of the object using which the member function is being called.

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872225**

Option 1 ID : **6119878665**

Option 2 ID : **6119878666**

Option 3 ID : **6119878667**

Option 4 ID : **6119878668**

Status : **Answered**

Chosen Option : **4**

Q.94 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Expert systems	I.	Medical Diagnosis
B.	NLP	II.	Text Summarization
C.	Computer Vision	III.	Image Classification
D.	ML	IV.	Predictive Analysis

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872288**

Option 1 ID : **6119878917**

Option 2 ID : **6119878918**

Option 3 ID : **6119878919**

Option 4 ID : **6119878920**

Status : **Answered**

Chosen Option : **1**

Q.95 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Unsupervised learning algorithms are used for tasks like data summarization and exploratory data analysis.

Reason R: Unsupervised learning requires labelled dataset to find relationships and patterns in data.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872281**

Option 1 ID : **6119878889**

Option 2 ID : **6119878890**

Option 3 ID : **6119878891**

Option 4 ID : **6119878892**

Status : **Answered**

Chosen Option : **3**

Q.96 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Kruskal's algorithm and Prim's algorithm always produce minimum spanning tree (MST).

Reason R: Every connected graph has a unique MST.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options

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

Question Type : **MCQ**

Question ID : **6119872251**

Option 1 ID : **6119878769**

Option 2 ID : **6119878770**

Option 3 ID : **6119878771**

Option 4 ID : **6119878772**

Status : **Answered**

Chosen Option : **2**

Q.97 Specialization process does not allow

1. to define a set a sub classes of an entity type.
2. to establish additional specific attributes with each subclass.
3. to define a generalized entity type from the given entity types.
4. to establish additional specific relationship types between each subclass and other entity types or other subclasses.

Options

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

Question Type : **MCQ**

Question ID : **6119872229**

Option 1 ID : **6119878681**

Option 2 ID : **6119878682**

Option 3 ID : **6119878683**

Option 4 ID : **6119878684**

Status : **Answered**

Chosen Option : **4**

Q.98 Which planning approach is used for environment with no observations?

1. Hierarchical planning
2. Reactive planning
3. Conformant planning
4. Contingency Planning

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872277**

Option 1 ID : **6119878873**

Option 2 ID : **6119878874**

Option 3 ID : **6119878875**

Option 4 ID : **6119878876**

Status : **Answered**

Chosen Option : **3**

Q.99 Arrange the following events in correct order when an interrupt occurs during instruction execution.

- A. Save program counter (PC) and status register.
- B. Fetch interrupt vector from memory.
- C. Execute the interrupted instruction completely.
- D. Transfer control to interrupt service routine (ISR)
- E. Restore PC and register after ISR.

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872290**

Option 1 ID : **6119878925**

Option 2 ID : **6119878926**

Option 3 ID : **6119878927**

Option 4 ID : **6119878928**

Status : **Answered**

Chosen Option : **3**

Q.100 Which of the following is correct order of increasing time complexity of algorithms

- A. Tower of Hanoi with n disk.
- B. Binary search given n sorted numbers.
- C. Heap sort given n numbers at the worst case.
- D. Addition of two $n \times n$ matrices.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872249**

Option 1 ID : **6119878761**

Option 2 ID : **6119878762**

Option 3 ID : **6119878763**

Option 4 ID : **6119878764**

Status : **Answered**

Chosen Option : **1**

Q.101 Arrange the following interframe time interval in increasing order.

