NTA UGC NET AUG 2024 21st Aug to 04th Sep 2024

Application No	240510302846
Candidate Name	Ashok kumar
Roll No.	2001010353
Test Date	23/08/2024
Test Time	9:00 AM - 12:00 PM
Subject	87 Computer Science and Applications

Section : **General Paper**

Comprehension:

The following table shows the proportion of students passed in three different Graduation Streams, namely, Arts, Science and Commerce, from seven different cities A-G, along with the ratio of Males (M) to Females (F) for the three streams among the students. Based on the data in the table, answer the questions that follow.

City-wise details of Graduating students

	Proportion of passed Students			
City	Arts : Science : Commerce	Arts	Science	Commerece
		M : F	M : F	M : F
A	2 : 4 : 5	31 : 14	23 : 27	11 : 7
B	7 : 2 : 4	37 : 33	43 : 32	29 : 21
C	1 : 4 : 2	34 : 16	57 : 43	31 : 29
D	5 : 7 : 4	17 : 13	51 : 33	23 : 17
E	4 : 3 : 8	23 : 17	41 : 34	57 : 23
F	2 : 4 : 3	47 : 28	11 : 7	16 : 11
G	3 : 5 : 4	29 : 21	27 : 24	53 : 47

SubQuestion No : 1

Q.1 If the number of students who passed in Commerce from City-F is 3240, then the number of students who passed from City-F is_____% of the number of Science students who passed from City-F.

(1) 75
(2) 150
(3) 180
(4) 225

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

Question Type : **MCQ**
Question ID : **5330723677**
Option 1 ID : **53307214309**
Option 2 ID : **53307214310**
Option 3 ID : **53307214311**
Option 4 ID : **53307214312**
Status : **Answered**
Chosen Option : **2**

Comprehension:

The following table shows the proportion of students passed in three different Graduation Streams, namely, Arts, Science and Commerce, from seven different cities A-G, along with the ratio of Males (M) to Females (F) for the three streams among the students. Based on the data in the table, answer the questions that follow.

City-wise details of Graduating students

	Proportion of passed Students			
City	Arts : Science : Commerce	Arts	Science	Commerece
		M : F	M : F	M : F
A	2 : 4 : 5	31 : 14	23 : 27	11 : 7
B	7 : 2 : 4	37 : 33	43 : 32	29 : 21
C	1 : 4 : 2	34 : 16	57 : 43	31 : 29
D	5 : 7 : 4	17 : 13	51 : 33	23 : 17
E	4 : 3 : 8	23 : 17	41 : 34	57 : 23
F	2 : 4 : 3	47 : 28	11 : 7	16 : 11
G	3 : 5 : 4	29 : 21	27 : 24	53 : 47

SubQuestion No : 2

Q.2 If the number of females who passed in Arts from City-C is 768, then the number of males who passed in Commerce from City-C is approximately _____% of the number of students who passed from City-C.

(1) 14.76
(2) 18.24
(3) 27.8
(4) 32.5

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723678**
Option 1 ID : **53307214313**
Option 2 ID : **53307214314**
Option 3 ID : **53307214315**
Option 4 ID : **53307214316**
Status : **Answered**
Chosen Option : **3**

Comprehension:

The following table shows the proportion of students passed in three different Graduation Streams, namely, Arts, Science and Commerce, from seven different cities A-G, along with the ratio of Males (M) to Females (F) for the three streams among the students. Based on the data in the table, answer the questions that follow.

City-wise details of Graduating students

	Proportion of passed Students			
City	Arts : Science : Commerce	Arts	Science	Commerece
		M : F	M : F	M : F
A	2 : 4 : 5	31 : 14	23 : 27	11 : 7
B	7 : 2 : 4	37 : 33	43 : 32	29 : 21
C	1 : 4 : 2	34 : 16	57 : 43	31 : 29
D	5 : 7 : 4	17 : 13	51 : 33	23 : 17
E	4 : 3 : 8	23 : 17	41 : 34	57 : 23
F	2 : 4 : 3	47 : 28	11 : 7	16 : 11
G	3 : 5 : 4	29 : 21	27 : 24	53 : 47

SubQuestion No : 3

Q.3 If the number of males who passed in Commerce from City-G is 2544, then what is the number of students who passed in Arts from City-G ?

(1) 3600
(2) 4200
(3) 4800
(4) 3400

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723675**
Option 1 ID : **53307214301**
Option 2 ID : **53307214302**
Option 3 ID : **53307214303**
Option 4 ID : **53307214304**
Status : **Answered**
Chosen Option : **1**

Comprehension:

The following table shows the proportion of students passed in three different Graduation Streams, namely, Arts, Science and Commerce, from seven different cities A-G, along with the ratio of Males (M) to Females (F) for the three streams among the students. Based on the data in the table, answer the questions that follow.

City-wise details of Graduating students

	Proportion of passed Students			
City	Arts : Science : Commerce	Arts	Science	Commerece
		M : F	M : F	M : F
A	2 : 4 : 5	31 : 14	23 : 27	11 : 7
B	7 : 2 : 4	37 : 33	43 : 32	29 : 21
C	1 : 4 : 2	34 : 16	57 : 43	31 : 29
D	5 : 7 : 4	17 : 13	51 : 33	23 : 17
E	4 : 3 : 8	23 : 17	41 : 34	57 : 23
F	2 : 4 : 3	47 : 28	11 : 7	16 : 11
G	3 : 5 : 4	29 : 21	27 : 24	53 : 47

SubQuestion No : 4

Q.4 The number of males who passed in Commerce from City-F is approximately _____% more than the number of females who passed in Commerce from City-F.

(1) 31.25
(2) 47.47
(3) 45.45
(4) 42.67

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

Question Type : **MCQ**
Question ID : **5330723679**
Option 1 ID : **53307214317**
Option 2 ID : **53307214318**
Option 3 ID : **53307214319**
Option 4 ID : **53307214320**
Status : **Answered**
Chosen Option : **1**

Comprehension:

The following table shows the proportion of students passed in three different Graduation Streams, namely, Arts, Science and Commerce, from seven different cities A-G, along with the ratio of Males (M) to Females (F) for the three streams among the students. Based on the data in the table, answer the questions that follow.

City-wise details of Graduating students

	Proportion of passed Students			
City	Arts : Science : Commerce	Arts	Science	Commerece
		M : F	M : F	M : F
A	2 : 4 : 5	31 : 14	23 : 27	11 : 7
B	7 : 2 : 4	37 : 33	43 : 32	29 : 21
C	1 : 4 : 2	34 : 16	57 : 43	31 : 29
D	5 : 7 : 4	17 : 13	51 : 33	23 : 17
E	4 : 3 : 8	23 : 17	41 : 34	57 : 23
F	2 : 4 : 3	47 : 28	11 : 7	16 : 11
G	3 : 5 : 4	29 : 21	27 : 24	53 : 47

SubQuestion No : 5

Q.5 For City-A, if the total number of males who passed in Arts is 2480, then what is the difference between the number of students who passed in Commerce and that in Science ?

(1) 600
(2) 1000
(3) 1400
(4) 1800

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

Question Type : **MCQ**
Question ID : **5330723676**
Option 1 ID : **53307214305**
Option 2 ID : **53307214306**
Option 3 ID : **53307214307**
Option 4 ID : **53307214308**
Status : **Answered**
Chosen Option : **4**

Q.6 If $(L)_M$ represents a number L in base-M number system, then what will be the value of $(107)_{16} + (257)_{16}$?

(1) $(762)_{10}$
(2) $(862)_{10}$
(3) $(962)_{10}$
(4) $(662)_{10}$

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

Question Type : **MCQ**
Question ID : **5330723705**
Option 1 ID : **53307214421**
Option 2 ID : **53307214422**
Option 3 ID : **53307214423**
Option 4 ID : **53307214424**
Status : **Answered**
Chosen Option : **2**

Q.7

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

	List - I (Type of variable)		**List - II (Example)**
(A)	Nominal	(I)	Satisfaction level
(B)	Ordinal	(II)	Weight
(C)	Interval	(III)	Ethnicity
(D)	Ratio	(IV)	Year of death

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

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

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

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723689**
Option 1 ID : **53307214357**
Option 2 ID : **53307214358**
Option 3 ID : **53307214359**
Option 4 ID : **53307214360**
Status : **Answered**
Chosen Option : **4**

Q.8

Which of the following criteria in research relates mainly to the issue of causality ?

(1) Transferability

(2) Measurement validity

(3) External validity

(4) Internal validity

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723686**
Option 1 ID : **53307214345**
Option 2 ID : **53307214346**
Option 3 ID : **53307214347**
Option 4 ID : **53307214348**
Status : **Answered**
Chosen Option : **4**

Q.9 In a race of 500 m run, A beats B by 20 m and C by 80 m. If B and C are running another race of 100 m with exactly same speed as before, then by how many meters will B beat C ?

(1) 10.0 m
(2) 8.5 m
(3) 15.0 m
(4) 12.5 m

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

Question Type : **MCQ**
Question ID : **5330723696**
Option 1 ID : **53307214385**
Option 2 ID : **53307214386**
Option 3 ID : **53307214387**
Option 4 ID : **53307214388**
Status : **Answered**
Chosen Option : **3**

Q.10 Arrange the following fractions in increasing order :

(A) $\frac{12}{17}$

(B) $\frac{13}{19}$

(C) $\frac{8}{11}$

(D) $\frac{16}{23}$

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

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

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

Question Type : **MCQ**
Question ID : **5330723697**
Option 1 ID : **53307214389**
Option 2 ID : **53307214390**
Option 3 ID : **53307214391**
Option 4 ID : **53307214392**
Status : **Answered**
Chosen Option : **1**

Q.11 Match **List - I** with **List - II**.

	List - I (Applications)		**List - II (Communication term)**
(A)	Interviews	(I)	Group Communication
(B)	Newspaper	(II)	Intrapersonal Communication
(C)	Classroom	(III)	Interpersonal Communication
(D)	Meditation	(IV)	Mass Communication

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

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

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

Question Type : **MCQ**
Question ID : **5330723694**
Option 1 ID : **53307214377**
Option 2 ID : **53307214378**
Option 3 ID : **53307214379**
Option 4 ID : **53307214380**
Status : **Answered**
Chosen Option : **4**

Q.12 What among the following can be ascribed to learning styles ?

(A) It is a way 'how' the student learns
(B) They are strengths and preferences of the learners for responding to the stimuli in the environment
(C) It is 'What' the learner learns
(D) It is a behavioural pattern developed for any new learning

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

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

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

Question Type : **MCQ**
Question ID : **5330723682**
Option 1 ID : **53307214329**
Option 2 ID : **53307214330**
Option 3 ID : **53307214331**
Option 4 ID : **53307214332**
Status : **Answered**
Chosen Option : **3**

Q.13

Three major actions in the process of Communication are :

(A) Receiving

(B) Sending

(C) Reviewing

(D) Interpreting

(E) Analysing

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), (D) and (E) only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723693**
Option 1 ID : **53307214373**
Option 2 ID : **53307214374**
Option 3 ID : **53307214375**
Option 4 ID : **53307214376**
Status : **Answered**
Chosen Option : **3**

Q.14

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

	List - I (Internet Term)		**List - II (Description)**
(A)	Blogs	(I)	Allows users to create and edit web pages using a browser
(B)	Podcasts	(II)	A type of bookmarking where a user "marks" a webpage or photo using text to describe its contents
(C)	Tagging	(III)	A series of digital media files
(D)	Wikis	(IV)	Personal internet journals

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

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

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

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723709**
Option 1 ID : **53307214437**
Option 2 ID : **53307214438**
Option 3 ID : **53307214439**
Option 4 ID : **53307214440**
Status : **Answered**
Chosen Option : **2**

Q.15 To record voice narration for your Microsoft PowerPoint presentation, your computer must have :

(A) Sound card
(B) An internet connection
(C) Speakers
(D) An external video port
(E) Microphone

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

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

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

Question Type : **MCQ**
Question ID : **5330723708**
Option 1 ID : **53307214433**
Option 2 ID : **53307214434**
Option 3 ID : **53307214435**
Option 4 ID : **53307214436**
Status : **Answered**
Chosen Option : **3**

Q.16 Which among the following fuels produces least amount of soot particles during combustion ?

(1) Petrol
(2) Kerosene
(3) Diesel
(4) Compressed Natural Gas (CNG)

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

Question Type : **MCQ**
Question ID : **5330723711**
Option 1 ID : **53307214445**
Option 2 ID : **53307214446**
Option 3 ID : **53307214447**
Option 4 ID : **53307214448**
Status : **Answered**
Chosen Option : **4**

Q.17

Identify the numbers that occur in the series 1, 7, 17, 31, 49, ...

(A) 74
(B) 95
(C) 97
(D) 127
(E) 161

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

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

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

Question Type : **MCQ**
Question ID : **5330723698**
Option 1 ID : **53307214393**
Option 2 ID : **53307214394**
Option 3 ID : **53307214395**
Option 4 ID : **53307214396**
Status : **Marked For Review**
Chosen Option : **2**

Q.18

What among the following is incorrect about SWAYAM Prabha ?

(1) It was launched by Sri Abul Kalam Azad.
(2) Satellite is used for telecasting the educational contents through DTH channels.
(3) The web portal of SWAYAM Prabha is maintained by INFLIBNET, Gujarat.
(4) The contents for SWAYAM Prabha are provided by NPTEL, IITs, UGC, CEC and IGNOU.

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

Question Type : **MCQ**
Question ID : **5330723684**
Option 1 ID : **53307214337**
Option 2 ID : **53307214338**
Option 3 ID : **53307214339**
Option 4 ID : **53307214340**
Status : **Answered**
Chosen Option : **1**

Q.19

Which of the following universities were set up in 1916 ?

(A) Osmania University

(B) S.N.D.T Women's University

(C) Mysore University

(D) Patna University

(E) Benaras Hindu University

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

(1) (A), (B) and (C) only

(2) (B), (C) and (E) only

(3) (B), (C) and (D) only

(4) (A), (D) and (E) only

Options

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

Question Type : **MCQ**
Question ID : **5330723716**
Option 1 ID : **53307214465**
Option 2 ID : **53307214466**
Option 3 ID : **53307214467**
Option 4 ID : **53307214468**
Status : **Answered**
Chosen Option : **2**

Q.20

Which is the first newspaper published in India in modern times ?

(1) Hickey's Bengal Gazzette

(2) India Gazette

(3) Samvad Kaumudi

(4) Udant Martand

Options

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

Question Type : **MCQ**
Question ID : **5330723690**
Option 1 ID : **53307214361**
Option 2 ID : **53307214362**
Option 3 ID : **53307214363**
Option 4 ID : **53307214364**
Status : **Answered**
Chosen Option : **3**

Q.21 A person sold an item at a loss of 7%. Had he sold the item at a gain of 7.5%, he would have received Rs. 87 more than his selling price. The cost price of the item is :

(1) Rs. 500
(2) Rs. 550
(3) Rs. 600
(4) Rs. 650

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

Question Type : **MCQ**
Question ID : **5330723695**
Option 1 ID : **53307214381**
Option 2 ID : **53307214382**
Option 3 ID : **53307214383**
Option 4 ID : **53307214384**
Status : **Marked For Review**
Chosen Option : **2**

Q.22 Match **List - I** with **List - II**.

	List - I (Types of Teaching)		**List - II (Description)**
(A)	Macro teaching	(I)	A teaching technique especially used in teacher's pre-service education to train them systematically
(B)	Micro teaching	(II)	An approach where the educators divide the content among themselves and students sit with one educator before moving to the other
(C)	Station teaching	(III)	A situation in a classroom where two teachers work on a class together
(D)	Cooperative teaching	(IV)	When a teacher provides instruction to the entire class at one time for an extended period of time

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

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

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

Question Type : **MCQ**
Question ID : **5330723681**
Option 1 ID : **53307214325**
Option 2 ID : **53307214326**
Option 3 ID : **53307214327**
Option 4 ID : **53307214328**
Status : **Answered**
Chosen Option : **3**

Q.23 According to UGC regulations 2018 on plagiarism, which of the following similarities constitute Level - 1 plagiarism ?

(A) 12%
(B) 42%
(C) 28%
(D) 56%
(E) 37%

Choose the **most appropriate** answer from the options given below :

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

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

Question Type : **MCQ**
Question ID : **5330723688**
Option 1 ID : **53307214353**
Option 2 ID : **53307214354**
Option 3 ID : **53307214355**
Option 4 ID : **53307214356**
Status : **Answered**
Chosen Option : **3**

Q.24 निम्नलिखित में युक्ति के पैटर्न की पहचान करें ''आदतें केबल के समान होती हैं। हम प्रतिदिन इसका तन्तु बुनते हैं और इसे शीघ्र तोड़ा नहीं जा सकता'' :

(1) कारणात्मक युक्ति
(2) सादृश्यता से युक्ति
(3) प्राधिकार से युक्ति
(4) परिभाषा से युक्ति

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

Question Type : **MCQ**
Question ID : **5330723700**
Option 1 ID : **53307214401**
Option 2 ID : **53307214402**
Option 3 ID : **53307214403**
Option 4 ID : **53307214404**
Status : **Answered**
Chosen Option : **1**

Q.25 Which of the following is known as "One Nation One Student ID" card ?

(1) Aadhar card
(2) Pan card
(3) APAAR card
(4) Voter's ID card

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

Question Type : **MCQ**
Question ID : **5330723718**
Option 1 ID : **53307214473**
Option 2 ID : **53307214474**
Option 3 ID : **53307214475**
Option 4 ID : **53307214476**
Status : **Answered**
Chosen Option : **3**

Q.26 Identify the correct order of the following major technological changes A-D in the development of computers based on first to fourth generation of computers :

(A) Transistors
(B) Microprocessor
(C) Vacuum tubes
(D) Integrated circuits

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

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

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

Question Type : **MCQ**
Question ID : **5330723707**
Option 1 ID : **53307214429**
Option 2 ID : **53307214430**
Option 3 ID : **53307214431**
Option 4 ID : **53307214432**
Status : **Answered**
Chosen Option : **4**

Q.27 Match **List - I** with **List - II**.

	List - I (International Treaties)		**List - II (Key Objectives)**
(A)	Sendai Framework	(I)	Equality between men and women
(B)	Monterry Concensus	(II)	Our common future
(C)	Beijing Declaration	(III)	Disaster Risk Reduction
(D)	Brundtland Report	(IV)	Financing for development

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

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

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

Question Type : **MCQ**
Question ID : **5330723714**
Option 1 ID : **53307214457**
Option 2 ID : **53307214458**
Option 3 ID : **53307214459**
Option 4 ID : **53307214460**
Status : **Answered**
Chosen Option : **4**

Q.28 What can be inferred correctly from the following ? "No musicians are Greeks. All traders are Musicians. Therefore, no traders are Greeks"

(A) It represents figure II of the syllogistic argument
(B) It is an EAE mood
(C) The term 'Greeks' is the major term
(D) The minor term of the conclusion is distributed
(E) The middle term is undistributed

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

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

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

Question Type : **MCQ**
Question ID : **5330723702**
Option 1 ID : **53307214409**
Option 2 ID : **53307214410**
Option 3 ID : **53307214411**
Option 4 ID : **53307214412**
Status : **Answered**
Chosen Option : **2**

Q.29 Arrange the following ancient Indian Institutes from East to West direction.