- A. PIFS(PCF interframe Spacing)
- B. DIFS(DCF interframe Spacing)
- C. SIFS(Short interframe Spacing)
- D. EIFS (Extended interframe Spacing)

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872275**

Option 1 ID : **6119878865**

Option 2 ID : **6119878866**

Option 3 ID : **6119878867**

Option 4 ID : **6119878868**

Status : **Answered**

Chosen Option : **4**

Q.102 Which of the following are characteristics of RISC architecture:

- A. Large instruction set with many addressing modes.
- B. Fixed instruction length.
- C. Emphasis on software rather than hardware.
- D. Simple instruction that execute in one cycle.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872291**

Option 1 ID : **6119878929**

Option 2 ID : **6119878930**

Option 3 ID : **6119878931**

Option 4 ID : **6119878932**

Status : **Answered**

Chosen Option : **3**

Q.103 Which of the following is correct solution of the given recurrence relation? $T(n) = 3T(n/4) + n \log n$

- 1. $\theta(n \log n)$
- 2. $\theta(n^2 \log n)$
- 3. $\theta(n (\log n)^2)$
- 4. $\theta(n \log \log n)$

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872246**

Option 1 ID : **6119878749**

Option 2 ID : **6119878750**

Option 3 ID : **6119878751**

Option 4 ID : **6119878752**

Status : **Answered**

Chosen Option : **3**

Q.104 Let P and Q be two regular expressions over Σ . If P does not contain ϵ , then the following equation in R namely,

$$R = Q + RP$$

has a unique solution given by,

1. $R = Q^* P^*$
2. $R = Q P^*$
3. $R = P Q^*$
4. $R = Q^* + P^* R$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872257**

Option 1 ID : **6119878793**

Option 2 ID : **6119878794**

Option 3 ID : **6119878795**

Option 4 ID : **6119878796**

Status : **Answered**

Chosen Option : **3**

Q.105 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: We can build an object from a class containing a pure virtual function.

Reason R: A class containing a pure virtual function is called an abstract class.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872222**

Option 1 ID : **6119878653**

Option 2 ID : **6119878654**

Option 3 ID : **6119878655**

Option 4 ID : **6119878656**

Status : **Answered**

Chosen Option : **3**

Q.106 For implicit type conversion, arrange the following from a lower size type to a high type size.

- A. double
- B. unsigned long int
- C. unsigned int
- D. long double
- E. long int

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

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

Options 1. 1

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

Question Type : **MCQ**
Question ID : **6119872223**
Option 1 ID : **6119878657**
Option 2 ID : **6119878658**
Option 3 ID : **6119878659**
Option 4 ID : **6119878660**
Status : **Answered**
Chosen Option : **4**

Q.107 Consider a disk queue with requests for I/O to blocks on cylinders 98, 183, 37, 122, 14, 124, 65, 67 in that order. If the disk head is initially at cylinder 53. Using SSTF scheduling. Arrange the following movement of head position in order of transversal.

- A. 67
- B. 37
- C. 65
- D. 98
- E. 14

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

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

Options 1. 1

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

Question Type : **MCQ**
Question ID : **6119872241**
Option 1 ID : **6119878729**
Option 2 ID : **6119878730**
Option 3 ID : **6119878731**
Option 4 ID : **6119878732**
Status : **Answered**
Chosen Option : **3**

Q.108 Arrange the following steps of Natural Language Processing pipeline in correct order

- A. Syntax Analysis
- B. Morphological Analysis
- C. Pragmatics
- D. Semantic analysis.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872285**

Option 1 ID : **6119878905**

Option 2 ID : **6119878906**

Option 3 ID : **6119878907**

Option 4 ID : **6119878908**

Status : **Answered**

Chosen Option : **4**

Q.109 Arrange the following algorithms from the most efficient to least efficient based on their time complexity.

- A. Kruskal's Algorithm
- B. Breadth first search Algorithm
- C. Bellman-Ford Algorithm
- D. Dijkstra's Algorithm
- E. Edmonds-Karp Algorithm.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872250**

Option 1 ID : **6119878765**

Option 2 ID : **6119878766**

Option 3 ID : **6119878767**

Option 4 ID : **6119878768**

Status : **Answered**

Chosen Option : **3**

Q.110 In artificial intelligence, the term "Turing Test" is primarily associated with:

1. Testing neural network convergence
2. Measuring computational efficiency of algorithm
3. Evaluating machine ability to exhibit human-like behavior.
4. Verifying correctness of AI search algorithm