(A) Takshashila
(B) Nalanda
(C) Vikramshila
(D) Shardapeeth

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

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

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

Question Type : **MCQ**
Question ID : **5330723715**
Option 1 ID : **53307214461**
Option 2 ID : **53307214462**
Option 3 ID : **53307214463**
Option 4 ID : **53307214464**
Status : **Answered**
Chosen Option : **1**

Q.30 Eye irritation is the common phenomenon during smog. It is mostly caused by :

(A) Formaldehyde
(B) Per-oxy acetyl Nitrate
(C) Ozone
(D) Acrolin

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

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

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

Question Type : **MCQ**
Question ID : **5330723713**
Option 1 ID : **53307214453**
Option 2 ID : **53307214454**
Option 3 ID : **53307214455**
Option 4 ID : **53307214456**
Status : **Answered**
Chosen Option : **2**

Q.31 In computer networking, an IP version-6 is _____ times larger than an IP version-4 address.

(1) 2
(2) 4
(3) 6
(4) 8

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

Question Type : **MCQ**
Question ID : **5330723706**
Option 1 ID : **53307214425**
Option 2 ID : **53307214426**
Option 3 ID : **53307214427**
Option 4 ID : **53307214428**
Status : **Answered**
Chosen Option : **2**

Q.32 What among the following can be correctly claimed in the light of 'Assessment Rubrics' ?

(A) A tool used to interpret and grade students on the basis of some criterion.
(B) A means to increase subjective evaluation by the evaluator.
(C) It ensures transparency and fairness in the marking process.
(D) It provides an opportunity to set orbitrary standards and guidelines for moderation.
(E) It is an innovative evaluation system.

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

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

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

Question Type : **MCQ**
Question ID : **5330723680**
Option 1 ID : **53307214321**
Option 2 ID : **53307214322**
Option 3 ID : **53307214323**
Option 4 ID : **53307214324**
Status : **Answered**
Chosen Option : **4**

Q.33

Arrange the '5 Ws' of communication in proper sequence :

(A) Why
(B) When
(C) What
(D) Who
(E) Where

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

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

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

Question Type : **MCQ**
Question ID : **5330723692**
Option 1 ID : **53307214369**
Option 2 ID : **53307214370**
Option 3 ID : **53307214371**
Option 4 ID : **53307214372**
Status : **Answered**
Chosen Option : **1**

Q.34

The amount of biomass produced by the plants through photosynthesis minus respiration losses in a given time period is known as :

(1) Gross Primary Productivity
(2) Net Primary Productivity
(3) Gross Ecological Productivity
(4) Net Secondary Productivity

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

Question Type : **MCQ**
Question ID : **5330723710**
Option 1 ID : **53307214441**
Option 2 ID : **53307214442**
Option 3 ID : **53307214443**
Option 4 ID : **53307214444**
Status : **Answered**
Chosen Option : **2**

Q.35 Match **List - I** with **List - II**.

List - I (Constitutional Provision of Education)		**List - II (Article)**
(A) Women's Education	(I)	28
(B) Education of Minorities	(II)	21-A
(C) Secular Education	(III)	15 (Part-II)
(D) Right to Education	(IV)	29 (Part-III)

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

(1) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
(2) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)
(3) (A)-(III), (B)-(IV), (C)-(I), (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 : **5330723717**
Option 1 ID : **53307214469**
Option 2 ID : **53307214470**
Option 3 ID : **53307214471**
Option 4 ID : **53307214472**
Status : **Answered**
Chosen Option : **1**

Q.36 Which of the following can not be treated as the folk tradition of communication in India ?

(1) Cinema
(2) Jatra
(3) Ramleela
(4) Kumbh Mela

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

Question Type : **MCQ**
Question ID : **5330723691**
Option 1 ID : **53307214365**
Option 2 ID : **53307214366**
Option 3 ID : **53307214367**
Option 4 ID : **53307214368**
Status : **Answered**
Chosen Option : **1**

Q.37 A researcher decides to tell participants something false about a research session in order to mislead them. The researcher is using :

(1) Naturalistic observation
(2) Role playing
(3) Active deception
(4) Dehoaxing

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

Question Type : **MCQ**
Question ID : **5330723685**
Option 1 ID : **53307214341**
Option 2 ID : **53307214342**
Option 3 ID : **53307214343**
Option 4 ID : **53307214344**
Status : **Answered**
Chosen Option : **4**

Q.38 Arrange the data sets with following pairs of mean ($\bar{x}$) and standard derivation (σ) in increasing order of their coefficient of variation.

(A) $\bar{x} = 8,\ \sigma = 1.7$
(B) $\bar{x} = 11,\ \sigma = 2.2$
(C) $\bar{x} = 15,\ \sigma = 3.6$
(D) $\bar{x} = 16,\ \sigma = 3$

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

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

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

Question Type : **MCQ**
Question ID : **5330723687**
Option 1 ID : **53307214349**
Option 2 ID : **53307214350**
Option 3 ID : **53307214351**
Option 4 ID : **53307214352**
Status : **Answered**
Chosen Option : **4**

Q.39

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

List - I (Word)		**List - II (Unique Code)**
(A) QUAKE	(I)	KTFUL
(B) OFTEN	(II)	VHQDU
(C) PEACH	(III)	IEYOU
(D) DRIVE	(IV)	JUYWR

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

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

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

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

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

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

Question Type : **MCQ**
Question ID : **5330723699**
Option 1 ID : **53307214397**
Option 2 ID : **53307214398**
Option 3 ID : **53307214399**
Option 4 ID : **53307214400**
Status : **Answered**
Chosen Option : **1**

Q.40

Among the following which is correct in the context of Śabda Pramāṇa ?

(1) For Sāmkhya, a word signifies universal

(2) For, Jainas, a word signifies a particular

(3) For old Nyāya, a word symbolizes universal only

(4) For Vedantins, a word primarily means the class character of individuals

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

Question Type : **MCQ**
Question ID : **5330723704**
Option 1 ID : **53307214417**
Option 2 ID : **53307214418**
Option 3 ID : **53307214419**
Option 4 ID : **53307214420**
Status : **Answered**
Chosen Option : **1**

Q.41 **सूची-I** से **सूची-II** का मिलान कीजिए :

	सूची-I (**अस्तित्व रहित होने के स्वरूप**)		**सूची-II** (**निरूपण**)
(A)	अन्योन्यभाव	(I)	हेयर का होर्न (खरगोश के सींग)
(B)	अत्यंताभाव	(II)	अब जार का अस्तित्व नहीं है
(C)	प्रागभाव	(III)	'यह वह नहीं है'
(D)	प्रध्वंसाभाव	(IV)	किसी वस्तु का अस्थायी तौर पर न होना

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

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

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

Question Type : **MCQ**
Question ID : **5330723703**
Option 1 ID : **53307214413**
Option 2 ID : **53307214414**
Option 3 ID : **53307214415**
Option 4 ID : **53307214416**
Status : **Answered**
Chosen Option : **4**

Q.42 According to National Credit Framework (NCrF) the credit level earned after Doctoral degree (Ph.D.) will be :

(1) 7
(2) 8
(3) 9
(4) 10

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

Question Type : **MCQ**
Question ID : **5330723719**
Option 1 ID : **53307214477**
Option 2 ID : **53307214478**
Option 3 ID : **53307214479**
Option 4 ID : **53307214480**
Status : **Answered**
Chosen Option : **2**

Q.43 What can be correctly inferred about the Traditional Teaching Method and Support System ?

(A) Teacher is responsible to control the class and teach with the usage of blackboard

(B) It is also known as 'Back-to Basics' System.

(C) The student carries the responsibilities to use self-learning tools.

(D) Virtual labs are used as one of the Teaching tools.