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872280**

Option 1 ID : **6119878885**

Option 2 ID : **6119878886**

Option 3 ID : **6119878887**

Option 4 ID : **6119878888**

Status : **Answered**

Chosen Option : **3**

Q.111 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	190.10.75.250	I.	Class E IP address
B.	230.41.10.20	II.	Class B IP address
C.	242.9.20.80	III.	Class A IP address
D.	127.10.125.230	IV.	Class D IP address

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872273**

Option 1 ID : **6119878857**

Option 2 ID : **6119878858**

Option 3 ID : **6119878859**

Option 4 ID : **6119878860**

Status : **Answered**

Chosen Option : **3**

Q.112 What is the space complexity of the CYK algorithm for the P table, where n is the number of words in the sentence and m is the number of non terminal symbols in the grammar?

1. $O(n^3)$
2. $O(mn^2)$
3. $O(n^2m)$
4. $O(n^2m^2)$

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **6119872279**
Option 1 ID : **6119878881**
Option 2 ID : **6119878882**
Option 3 ID : **6119878883**
Option 4 ID : **6119878884**
Status : **Answered**
Chosen Option : **3**

Q.113 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Neural networks are capable of approximating any continuous function to an arbitrary degree of accuracy.

Reason R: This is explained by the universal approximation theorem.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **6119872286**
Option 1 ID : **6119878909**
Option 2 ID : **6119878910**
Option 3 ID : **6119878911**
Option 4 ID : **6119878912**
Status : **Answered**
Chosen Option : **1**

Q.114 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: $L = \{a^n b^n c^n : n \geq 0\}$ is accepted by a linear bounded automata.

Reason R: Linear bounded automata's recognize exactly the class of context sensitive languages.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872260**

Option 1 ID : **6119878805**

Option 2 ID : **6119878806**

Option 3 ID : **6119878807**

Option 4 ID : **6119878808**

Status : **Answered**

Chosen Option : **2**

Q.115 Match the LIST-I with LIST-II

LIST-I		LIST-II	
Quadric surfaces		Equation	
A.	One-sheeted hyperboloid	I.	$\frac{x^2}{a^2} + \frac{y^2}{b^2} = cz$
B.	Two-sheeted hyperboloid	II.	$\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 1$
C.	Elliptic paraboloid	III.	$\frac{x^2}{a^2} - \frac{y^2}{b^2} = cz$
D.	Hyperbolic paraboloid	IV.	$\frac{z^2}{c^2} - \frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872227**

Option 1 ID : **6119878673**

Option 2 ID : **6119878674**

Option 3 ID : **6119878675**

Option 4 ID : **6119878676**

Status : **Answered**

Chosen Option : **2**

Q.116 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Dijkstra's Algorithm	I.	GPS route finding
B.	Huffman Coding	II.	Data compression
C.	KMP string matching	III.	Text editor search function
D.	Ford-Fulkerson	IV.	Network bandwidth optimization

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**Question ID : **6119872256**Option 1 ID : **6119878789**Option 2 ID : **6119878790**Option 3 ID : **6119878791**Option 4 ID : **6119878792**Status : **Answered**Chosen Option : **4****Q.117** Which of the following is not true about constructor

1. When an object is created and initialized at the same time, a copy constructor gets called.
2. They do not have return types, not even void.
3. They can be virtual.
4. They can not be inherited, though a derived class can call the base class constructor.

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**Question ID : **6119872220**Option 1 ID : **6119878645**Option 2 ID : **6119878646**Option 3 ID : **6119878647**Option 4 ID : **6119878648**Status : **Answered**Chosen Option : **3**

Q.118 Arrange the following WebApp design layers from top to bottom:

- A. Navigation design
- B. Aesthetic Design
- C. Interface Design
- D. Content Design
- E. Performance Design

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872294**

Option 1 ID : **6119878941**

Option 2 ID : **6119878942**

Option 3 ID : **6119878943**

Option 4 ID : **6119878944**

Status : **Answered**

Chosen Option : **3**

Q.119 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Instruction pipelining improves CPU throughput.

Reason R: Pipelining decreases the execution time of each individual instruction.