(E) Charts, Maps and Textbooks are the prime resources and handouts are used by the teacher

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

(1) (B) and (C) only

(2) (A), (B) and (D) only

(3) (D) and (E) only

(4) (A), (B), and (E) only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723683**
Option 1 ID : **53307214333**
Option 2 ID : **53307214334**
Option 3 ID : **53307214335**
Option 4 ID : **53307214336**
Status : **Answered**
Chosen Option : **4**

Q.44 Arrange the following states in ascending order according to their area under forest cover :

(A) Arunachal Pradesh

(B) Chhattisgarh

(C) Maharastra

(D) Odisha

(E) Madhya Pradesh

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

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

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

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723712**
Option 1 ID : **53307214449**
Option 2 ID : **53307214450**
Option 3 ID : **53307214451**
Option 4 ID : **53307214452**
Status : **Answered**
Chosen Option : **2**

Q.45 निम्नलिखित से किस बात का अनुमान लगाया जा सकता है? ''आपको ज्ञात है कि मुझे कैसे इस बात की जानकारी है कि पशुओं में आत्मायें होती हैं? क्योंकि औसतन निम्नतम पशु इस पृथ्वी पर रहने वाले अधिकतर अनुष्यों की तुलना में काफी अच्छा और दयालु होता है।''

(A) आधार वाक्य : निम्नतम पशु इस पृथ्वी पर रहने वाले अधिकतर मनुष्यों की तुलना में काफी अच्छा और दयालु होता है।

(B) आधारवाक्य : पशुओं में आत्मा होती है।

(C) यह एक युक्ति नहीं है।

(D) निष्कर्ष : निम्नतम पशु, इस पृथ्वी पर रहने वाले अधिकतर मनुष्यों की तुलना में काफी अच्छा और दयालु होता है।

(E) निष्कर्ष : पशुओं में आत्मा होती है।

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

(1) केवल (B), (C) और (D)

(2) केवल (A), (C) और (E)

(3) केवल (A) और (E)

(4) केवल (A), (D) और (E)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723701**
Option 1 ID : **53307214405**
Option 2 ID : **53307214406**
Option 3 ID : **53307214407**
Option 4 ID : **53307214408**
Status : **Answered**
Chosen Option : **3**

Comprehension:

Read the following passage and answer the questions that follow :

Odisha has colourful fairs and festivals and are as numerous as the days of the year. The sacred journey of Lord Jagannath with brother Balabhadra and sister Subhadra from the Jagannath Temple to the divine shrine called the Gundicha Temple is known as the Car Festival or the Rath Yatra. On this occasion, the deities adorn three chariots named Nandigosha, Taladhwaja and Darpadalana respectively. They stay in the divine shrine for nine days and then return to the Jagannath Temple. This journey is called Bahuda Jatra. This grand festival of Odisha is visited by lakhs of devotees from India and abroad who pull the sacred chariots from the Jagannath Temple to the Gundicha Temple and back on a broad road called Badadanda. The festival begins from the second day of Shukla Paksha (bright half) in the month of Ashadha (June-July) every year. This festival of Lord Jagannath, who is worshipped as the Lord of the Universe, is celebrated not only in Puri, but also in many other places in India and abroad.

SubQuestion No : 46

Q.46 Whereas the festival of Lord Jagannath is celebrated in many places in India and abroad, it is primarily associated with which city ?

(1) Bhuvaneswar

(2) Puri

(3) Cuttack

(4) Konark

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723721**
Option 1 ID : **53307214481**
Option 2 ID : **53307214482**
Option 3 ID : **53307214483**
Option 4 ID : **53307214484**
Status : **Answered**
Chosen Option : **2**

Comprehension:

Read the following passage and answer the questions that follow :

Odisha has colourful fairs and festivals and are as numerous as the days of the year. The sacred journey of Lord Jagannath with brother Balabhadra and sister Subhadra from the Jagannath Temple to the divine shrine called the Gundicha Temple is known as the Car Festival or the Rath Yatra. On this occasion, the deities adorn three chariots named Nandigosha, Taladhwaja and Darpadalana respectively. They stay in the divine shrine for nine days and then return to the Jagannath Temple. This journey is called Bahuda Jatra. This grand festival of Odisha is visited by lakhs of devotees from India and abroad who pull the sacred chariots from the Jagannath Temple to the Gundicha Temple and back on a broad road called Badadanda. The festival begins from the second day of Shukla Paksha (bright half) in the month of Ashadha (June-July) every year. This festival of Lord Jagannath, who is worshipped as the Lord of the Universe, is celebrated not only in Puri, but also in many other places in India and abroad.

SubQuestion No : 47

Q.47 What are the names of the deities who accompany Lord Jagannath in the Rath Yatra ?

(1) Subhadra and Balabhadra
(2) Balabhadra and Shiva
(3) Subhadra and Hidimba
(4) Balabhadra and Hidimba

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

Question Type : **MCQ**
Question ID : **5330723722**
Option 1 ID : **53307214485**
Option 2 ID : **53307214486**
Option 3 ID : **53307214487**
Option 4 ID : **53307214488**
Status : **Answered**
Chosen Option : **1**

Comprehension:

Read the following passage and answer the questions that follow :

Odisha has colourful fairs and festivals and are as numerous as the days of the year. The sacred journey of Lord Jagannath with brother Balabhadra and sister Subhadra from the Jagannath Temple to the divine shrine called the Gundicha Temple is known as the Car Festival or the Rath Yatra. On this occasion, the deities adorn three chariots named Nandigosha, Taladhwaja and Darpadalana respectively. They stay in the divine shrine for nine days and then return to the Jagannath Temple. This journey is called Bahuda Jatra. This grand festival of Odisha is visited by lakhs of devotees from India and abroad who pull the sacred chariots from the Jagannath Temple to the Gundicha Temple and back on a broad road called Badadanda. The festival begins from the second day of Shukla Paksha (bright half) in the month of Ashadha (June-July) every year. This festival of Lord Jagannath, who is worshipped as the Lord of the Universe, is celebrated not only in Puri, but also in many other places in India and abroad.

SubQuestion No : 48

Q.48 The Car Festival is conducted on a broad road that is called _____.

(1) Darpadalana
(2) Ashadha
(3) Badadanda
(4) Taladhwaja

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

Question Type : **MCQ**
Question ID : **5330723724**
Option 1 ID : **53307214493**
Option 2 ID : **53307214494**
Option 3 ID : **53307214495**
Option 4 ID : **53307214496**
Status : **Answered**
Chosen Option : **3**

Comprehension:

Read the following passage and answer the questions that follow :

Odisha has colourful fairs and festivals and are as numerous as the days of the year. The sacred journey of Lord Jagannath with brother Balabhadra and sister Subhadra from the Jagannath Temple to the divine shrine called the Gundicha Temple is known as the Car Festival or the Rath Yatra. On this occasion, the deities adorn three chariots named Nandigosha, Taladhwaja and Darpadalana respectively. They stay in the divine shrine for nine days and then return to the Jagannath Temple. This journey is called Bahuda Jatra. This grand festival of Odisha is visited by lakhs of devotees from India and abroad who pull the sacred chariots from the Jagannath Temple to the Gundicha Temple and back on a broad road called Badadanda. The festival begins from the second day of Shukla Paksha (bright half) in the month of Ashadha (June-July) every year. This festival of Lord Jagannath, who is worshipped as the Lord of the Universe, is celebrated not only in Puri, but also in many other places in India and abroad.

SubQuestion No : 49

Q.49 What is the name assigned to the journey wherein the deities return to the Jagannath Temple after nine days ?

(1) Rath Yatra
(2) Wapsi Yatra
(3) Maha Yatra
(4) Bahuda Jatra

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

Question Type : **MCQ**
Question ID : **5330723725**
Option 1 ID : **53307214497**
Option 2 ID : **53307214498**
Option 3 ID : **53307214499**
Option 4 ID : **53307214500**
Status : **Answered**
Chosen Option : **4**

Comprehension:

Read the following passage and answer the questions that follow :

Odisha has colourful fairs and festivals and are as numerous as the days of the year. The sacred journey of Lord Jagannath with brother Balabhadra and sister Subhadra from the Jagannath Temple to the divine shrine called the Gundicha Temple is known as the Car Festival or the Rath Yatra. On this occasion, the deities adorn three chariots named Nandigosha, Taladhwaja and Darpadalana respectively. They stay in the divine shrine for nine days and then return to the Jagannath Temple. This journey is called Bahuda Jatra. This grand festival of Odisha is visited by lakhs of devotees from India and abroad who pull the sacred chariots from the Jagannath Temple to the Gundicha Temple and back on a broad road called Badadanda. The festival begins from the second day of Shukla Paksha (bright half) in the month of Ashadha (June-July) every year. This festival of Lord Jagannath, who is worshipped as the Lord of the Universe, is celebrated not only in Puri, but also in many other places in India and abroad.

SubQuestion No : 50

Q.50 The sacred journey of Lord Jagannath is traditionally undertaken onward to which divine shrine ?

(1) Jagannath Temple
(2) Subhadra Temple
(3) Balabhadra Temple
(4) Gundicha Temple

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

Question Type : **MCQ**
Question ID : **5330723723**
Option 1 ID : **53307214489**
Option 2 ID : **53307214490**
Option 3 ID : **53307214491**
Option 4 ID : **53307214492**
Status : **Answered**
Chosen Option : **4**

Section : **Computer Science and Applications**

Q.51

Consider the following if p and q are two statements.

(A) $\sim(p \wedge q) \equiv \sim p \vee \sim q$

(B) $\sim(p \vee q) \equiv \sim p \wedge \sim q$

(C) $p \wedge \sim p \equiv T$

(D) $\sim(p \Rightarrow q) \equiv p \wedge \sim q$

(E) $p \vee q \equiv \sim p \vee \sim q$

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

(1) (A), (B) and (D) Only

(2) (A), (C) and (D) Only

(3) (C), (D) and (E) Only

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723800**
Option 1 ID : **53307214797**
Option 2 ID : **53307214798**
Option 3 ID : **53307214799**
Option 4 ID : **53307214800**
Status : **Answered**
Chosen Option : **1**

Q.52

Which of the following is correct way to declare a functional pointer in C ?

(1) int *func (int, int);

(2) int (*func) (int, int);

(3) int (func*) (int, int);

(4) int *func* (int, int);

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723745**
Option 1 ID : **53307214577**
Option 2 ID : **53307214578**
Option 3 ID : **53307214579**
Option 4 ID : **53307214580**
Status : **Answered**
Chosen Option : **1**

Q.53

Arrange the following steps of file handling in C in the correct order :

(A) Close the file

(B) Read from or write to the file

(C) Open the file

(D) Check for error

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

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

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

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723769**
Option 1 ID : **53307214673**
Option 2 ID : **53307214674**
Option 3 ID : **53307214675**
Option 4 ID : **53307214676**
Status : **Answered**
Chosen Option : **3**

Q.54

How does a relational database ensure data integrity ?