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

- 1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
- 2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
- 3. **A** is correct but **R** is not correct
- 4. **A** is not correct but **R** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872293**

Option 1 ID : **6119878937**

Option 2 ID : **6119878938**

Option 3 ID : **6119878939**

Option 4 ID : **6119878940**

Status : **Answered**

Chosen Option : **2**

Q.120 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A.	Definite clause	I.	Forward Chaining
B.	Horn Clause	II.	At most one is positive literals
C.	Goal Clause	III.	No positive literals
D.	Inference with Horn clause	IV.	Exactly one is positive literals

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

1. A-II, B-IV, C-III, D-I
2. A-IV, B-II, C-I, D-III
3. A-II, B-III, 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 : **6119872289**Option 1 ID : **6119878921**Option 2 ID : **6119878922**Option 3 ID : **6119878923**Option 4 ID : **6119878924**Status : **Answered**Chosen Option : **3****Q.121** Match the LIST-I with LIST-II

LIST-I		LIST-II	
Name of Methods		Problem Type	
A.	Branch and bound method	I.	Integer Programming Problem
B.	The North-west corner rule	II.	Quadratic Programming Problem
C.	Lagrange Multiplier Method	III.	Transportation Problem
D.	Wolfe's Modified Method	IV.	Non-Linear programming problem

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

1. A-III, B-II, C-IV, D-I
2. A-I, B-III, C-IV, D-II
3. A-II, B-I, C-IV, 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 : **6119872218**Option 1 ID : **6119878637**Option 2 ID : **6119878638**Option 3 ID : **6119878639**Option 4 ID : **6119878640**Status : **Answered**Chosen Option : **1**

Q.122 Arrange the following in the order of execution while proving a Language is non-Regular using Pumping Lemma.

- Split in to xyz satisfying pumping Lemma conditions.
- Assume the language is regular.
- Choose a string of length \geq pumping length.
- Show contradiction when pumping y.

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

- B, C, D, A
- C, D, A, B
- B, C, A, D
- A, B, C, D

Options 1. 1

- 2
- 3
- 4

Question Type : **MCQ**

Question ID : **6119872261**

Option 1 ID : **6119878809**

Option 2 ID : **6119878810**

Option 3 ID : **6119878811**

Option 4 ID : **6119878812**

Status : **Answered**

Chosen Option : **3**

Q.123 Match the LIST-I with LIST-II : BOOLEAN IDENTITIES

LIST-I		LIST-II	
	Name		Identity
A.	Domination law	I.	$x + 1 = 1$
B.	Associative law	II.	$x + (yz) = (x + y)(x + z)$
C.	Distributive law	III.	$x + xy = x$
D.	Absorption law	IV.	$x + (y + z) = (x + y) + z$

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

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

Options 1. 1

- 2
- 3
- 4

Question Type : **MCQ**

Question ID : **6119872217**

Option 1 ID : **6119878633**

Option 2 ID : **6119878634**

Option 3 ID : **6119878635**

Option 4 ID : **6119878636**

Status : **Answered**

Chosen Option : **3**

Q.124 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Thrashing occurs when a process spends more time on paging than executing.

Reason R: It happens when the degree of multiprogramming is too low and frames are insufficient.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872240**

Option 1 ID : **6119878725**

Option 2 ID : **6119878726**

Option 3 ID : **6119878727**

Option 4 ID : **6119878728**

Status : **Answered**

Chosen Option : **1**

Q.125 A normalized matrix that maps a 3D window specified by coordinates (1, 1, 1) and (4, 5, 6) on to a viewport specified by coordinates (2, 4, 2) and (8, 10, 8) is

1.
$$\begin{bmatrix} 2 & 0 & 0 & 0 \\ 0 & \frac{3}{2} & 0 & \frac{5}{2} \\ 0 & 0 & \frac{6}{5} & \frac{4}{5} \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

2.
$$\begin{bmatrix} 2 & 0 & 0 & 0 \\ 0 & 3 & 0 & 5 \\ 0 & 0 & 6 & 4 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

3.
$$\begin{bmatrix} 2 & 1 & 0 & 1 \\ 1 & 3 & 4 & 5 \\ 0 & 0 & 2 & 4 \\ 0 & 1 & 0 & 0 \end{bmatrix}$$

4.
$$\begin{bmatrix} 1 & 0 & 0 & 1 \\ 2 & 3 & 0 & 5 \\ 1 & 0 & 4 & 5 \\ 0 & 0 & 0 & 1 \end{bmatrix}$$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872219**

Option 1 ID : **6119878641**

Option 2 ID : **6119878642**

Option 3 ID : **6119878643**

Option 4 ID : **6119878644**

Status : **Answered**

Chosen Option : **3**

Q.126 Match the LIST-I with LIST-II

LIST-I		LIST-II	
A. System Call	I.	A process requests a function that is located in a different computer system	
B. Preemption	II.	A request that a program makes to the operating system.	
C. Real time application	III.	The forced deallocation of the CPU from a process.	
D. Remote procedure call	IV.	A program that responds to activities in an external within a maximum time determined by the external system.	

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872244**

Option 1 ID : **6119878741**

Option 2 ID : **6119878742**

Option 3 ID : **6119878743**

Option 4 ID : **6119878744**

Status : **Answered**

Chosen Option : **3**

Q.127 If K_n is complete simple graph of n vertices and $K_{m,n}$ is complete bipartite graph then arrange the following non-planner graph in ascending order on the bases of the minimum number of crossings.

- A. K_6
- B. K_7
- C. $K_{4,4}$
- D. $K_{5,5}$

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872215**

Option 1 ID : **6119878625**

Option 2 ID : **6119878626**

Option 3 ID : **6119878627**

Option 4 ID : **6119878628**

Status : **Answered**

Chosen Option : **1**

Q.128 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: OLAP systems are optimized for complex queries and analysis.

Reason R: OLTP systems are designed for transactions processing with large read-only queries.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872231**

Option 1 ID : **6119878689**

Option 2 ID : **6119878690**

Option 3 ID : **6119878691**

Option 4 ID : **6119878692**

Status : **Answered**

Chosen Option : **1**

Q.129 Which of the following is correct about Real time operating system.

- A. It permits creation of multiple processes within an application.
- B. It does not permit priorities to be assigned to processes.
- C. It permits a programmer to define interrupts and interrupt processing routines.
- D. It does not uses priority driver or deadline oriented scheduling.
- E. It provides fault tolerance and graceful degradation capabilities.

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

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872242**

Option 1 ID : **6119878733**

Option 2 ID : **6119878734**

Option 3 ID : **6119878735**

Option 4 ID : **6119878736**

Status : **Answered**

Chosen Option : **3**

Q.130 Which of the following are limitations of Greedy algorithms?

- A. They always fail for NP hard problem.
- B. They may not give the optimal solution for all problems.
- C. They are faster than dynamic programming in most cases
- D. They make local choices without looking ahead.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872254**

Option 1 ID : **6119878781**

Option 2 ID : **6119878782**

Option 3 ID : **6119878783**

Option 4 ID : **6119878784**

Status : **Answered**

Chosen Option : **2**

Q.131 In relation to Index structures for files which of the following are true?

- A. An index is an integral part of the data file.
- B. An index can be created in conjunction with virtually any primary record organization.
- C. An index cannot be created dynamically.
- D. An index can be used to enforce a key constraint on an attribute.
- E. An index can be created dynamically.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872235**

Option 1 ID : **6119878705**

Option 2 ID : **6119878706**

Option 3 ID : **6119878707**

Option 4 ID : **6119878708**

Status : **Answered**

Chosen Option : **1**

Q.132 Arrange the following applet life cycles methods in sequence

- A. start()
- B. paint()
- C. init()
- D. stop()

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872224**

Option 1 ID : **6119878661**

Option 2 ID : **6119878662**

Option 3 ID : **6119878663**

Option 4 ID : **6119878664**

Status : **Answered**

Chosen Option : **2**

Q.133 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: In supervised learning, the model is trained using labelled data.