(1) By encrypting all data stored

(2) By enforcing rules defined in the schema

(3) By compressing data for efficient storage

(4) By allowing unrestricted access to all users

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723750**
Option 1 ID : **53307214597**
Option 2 ID : **53307214598**
Option 3 ID : **53307214599**
Option 4 ID : **53307214600**
Status : **Answered**
Chosen Option : **2**

Q.55

(A) In IPv4 addressing, a block of address can be define as x.y.z.t/n in which x.y.z.t define one of the address and /n define the mask

(B) The first address in the block can be found by setting the rightmost 32-n bits to 0s

(C) Address of class C is used for multicast communication

(D) There are five classes in IPv4 address

(E) Supernetting combine several networks into one large network

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

(1) (A), (B) and (C) Only

(2) (A), (B), (D) and (E) Only

(3) (A), (C), (D) and (E) Only

(4) (C), (D) and (E) Only

Options

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

Question Type : **MCQ**
Question ID : **5330723789**
Option 1 ID : **53307214753**
Option 2 ID : **53307214754**
Option 3 ID : **53307214755**
Option 4 ID : **53307214756**
Status : **Answered**
Chosen Option : **2**

Q.56

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

List - I (Algorithms)		**List - II (Characteristics)**	
(A)	First Come First Served (FCFS)	(I)	Each process is assigned a priority.
(B)	Shortest Job First (SJF)	(II)	Ensures fair allocation of CPU time by assigning time slice.
(C)	Round Robin (RR)	(III)	Processes are executed in the order they arrive.
(D)	Priority Scheduling	(IV)	Select the process for execution with smallest next Burst time.

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

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

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

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

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

Options

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

Question Type : **MCQ**
Question ID : **5330723815**
Option 1 ID : **53307214857**
Option 2 ID : **53307214858**
Option 3 ID : **53307214859**
Option 4 ID : **53307214860**
Status : **Answered**
Chosen Option : **3**

Q.57 Arrange the following stages of parsing in the correct order as they typically occur in the compilation process.

(A) Lexical Analysis
(B) Sematic Analysis
(C) Syntax Analysis
(D) Intermediate Code Generation
(E) Code Optimization

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

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

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

Question Type : **MCQ**
Question ID : **5330723776**
Option 1 ID : **53307214701**
Option 2 ID : **53307214702**
Option 3 ID : **53307214703**
Option 4 ID : **53307214704**
Status : **Answered**
Chosen Option : **2**

Q.58 Match **List - I** with **List - II**.

List - I (Testing Type)		**List - II (Description)**	
(A)	Unit testing	(I)	Testing individual components of the software.
(B)	Integrating testing	(II)	Testing the interaction between integrated components.
(C)	System testing	(III)	Testing to verify the system meets business needs.
(D)	Acceptance testing	(IV)	Testing the complete system to ensure it meets requirements.

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

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

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

Question Type : **MCQ**
Question ID : **5330723812**
Option 1 ID : **53307214845**
Option 2 ID : **53307214846**
Option 3 ID : **53307214847**
Option 4 ID : **53307214848**
Status : **Answered**
Chosen Option : **2**

Q.59 Which of the following C++ statements correctly declares an abstract class ?

(1) class A { virtual void show() = 0; };
(2) class A { void show() = 0; };
(3) class A { void show() { } ; };
(4) class A { show() = 0; };

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

Question Type : **MCQ**
Question ID : **5330723748**
Option 1 ID : **53307214589**
Option 2 ID : **53307214590**
Option 3 ID : **53307214591**
Option 4 ID : **53307214592**
Status : **Answered**
Chosen Option : **3**

Q.60 In a schema R(A, B, C, D, E, F, G, H), each field of R contains only atomic values. F = {CH→G, A→BC, B→CFH, E→A, F→EG} is a set of functional dependencies so that F + is exactly the set of FDs that holds R. The relation R is :

(1) In 1NF, but not in 2NF
(2) In 2NF, but not in 3NF
(3) In 3NF, but not in BCNF
(4) In BCNF

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

Question Type : **MCQ**
Question ID : **5330723756**
Option 1 ID : **53307214621**
Option 2 ID : **53307214622**
Option 3 ID : **53307214623**
Option 4 ID : **53307214624**
Status : **Marked For Review**
Chosen Option : **1**

Q.61 Which of the following languages can be recognized by Non-Deterministic Finite Automata (NFA) but cannot be recognized by Deterministic Finite Automata (DFA) ?

(A) $L_1 = \{w \in \{0, 1\}^* \mid$ the length of w is even$\}$

(B) $L_2 = \{w \in \{0, 1\}^* \mid$ the length of w is odd$\}$

(C) $L_3 = \{w \in \{0, 1\}^* \mid$ all 0's come before all 1's in w$\}$

(D) $L_4 = \{w \in \{0, 1\}^* \mid$ w contains an equal number of 0's and 1's$\}$

(E) $L_5 = \{w \in \{0, 1\}^* \mid$ all 1's come before all 0's in w$\}$

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

(1) (A) and (B) Only

(2) (B) and (C) Only

(3) (C) and (D) Only

(4) (D) and (E) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723788**
Option 1 ID : **53307214749**
Option 2 ID : **53307214750**
Option 3 ID : **53307214751**
Option 4 ID : **53307214752**
Status : **Answered**
Chosen Option : **1**

Q.62 Consider the Grammar :

$T \rightarrow Qx$

$Q \rightarrow RS$

$R \rightarrow y \mid \varepsilon$

$S \rightarrow z \mid \varepsilon$

Here x, y, z are terminals and T, Q, R, S are non terminals.

What will be the follow set of the non terminal R ?

(1) {x, y}

(2) {y, z}

(3) {z, x}

(4) {ε}

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723727**
Option 1 ID : **53307214505**
Option 2 ID : **53307214506**
Option 3 ID : **53307214507**
Option 4 ID : **53307214508**
Status : **Answered**
Chosen Option : **3**

Q.63

Which of the following statements about pointers in C are TRUE.

(A) Pointers can be used to access array elements

(B) Pointers can store the address of another pointer

(C) Pointers are automatically deferenced in expression

(D) Pointers cannot be used to access structure members

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

(1) (A) and (C) Only

(2) (A) and (B) Only

(3) (B) and (C) Only

(4) (C) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723796**
Option 1 ID : **53307214781**
Option 2 ID : **53307214782**
Option 3 ID : **53307214783**
Option 4 ID : **53307214784**
Status : **Answered**
Chosen Option : **2**

Q.64

Which of the following are Agile Process Models ?

(A) Extreme Programming (XP)

(B) Waterfall

(C) Scrum

(D) Spiral

(E) Incremental

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

(1) (A) and (C) Only

(2) (B) and (C) Only

(3) (A) and (D) Only

(4) (B) and (E) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723795**
Option 1 ID : **53307214777**
Option 2 ID : **53307214778**
Option 3 ID : **53307214779**
Option 4 ID : **53307214780**
Status : **Answered**
Chosen Option : **1**

Q.65 Match **List - I** with **List - II**.

	List - I		List - II
(A)	HTML	(I)	Allow for dynamic and interactive web pages.
(B)	DHTML	(II)	Defines the structure of web pages.
(C)	XML	(III)	Object-oriented programming language for web applications.
(D)	JAVA	(IV)	Used for data storage and transport.

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

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

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

Question Type : **MCQ**
Question ID : **5330723814**
Option 1 ID : **53307214853**
Option 2 ID : **53307214854**
Option 3 ID : **53307214855**
Option 4 ID : **53307214856**
Status : **Answered**
Chosen Option : **3**

Q.66 Match **List - I** with **List - II**.

	List - I (Queries)		List - II (Probability)
(A)	A bag contains 6 white and 4 red balls. Two balls are drawn at random. What is the chance, they will be the same colour ?	(I)	3/68
(B)	In a pack of 52 cards, one card is drawn at random, what is the probability that it is either a king or a queen ?	(II)	14/68
(C)	A bag contains 6 red, 4 white and 8 blue balls. If three balls are drawn at random, find the probability of 1 red and 2 white balls ?	(III)	2/3
(D)	A bag contains 6 red, 4 white and 8 blue balls. If three balls are drawn at random. Find the probability of 2 blue and 1 red balls ?	(IV)	7/15

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

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

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

Question Type : **MCQ**
Question ID : **5330723801**
Option 1 ID : **53307214801**
Option 2 ID : **53307214802**
Option 3 ID : **53307214803**
Option 4 ID : **53307214804**
Status : **Marked For Review**
Chosen Option : **3**

Q.67 A graph G with number of vertices greater and equal than three i.e. ($n \geq 3$) is a Hamiltonian graph, if the degree of each vertex is greater and equal to . . . .

(1) Equal to number of vertices
(2) Double of number of vertices
(3) Half of number of vertices
(4) Four times of number of vertices

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

Question Type : **MCQ**
Question ID : **5330723802**
Option 1 ID : **53307214805**
Option 2 ID : **53307214806**
Option 3 ID : **53307214807**
Option 4 ID : **53307214808**
Status : **Answered**
Chosen Option : **3**

Q.68 Which of the following are TRUE about constructors in C++ ?

(A) A constructor can be overloaded.
(B) A constructor does not have a return type.
(C) A constructor must be declared as a friend function.
(D) A constructor is called when an object is destroyed.

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

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

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

Question Type : **MCQ**
Question ID : **5330723797**
Option 1 ID : **53307214785**
Option 2 ID : **53307214786**
Option 3 ID : **53307214787**
Option 4 ID : **53307214788**
Status : **Answered**
Chosen Option : **4**

Q.69

Select the Sorting Algorithms that are stable.