Reason R: Supervised learning algorithms find patterns in data to predict outcomes without any prior knowledge of the correct output.

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

- 1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
- 2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
- 3. **A** is correct but **R** is not correct
- 4. **A** is not correct but **R** is correct

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872287**

Option 1 ID : **6119878913**

Option 2 ID : **6119878914**

Option 3 ID : **6119878915**

Option 4 ID : **6119878916**

Status : **Answered**

Chosen Option : **1**

Q.134 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Asymmetric key cryptography is significant slower than symmetric key cryptography.

Reason R: Asymmetric key cryptography is based on complex mathematical structure to secure data.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872271**

Option 1 ID : **6119878849**

Option 2 ID : **6119878850**

Option 3 ID : **6119878851**

Option 4 ID : **6119878852**

Status : **Answered**

Chosen Option : **3**

Q.135 Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	SMTP	I.	Application layer
B.	BGP	II.	Transport layer
C.	TCP	III.	Data Link Layer
D.	PPP	IV.	Network Layer

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872274**

Option 1 ID : **6119878861**

Option 2 ID : **6119878862**

Option 3 ID : **6119878863**

Option 4 ID : **6119878864**

Status : **Answered**

Chosen Option : **4**

Q.136 Which of the following statements are correct regarding task elaboration in interface design.

- A. Alpha testing is done at the developer's site in a controlled environment.
- B. Beta testing is done at the end-user site with developer presence.
- C. Acceptance testing may be very formal and last for weeks.
- D. Alpha testing always replaces Beta testing.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872296**

Option 1 ID : **6119878949**

Option 2 ID : **6119878950**

Option 3 ID : **6119878951**

Option 4 ID : **6119878952**

Status : **Answered**

Chosen Option : **2**

Q.137 Match the LIST-I with LIST-II

	LIST-I		LIST-II
A.	Content coupling	I.	Modifies internal data of another component
B.	Control Coupling	II.	Pass control flag to influence logic
C.	Stamp Coupling	III.	Uses entire structure/class as argument
D.	Data Coupling	IV.	Passes long list of data arguments.

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

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

Options 1. 1

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

Question Type : **MCQ**

Question ID : **6119872297**

Option 1 ID : **6119878953**

Option 2 ID : **6119878954**

Option 3 ID : **6119878955**

Option 4 ID : **6119878956**

Status : **Answered**

Chosen Option : **2**

Q.138 What is a superblock object represents in virtual file system of Linux OS

1. an open file
2. an entire file system
3. individual directory entry
4. an individual file

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872238**

Option 1 ID : **6119878717**

Option 2 ID : **6119878718**

Option 3 ID : **6119878719**

Option 4 ID : **6119878720**

Status : **Answered**

Chosen Option : **3**

Q.139 Consider B^+ tree in which the maximum number of keys in a node is 5. What is the minimum number of keys in any non-root node?

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

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872247**

Option 1 ID : **6119878753**

Option 2 ID : **6119878754**

Option 3 ID : **6119878755**

Option 4 ID : **6119878756**

Status : **Answered**

Chosen Option : **1**

Q.140 Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

Assertion A: Depth first search can be used to perform a topological sort of a directed acyclic graph.

Reason R: A topological sort a directed acyclic graph $G=(V, E)$ is a linear ordering of its vertices such that if G contain an edge (u, v) then u appears before v in the ordering.

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

1. Both **A** and **R** are correct and **R** is the correct explanation of **A**
2. Both **A** and **R** are correct but **R** is NOT the correct explanation of **A**
3. **A** is correct but **R** is not correct
4. **A** is not correct but **R** is correct

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872252**

Option 1 ID : **6119878773**

Option 2 ID : **6119878774**

Option 3 ID : **6119878775**

Option 4 ID : **6119878776**

Status : **Answered**

Chosen Option : **2**

Comprehension:

A project is planned for an enterprise accounting system with an estimated size 60 KLOC. The organization applies Basic COCOMO(Semi-Detached Mode with parameters:)

--Effort = $3.0 (\text{KLOC})^{1.0}$

--Development time = $2.5 (\text{Effort})^{1/2}$

--Average cost per person-month (pm) = \$10,000

--A contingency margin of 10% effort is mandatory

-- The client demands a detailed schedule if staff is capped at 15 engineers.

Answer the following 5 questions based on this paragraph.

SubQuestion No : 141

Q.141 Including 10% contingency margin what is the project cost?

1. \$ 1.80 M
2. \$ 1.98 M
3. \$ 2.4 M
4. \$ 2.36 M

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872304**

Option 1 ID : **6119878977**

Option 2 ID : **6119878978**

Option 3 ID : **6119878979**

Option 4 ID : **6119878980**

Status : **Answered**

Chosen Option : **4**

Comprehension:

A project is planned for an enterprise accounting system with an estimated size 60 KLOC. The organization applies Basic COCOMO(Semi-Detached Mode with parameters:)

--Effort = $3.0 (\text{KLOC})^{1.0}$

--Development time = $2.5 (\text{Effort})^{1/2}$

--Average cost per person-month (pm) = \$10,000

--A contingency margin of 10% effort is mandatory

-- The client demands a detailed schedule if staff is capped at 15 engineers.

Answer the following 5 questions based on this paragraph.

SubQuestion No : 142

Q.142 What is the estimated development time in months?

1. 28 Months
2. 26 Months
3. 34 Months
4. 12 Months

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872301**

Option 1 ID : **6119878965**

Option 2 ID : **6119878966**

Option 3 ID : **6119878967**

Option 4 ID : **6119878968**

Status : **Answered**

Chosen Option : **3**

Comprehension:

A project is planned for an enterprise accounting system with an estimated size 60 KLOC. The organization applies Basic COCOMO(Semi-Detached Mode with parameters:)

--Effort = $3.0 (\text{KLOC})^{1.0}$

--Development time = $2.5 (\text{Effort})^{1/2}$

--Average cost per person-month (pm) = \$10,000

--A contingency margin of 10% effort is mandatory

-- The client demands a detailed schedule if staff is capped at 15 engineers.

Answer the following 5 questions based on this paragraph.

SubQuestion No : 143

Q.143 What is the implied average staffing level?

1. 8 Engineers
2. 5 Engineers
3. 10 Engineers
4. 12 Engineers

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872302**

Option 1 ID : **6119878969**

Option 2 ID : **6119878970**

Option 3 ID : **6119878971**

Option 4 ID : **6119878972**

Status : **Answered**

Chosen Option : **2**

Comprehension:

A project is planned for an enterprise accounting system with an estimated size 60 KLOC. The organization applies Basic COCOMO(Semi-Detached Mode with parameters:)

--Effort = $3.0 (\text{KLOC})^{1.0}$

--Development time = $2.5 (\text{Effort})^{1/2}$

--Average cost per person-month (pm) = \$10,000

--A contingency margin of 10% effort is mandatory

-- The client demands a detailed schedule if staff is capped at 15 engineers.

Answer the following 5 questions based on this paragraph.

SubQuestion No : 144

Q.144 If the staff is capped at 15 engineers what is the revised calendar duration?

1. 20.0 Months
2. 18.4 Months
3. 13.2 Months
4. 22.0 Months

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **6119872303**

Option 1 ID : **6119878973**

Option 2 ID : **6119878974**

Option 3 ID : **6119878975**

Option 4 ID : **6119878976**

Status : **Answered**

Chosen Option : **4**

Comprehension:

A project is planned for an enterprise accounting system with an estimated size 60 KLOC. The organization applies Basic COCOMO(Semi-Detached Mode with parameters:)

--Effort = $3.0 (\text{KLOC})^{1.0}$

--Development time = $2.5 (\text{Effort})^{1/2}$

--Average cost per person-month (pm) = \$10,000

--A contingency margin of 10% effort is mandatory

-- The client demands a detailed schedule if staff is capped at 15 engineers.

Answer the following 5 questions based on this paragraph.