(A) Quick Sort

(B) Bubble Sort

(C) Insertion Sort

(D) Merge Sort

(E) Shell Sort

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

(1) (A), (B), (C) and (E) Only

(2) (A), (D) and (E) Only

(3) (B) and (C) Only

(4) (B), (C) and (E) Only

Options

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

Question Type : **MCQ**
Question ID : **5330723793**
Option 1 ID : **53307214769**
Option 2 ID : **53307214770**
Option 3 ID : **53307214771**
Option 4 ID : **53307214772**
Status : **Answered**
Chosen Option : **2**

Q.70

Fifth normal form is concerned with :

(1) Join Dependency

(2) Domain-Key

(3) Multivalued dependency

(4) Functional dependency

Options

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

Question Type : **MCQ**
Question ID : **5330723749**
Option 1 ID : **53307214593**
Option 2 ID : **53307214594**
Option 3 ID : **53307214595**
Option 4 ID : **53307214596**
Status : **Answered**
Chosen Option : **2**

Q.71 Match **List - I** with **List - II**.

	List - I (Counter)		**List - II (uses/working)**
(A)	N-bit Ring Counter	(I)	Uses universal clock
(B)	Synchronous Counter	(II)	Counts exactly N states
(C)	Asynchronous Counter	(III)	Counts 0 to 9
(D)	Decimal Counter	(IV)	Main clock is applied to first flip-flop only

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

(1) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
(2) (A)-(IV), (B)-(II), (C)-(III), (D)-(I)
(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 : **5330723805**
Option 1 ID : **53307214817**
Option 2 ID : **53307214818**
Option 3 ID : **53307214819**
Option 4 ID : **53307214820**
Status : **Answered**
Chosen Option : **3**

Q.72 Match **List - I** with **List - II**.

	List - I (operating system concepts)		**List - II (characteristics)**
(A)	Paging	(I)	Evicts least recently used process
(B)	LRU (Least Recently Used)	(II)	Extends physical memory
(C)	C-SCAN	(III)	Logical to physical mapping
(D)	Virtual Memory	(IV)	Circular disk access

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

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

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

Question Type : **MCQ**
Question ID : **5330723813**
Option 1 ID : **53307214849**
Option 2 ID : **53307214850**
Option 3 ID : **53307214851**
Option 4 ID : **53307214852**
Status : **Answered**
Chosen Option : **2**

Q.73 Match **List - I** with **List - II**.

	List - I		List - II
(A)	Natural language processing	(I)	A method of training algorithm by rewarding desired behaviour and/or punishing undesired one.
(B)	Reinforcement learning	(II)	System designed to emulate the decision making abilities of a human expert.
(C)	Support vector machine	(III)	A branch of AI focused on understanding and generating human language.
(D)	Expert system	(IV)	A machine learning technique that finds the hyper plane that best separates different class in a feature space.

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

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

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

Question Type : **MCQ**
Question ID : **5330723808**
Option 1 ID : **53307214829**
Option 2 ID : **53307214830**
Option 3 ID : **53307214831**
Option 4 ID : **53307214832**
Status : **Answered**
Chosen Option : **3**

Q.74 A class B network on the Internet has a subnet mask of 255.255.248.0, what is the maximum number of hosts per subnet ?

(1) 1022
(2) 1023
(3) 2046
(4) 2047

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

Question Type : **MCQ**
Question ID : **5330723740**
Option 1 ID : **53307214557**
Option 2 ID : **53307214558**
Option 3 ID : **53307214559**
Option 4 ID : **53307214560**
Status : **Answered**
Chosen Option : **1**

Q.75 Arrange the given steps required for a Direct Memory Access (DMA) transfer in the correct order.

(A) Initiate DMA transfer request

(B) Transfer data directly between peripheral and memory

(C) Processor grants DMA control over the system bus

(D) DMA controller completes data transfer and signals completion

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

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

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

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723768**
Option 1 ID : **53307214669**
Option 2 ID : **53307214670**
Option 3 ID : **53307214671**
Option 4 ID : **53307214672**
Status : **Answered**
Chosen Option : **2**

Q.76 Which of the following statements are TRUE about Privileged Instructions ?

(A) It can only be executed by the Operating System kernel and not by user applications.

(B) It is designed to perform operations that can directly affect the hardware or system state such as I/O operations or changing memory management setting.

(C) User applications can execute privileged instructions if they have to correct permissions, set by the Operating System.

(D) It usually executed in user mode to ensure the safety and security of the system.

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

(1) (A) and (B) Only

(2) (A), (B) and (C) Only

(3) (B) and (C) Only

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723786**
Option 1 ID : **53307214741**
Option 2 ID : **53307214742**
Option 3 ID : **53307214743**
Option 4 ID : **53307214744**
Status : **Answered**
Chosen Option : **1**

Q.77 Arrange the following recurrence relations in increasing order of their time capacity.

(A) $T(n) = T(n/2) + 1$

(B) $T(n) = 2T(n/2) + n$

(C) $T(n) = 3T(n/3) + n$

(D) $T(n) = 2T(n/2) + \sqrt{n}$

(E) $T(n) = T(n-1) + 1$

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

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

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

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723774**
Option 1 ID : **53307214693**
Option 2 ID : **53307214694**
Option 3 ID : **53307214695**
Option 4 ID : **53307214696**
Status : **Answered**
Chosen Option : **2**

Q.78 If a software project has 2000 lines of code (LOC) and the average productivity rate is 10 LOC per person-hour, how many person-hours are required to complete the project ?

(1) 100

(2) 150

(3) 200

(4) 250

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723735**
Option 1 ID : **53307214537**
Option 2 ID : **53307214538**
Option 3 ID : **53307214539**
Option 4 ID : **53307214540**
Status : **Answered**
Chosen Option : **3**

Q.79 _____ is a Self Balancing binary search tree, where the path from the root to the furthest leaf is no more than twice as long as the path from the root to nearest leaf.

(1) Expression tree
(2) Game tree
(3) Red-Black tree
(4) Threaded tree

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

Question Type : **MCQ**
Question ID : **5330723729**
Option 1 ID : **53307214513**
Option 2 ID : **53307214514**
Option 3 ID : **53307214515**
Option 4 ID : **53307214516**
Status : **Answered**
Chosen Option : **3**

Q.80 Host A (on TCP/IPv4 Networks) send an IP Datagram D to host B (also on TCP/IPv4 network). Assume that no error occured during transmission of D, when D reaches B. Which of following header field may differ from that of original datagram D ?

(A) TTL
(B) Checksum
(C) Fragment offset
(D) Source IP
(E) Destination IP

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

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

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

Question Type : **MCQ**
Question ID : **5330723790**
Option 1 ID : **53307214757**
Option 2 ID : **53307214758**
Option 3 ID : **53307214759**
Option 4 ID : **53307214760**
Status : **Answered**
Chosen Option : **2**

Q.81 Arrange the following Language Classes in ascending order according to their expressive power, as defined by Chomsky hierarchy :

(A) Context-free languages
(B) Context-sensitive languages
(C) Regular languages
(D) Unrestricted Grammars

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

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

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

Question Type : **MCQ**
Question ID : **5330723777**
Option 1 ID : **53307214705**
Option 2 ID : **53307214706**
Option 3 ID : **53307214707**
Option 4 ID : **53307214708**
Status : **Answered**
Chosen Option : **1**

Q.82 Which of the following relations can not be decomposed in to BCNF with a lossless join and dependency-preserving decomposition ?

(1) R (V, W, X, Y, Z) {VW→X, WX→V, VX→W, W→Y, Y→Z}
(2) R (V, W, X, Y) {VW→W, X→Y}
(3) R (V, W, X, Y) {VW→X, X→VY}
(4) R (V, W, X, Y, Z) {VW→X, X→Y, Y→Z, Z→V}

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

Question Type : **MCQ**
Question ID : **5330723755**
Option 1 ID : **53307214617**
Option 2 ID : **53307214618**
Option 3 ID : **53307214619**
Option 4 ID : **53307214620**
Status : **Answered**
Chosen Option : **1**

Q.83 Let G(V, E) be an undirected graph with l edges. Then the sum of degree of all vertices is equal to _____.

(1) $2\,l$
(2) $l/2$
(3) l^2
(4) $\sqrt{l}$

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

Question Type : **MCQ**
Question ID : **5330723758**
Option 1 ID : **53307214629**
Option 2 ID : **53307214630**
Option 3 ID : **53307214631**
Option 4 ID : **53307214632**
Status : **Answered**
Chosen Option : **1**

Q.84 Match **List - I** with **List - II**.

	List - I (computing systems)		**List - II (working/output)**
(A)	Half Adder	(I)	Has n input and 2^n output
(B)	Decoder	(II)	CPU Storage Unit
(C)	Register	(III)	Used to store program at runtime
(D)	Main memory	(IV)	2-bit addition circuit

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

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

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

Question Type : **MCQ**
Question ID : **5330723806**
Option 1 ID : **53307214821**
Option 2 ID : **53307214822**
Option 3 ID : **53307214823**
Option 4 ID : **53307214824**
Status : **Answered**
Chosen Option : **3**

Q.85 Consider the following statement regarding special purpose registers.