SubQuestion No : 145

Q.145 What is the initial effort in Person-month (PM) before adding the contingency margin?

1. 240 PM
2. 260 PM
3. 180 PM
4. 200 PM

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872300**

Option 1 ID : **6119878961**

Option 2 ID : **6119878962**

Option 3 ID : **6119878963**

Option 4 ID : **6119878964**

Status : **Answered**

Chosen Option : **1**

Comprehension:

A system transfer data blocks of 2000 bytes with programmed I/O, each byte transfer takes 6 CPU cycles, with direct memory access (DMA), the block transfer takes 3000 Cycles total, with CPU setup overhead of 200 cycles. The CPU clock is 1 GHZ. Answer the following 5 questions based on this paragraph.

SubQuestion No : 146**Q.146** How much CPU time is consumed by programmed I/O ?

1. 12 μ s
2. 20 μ s
3. 24 μ s
4. 30 μ s

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**Question ID : **6119872308**Option 1 ID : **6119878989**Option 2 ID : **6119878990**Option 3 ID : **6119878991**Option 4 ID : **6119878992**Status : **Answered**Chosen Option : **1****Comprehension:**

A system transfer data blocks of 2000 bytes with programmed I/O, each byte transfer takes 6 CPU cycles, with direct memory access (DMA), the block transfer takes 3000 Cycles total, with CPU setup overhead of 200 cycles. The CPU clock is 1 GHZ. Answer the following 5 questions based on this paragraph.

SubQuestion No : 147**Q.147** Which is more CPU-efficient for large block transfer?

1. Programmed I/O
2. DMA
3. Both programmed I/O and DMA
4. Depends on block size

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**Question ID : **6119872310**Option 1 ID : **6119878997**Option 2 ID : **6119878998**Option 3 ID : **6119878999**Option 4 ID : **6119879000**Status : **Answered**Chosen Option : **3**

Comprehension:

A system transfer data blocks of 2000 bytes with programmed I/O, each byte transfer takes 6 CPU cycles, with direct memory access (DMA), the block transfer takes 3000 Cycles total, with CPU setup overhead of 200 cycles. The CPU clock is 1 GHZ. Answer the following 5 questions based on this paragraph.

SubQuestion No : 148**Q.148** How many CPU cycles are spent with DMA?

1. 200 Cycles
2. 3000 Cycles
3. 3200 Cycles
4. 4000 Cycles

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**Question ID : **6119872307**Option 1 ID : **6119878985**Option 2 ID : **6119878986**Option 3 ID : **6119878987**Option 4 ID : **6119878988**Status : **Answered**Chosen Option : **2****Comprehension:**

A system transfer data blocks of 2000 bytes with programmed I/O, each byte transfer takes 6 CPU cycles, with direct memory access (DMA), the block transfer takes 3000 Cycles total, with CPU setup overhead of 200 cycles. The CPU clock is 1 GHZ. Answer the following 5 questions based on this paragraph.

SubQuestion No : 149**Q.149** How many CPU cycles are spent using programmed I/O?

1. 2000
2. 6000
3. 12000
4. 20000

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**Question ID : **6119872306**Option 1 ID : **6119878981**Option 2 ID : **6119878982**Option 3 ID : **6119878983**Option 4 ID : **6119878984**Status : **Answered**Chosen Option : **3**

Comprehension:

A system transfer data blocks of 2000 bytes with programmed I/O, each byte transfer takes 6 CPU cycles, with direct memory access (DMA), the block transfer takes 3000 Cycles total, with CPU setup overhead of 200 cycles. The CPU clock is 1 GHZ. Answer the following 5 questions based on this paragraph.

SubQuestion No : 150

Q.150 How much CPU time is consumed by DMA overhead?

1. 0.2 μ s
2. 2.0 μ s
3. 3.0 μ s
4. 12.0 μ s

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **6119872309**

Option 1 ID : **6119878993**

Option 2 ID : **6119878994**

Option 3 ID : **6119878995**

Option 4 ID : **6119878996**

Status : **Answered**

Chosen Option : **4**