(A) Program Counter (PC) keeps the track of next instruction executed
(B) Instruction register holds the address of first instruction to be executed
(C) Accumulator holds the output of ALU
(D) Program Counter (PC) keeps the track of only first instruction of the program

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

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

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

Question Type : **MCQ**
Question ID : **5330723784**
Option 1 ID : **53307214733**
Option 2 ID : **53307214734**
Option 3 ID : **53307214735**
Option 4 ID : **53307214736**
Status : **Answered**
Chosen Option : **1**

Q.86 Which of the following statements are TRUE about mutual exclusion in concurrent programming ?

(A) Mutual exclusion ensures that only one process can be in a critical section at any given time.

(B) Mutual exclusion are designed to prevent conflicts and ensure that only one process can access shared resources at a time.

(C) Mutual exclusion can use various algorithms to ensure that processes do not enter the critical section simultaneously.

(D) Mutual exclusion allows multiple processes to access the critical section simultaneously to improve performance.

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

(1) (A), (B), (C) Only

(2) (B), (C), (D) Only

(3) (B), (D), (A) Only

(4) (A), (C), (D) Only

Options

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

Question Type : **MCQ**
Question ID : **5330723787**
Option 1 ID : **53307214745**
Option 2 ID : **53307214746**
Option 3 ID : **53307214747**
Option 4 ID : **53307214748**
Status : **Answered**
Chosen Option : **1**

Q.87 A multi processor system with 16 processors is used to execute a parallelizable task. If the serial portion of the task takes 200 clock cycles and the parallel portion take 800 clock cycles. When all 16 processor are used how many total clock cycles are required to complete the task ?

(1) 250

(2) 300

(3) 400

(4) 450

Options

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

Question Type : **MCQ**
Question ID : **5330723763**
Option 1 ID : **53307214649**
Option 2 ID : **53307214650**
Option 3 ID : **53307214651**
Option 4 ID : **53307214652**
Status : **Answered**
Chosen Option : **3**

Q.88 Let L (x, y) be the statement "x loves y" where the domain for both x and y consists of all people in the world. Use quantifiers to express "Joy is loved by everyone".

(1) $\forall x$ L(x, Joy)
(2) $\forall y$ L(Joy, y)
(3) $\exists y \forall x$ L(x, y)
(4) $\exists x \neg$ L(Joy, x)

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

Question Type : **MCQ**
Question ID : **5330723761**
Option 1 ID : **53307214641**
Option 2 ID : **53307214642**
Option 3 ID : **53307214643**
Option 4 ID : **53307214644**
Status : **Answered**
Chosen Option : **2**

Q.89 Arrange the following steps of Feature Drive Development (FDD) process in the correct sequence :

(A) Develop an overall model
(B) Build by feature
(C) Plan by feature
(D) Design by feature
(E) Build a feature list

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

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

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

Question Type : **MCQ**
Question ID : **5330723772**
Option 1 ID : **53307214685**
Option 2 ID : **53307214686**
Option 3 ID : **53307214687**
Option 4 ID : **53307214688**
Status : **Answered**
Chosen Option : **2**

Q.90

```
#include<stdio.h>
void main()
{
        int arr[ ]={1, 2, 3, 4, 5};
        int *p=arr;
        printf("%d", *p++);
        printf("%d", *(p+1));
}
```

Find the output of the above code?

(1) 1, 2
(2) 1, 3
(3) 2, 3
(4) 1, 4

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

Question Type : **MCQ**
Question ID : **5330723730**
Option 1 ID : **53307214517**
Option 2 ID : **53307214518**
Option 3 ID : **53307214519**
Option 4 ID : **53307214520**
Status : **Answered**
Chosen Option : **3**

Q.91 Which of the following properties correctly describe a Regular Grammar ?

(A) All production rules are of the form $A \rightarrow xB$ or $A \rightarrow x$, where A and B are non terminal symbols and x is a terminal symbol.
(B) Regular grammars are more powerful than context-free grammars and can express any type of language.
(C) There is a direct correspondence between regular grammar and finite automata.
(D) Regular grammars can generate languages that are not recognised by any type of automata.

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

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

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

Question Type : **MCQ**
Question ID : **5330723791**
Option 1 ID : **53307214761**
Option 2 ID : **53307214762**
Option 3 ID : **53307214763**
Option 4 ID : **53307214764**
Status : **Answered**
Chosen Option : **4**

Q.92 Find the correct sequence of the storage device in ascending order based on their access time.

(A) Registers
(B) Magnetic Disk
(C) Magnetic Tapes
(D) Main memory
(E) Optical Disk

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

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

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

Question Type : **MCQ**
Question ID : **5330723770**
Option 1 ID : **53307214677**
Option 2 ID : **53307214678**
Option 3 ID : **53307214679**
Option 4 ID : **53307214680**
Status : **Answered**
Chosen Option : **4**

Q.93 Consider the following code :

```
#include<stdio.h>
void f1(char *x, char *y) {
        char *t1; t1 = x; x = y; y = t1;}
void f2(char **x, char **y) {
        char *t1; t1 = *x; *x = *y; *y = t1;}
int main()
{
        char *a = "ONE", *b = "TWO";
        f1(a, b); printf("%s %s", a, b);
        f2(&a, &b); printf("%s %s", a, b);
        return 0;
}
```

What will be the output of the above code?

(1) ONE TWO TWO ONE
(2) TWO ONE ONE TWO
(3) ONE TWO ONE TWO
(4) TWO ONE TWO ONE

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

Question Type : **MCQ**
Question ID : **5330723743**
Option 1 ID : **53307214569**
Option 2 ID : **53307214570**
Option 3 ID : **53307214571**
Option 4 ID : **53307214572**
Status : **Answered**
Chosen Option : **1**

Q.94 Consider a relation schema R = (U, V, W, X, Y, Z), on which the following functional dependencies hold :

{U→V, VW→X, Y→W; X→U}

The candidate keys of R are :

(1) UY, VY
(2) UY, VY, XY
(3) UYZ, VYZ, VWZ
(4) UYZ, VYZ, XYZ

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

Question Type : **MCQ**
Question ID : **5330723754**
Option 1 ID : **53307214613**
Option 2 ID : **53307214614**
Option 3 ID : **53307214615**
Option 4 ID : **53307214616**
Status : **Answered**
Chosen Option : **4**

Q.95 What is SQL primarily used for in the context of relational databases ?

(1) To design user interfaces
(2) To create and manipulate databases
(3) To display data on web pages
(4) To format printed reports

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

Question Type : **MCQ**
Question ID : **5330723751**
Option 1 ID : **53307214601**
Option 2 ID : **53307214602**
Option 3 ID : **53307214603**
Option 4 ID : **53307214604**
Status : **Answered**
Chosen Option : **2**

Q.96 Which of the following are context free language ?

(A) $\{w^i x^j y^k z^l \mid i+k=j+l$, where i, j, k, $l \geq 0\}$
(B) $\{w^i x^j y^k z^l \mid i=j$ and $k=l$, where i, j, k, $l \geq 0\}$
(C) $\{w^i x^j y^k z^l \mid i=j=k$ and $k \neq l$, where i, j, k, $l \geq 0\}$
(D) $\{w^i x^j y^k z^l \mid i=j=k+l$, where i, j, k, $l \geq 0\}$
(E) $\{w^i x^j y^k z^l \mid i=j=l$ and $k \neq l$, where i, j, k, $l \geq 0\}$

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

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

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

Question Type : **MCQ**
Question ID : **5330723781**
Option 1 ID : **53307214721**
Option 2 ID : **53307214722**
Option 3 ID : **53307214723**
Option 4 ID : **53307214724**
Status : **Answered**
Chosen Option : **1**

Q.97 Match **List - I** with **List - II**.

	List - I		List - II
(A)	The activation function	(I)	is called the delta rule.
(B)	The learning method of perceptron	(II)	is one of the key components of the perceptron as in the most common neural network architecture.
(C)	Areas of application of artificial neural network include	(III)	is always boolean like a switch.
(D)	The output of the perceptron	(IV)	system identification and control.

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

(1) (A)-(II), (B)-(IV), (C)-(III), (D)-(I)
(2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
(3) (A)-(II), (B)-(I), (C)-(IV), (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 : **5330723807**
Option 1 ID : **53307214825**
Option 2 ID : **53307214826**
Option 3 ID : **53307214827**
Option 4 ID : **53307214828**
Status : **Answered**
Chosen Option : **3**

Q.98 Two computers A and B are configured as follows : A has IP address 203.197.2.53 and subnet mask 255.255.128.0, B has IP address 203.197.75.201 and subnet mask 255.255.192.0. What one of the following statement is true ?

(1) A and B both assume they are on the same network
(2) B assumes, A is on same network, A assumes B is on different network
(3) A assumes, B is on same network, but B assumes, A is on a different network
(4) A and B both assume they are on different network

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

Question Type : **MCQ**
Question ID : **5330723739**
Option 1 ID : **53307214553**
Option 2 ID : **53307214554**
Option 3 ID : **53307214555**
Option 4 ID : **53307214556**
Status : **Marked For Review**
Chosen Option : **4**

Q.99 Consider the following relations on {1, 2, 3, 4}. Which of the following relations are reflexive ?

(A) $R_1 = \{(1, 1), (1, 2), (2, 1), (2, 2), (3, 4), (4, 1), (4, 4)\}$

(B) $R_2 = \{(1, 1), (1, 2), (2, 1)\}$

(C) $R_3 = \{(1, 1), (1, 2), (1, 4), (2, 1), (2, 2), (3, 3), (4, 1), (4, 4)\}$

(D) $R_4 = \{(2, 1), (3, 1), (3, 2), (4, 1), (4, 2), (4, 3)\}$

(E) $R_5 = \{(1, 1), (1, 2), (1, 3), (1, 4), (2, 2), (2, 3), (2, 4), (3, 3), (3, 4), (4, 4)\}$

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

(1) (A), (B) and (C) Only

(2) (A), (D) and (E) Only

(3) (D) and (E) Only

(4) (C) and (E) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723799**
Option 1 ID : **53307214793**
Option 2 ID : **53307214794**
Option 3 ID : **53307214795**
Option 4 ID : **53307214796**
Status : **Answered**
Chosen Option : **4**

Q.100 Consider a schema R(P,Q,R,S) and the following functional dependencies P→Q, Q→R, R→S, S→Q.
Then decomposition of R_1 (P,Q), R_2 (Q,R) and R_3 (Q,S) is :

(1) Dependency Preserving and lossless join

(2) Lossless Join but not dependency preserving

(3) Dependency preserving but not lossless Join

(4) Not dependency preserving and not lossless join

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723753**
Option 1 ID : **53307214609**
Option 2 ID : **53307214610**
Option 3 ID : **53307214611**
Option 4 ID : **53307214612**
Status : **Answered**
Chosen Option : **1**

Q.101 A CPU has a 5-stage pipeline with the following stages Fetch (F), Decode (D), Execute (E), Memory (M) and Write-back (W). Each stage takes one clock cycle to complete. Assume there are no pipeline stalls and the pipeline is initially empty. How many clock cycles are required to complete the execution of 10 instructions ?

(1) 10
(2) 14
(3) 15
(4) 19

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

Question Type : **MCQ**
Question ID : **5330723764**
Option 1 ID : **53307214653**
Option 2 ID : **53307214654**
Option 3 ID : **53307214655**
Option 4 ID : **53307214656**
Status : **Answered**
Chosen Option : **2**

Q.102

```
#include<iostream.h>
using namespace std;
void swap(int &x, int &y)
{
        int temp=x;
        x=y;
        y=temp;
}
int main()
{
        int a=5, b=10;
        swap(a,b);
        swap(a,b);
        cout<<a<<" "<<b;
        return 0;
}
```

What will be the output of above code ?

(1) 5, 10
(2) 10, 5
(3) 5, 5
(4) 10, 10

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

Question Type : **MCQ**
Question ID : **5330723732**
Option 1 ID : **53307214525**
Option 2 ID : **53307214526**
Option 3 ID : **53307214527**
Option 4 ID : **53307214528**
Status : **Answered**
Chosen Option : **1**

Q.103 Arrange the following steps in a proper sequence for the process of training a neural network.

(A) Weight initialization
(B) Feed forward
(C) Back Propagation
(D) Loss Calculation
(E) Weight Update

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

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

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

Question Type : **MCQ**
Question ID : **5330723779**
Option 1 ID : **53307214713**
Option 2 ID : **53307214714**
Option 3 ID : **53307214715**
Option 4 ID : **53307214716**
Status : **Answered**
Chosen Option : **1**

Q.104 Which of the following statements are TRUE about Process Control Block (PCB) ?

(A) The PCB contains information about the process state, such as whether it is running, waiting or terminated
(B) The PCB includes the program code and data segments of the process
(C) The PCB stores the process's memory management information, such as page tables and segment tables
(D) The PCB is used to track process scheduling information and CPU registers for process execution

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

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

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

Question Type : **MCQ**
Question ID : **5330723785**
Option 1 ID : **53307214737**
Option 2 ID : **53307214738**
Option 3 ID : **53307214739**
Option 4 ID : **53307214740**
Status : **Answered**
Chosen Option : **3**

Q.105

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

	List - I (IP Address)		**List - II (Class)**
(A)	10.20.30.40	(I)	Class E
(B)	210.20.30.3	(II)	Class B
(C)	180.30.100.10	(III)	Class A
(D)	252.5.15.11	(IV)	Class C

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

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

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

(3) (A)-(I), (B)-(II), (C)-(IV), (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 : **5330723804**
Option 1 ID : **53307214813**
Option 2 ID : **53307214814**
Option 3 ID : **53307214815**
Option 4 ID : **53307214816**
Status : **Answered**
Chosen Option : **4**

Q.106

Consider the function in C code :

```
Cal(a, b) {
    if (b != 1) {
        if (a != 1) {
            printf("*");
            Cal(a/2, b);
        }
        else {
            b = b - 1;
            Cal(10, b);
        }
    }}
```

How many times * is going to be printed, if the function is called with Cal(10, 10); ?

(1) 25

(2) 23

(3) 24

(4) 27

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723733**
Option 1 ID : **53307214529**
Option 2 ID : **53307214530**
Option 3 ID : **53307214531**
Option 4 ID : **53307214532**
Status : **Answered**
Chosen Option : **4**

Q.107 Consider the following statements regarding combinational and sequential circuits.

(A) Output of combinational circuits depends on the only current input.

(B) Output of combinational circuit depends on the both current input and previous output.

(C) Output of sequential circuit depends on the current input.

(D) Output of sequential circuit depends on both current input and previous output.

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

(1) (A) and (C) Only

(2) (A) and (D) Only

(3) (B) and (D) Only

(4) (B) and (C) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723798**
Option 1 ID : **53307214789**
Option 2 ID : **53307214790**
Option 3 ID : **53307214791**
Option 4 ID : **53307214792**
Status : **Answered**
Chosen Option : **2**

Q.108 Arrange the following steps in a proper sequence for the typical process of a DNS query :

(A) Query authoritative DNS Server

(B) Query local DNS Server

(C) Local DNS Server Check Cache

(D) Query root DNS Server

(E) Query TLD DNS Server

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

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

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

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723778**
Option 1 ID : **53307214709**
Option 2 ID : **53307214710**
Option 3 ID : **53307214711**
Option 4 ID : **53307214712**
Status : **Answered**
Chosen Option : **4**

Q.109 Match **List - I** with **List - II**.

	List - I (Recurrence Relations)		**List - II (Complexity)**
(A)	$T(n) = 2T(n/2) + n$	(I)	$T(n) = \theta(n \log n)$ {exact solution}
(B)	$T(n) = T(n/2) + 1$	(II)	$O(n^2)$
(C)	$T(n) = 2T(n/2) + 1$	(III)	$T(n) = \theta(n)$ {exact solution}
(D)	$T(n) = T(n-1) + 1$	(IV)	$O(n)$

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

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

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

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723803**
Option 1 ID : **53307214809**
Option 2 ID : **53307214810**
Option 3 ID : **53307214811**
Option 4 ID : **53307214812**
Status : **Marked For Review**
Chosen Option : **2**

Q.110 Which of the following tasks could be attained using syntax trees in compiler design ?

(A) Type Checking

(B) Code Generation

(C) Code Optimization

(D) Error Handling

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

(1) (A), (B), (C) Only

(2) (B), (C), (D) Only

(3) (A), (C), (D) Only

(4) (A), (B), (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723792**
Option 1 ID : **53307214765**
Option 2 ID : **53307214766**
Option 3 ID : **53307214767**
Option 4 ID : **53307214768**
Status : **Answered**
Chosen Option : **3**

Q.111 Arrange the following stages of a Turing Machine (TM) operation in the correct order as they occur during computation.

(A) Writing a symbol on the tape
(B) Moving the tape head left to right
(C) Reading a symbol from the tape
(D) Transitioning to a new state based on the current state and symbol read
(E) Halting and accepting or rejecting the input

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

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

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

Question Type : **MCQ**
Question ID : **5330723775**
Option 1 ID : **53307214697**
Option 2 ID : **53307214698**
Option 3 ID : **53307214699**
Option 4 ID : **53307214700**
Status : **Answered**
Chosen Option : **3**

Q.112

Consider following C program :

```
#include<stdio.h>
int main()
{
  int x[]={2, 4, 6, 8, 10};
  int a, b=0, *y=x+4;
  for(a=0; a<5; a++)
  {
     b=b+(*y-a)-*(y-a);
  }
     printf("%d\n", b);
     return 0;
}
```

What will be the output of the above C program ?

(1) 4
(2) 6
(3) 8
(4) 10

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

Question Type : **MCQ**
Question ID : **5330723744**
Option 1 ID : **53307214573**
Option 2 ID : **53307214574**
Option 3 ID : **53307214575**
Option 4 ID : **53307214576**
Status : **Answered**
Chosen Option : **4**

Q.113

A vector processor with 16 lanes can perform an operation on 1024 elements with each operation taking 5 clock cycles. How many cycles are needed to complete the operation ?

(1) 64
(2) 80
(3) 100
(4) 128

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

Question Type : **MCQ**
Question ID : **5330723765**
Option 1 ID : **53307214657**
Option 2 ID : **53307214658**
Option 3 ID : **53307214659**
Option 4 ID : **53307214660**
Status : **Marked For Review**
Chosen Option : **2**

Q.114 Given a project with an estimated effort of 1500 person-hours and a team of 5 people, how many days will it take to complete the project, if each person works 8 hours a day ?

(1) 30
(2) 37.5
(3) 40
(4) 45.5

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

Question Type : **MCQ**
Question ID : **5330723737**
Option 1 ID : **53307214545**
Option 2 ID : **53307214546**
Option 3 ID : **53307214547**
Option 4 ID : **53307214548**
Status : **Answered**
Chosen Option : **2**

Q.115 In Software configuration management, what is the primary purpose of version control ?

(1) To control the changes made to software
(2) To document user requirements
(3) To estimate project cost
(4) To design the software architecture

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

Question Type : **MCQ**
Question ID : **5330723734**
Option 1 ID : **53307214533**
Option 2 ID : **53307214534**
Option 3 ID : **53307214535**
Option 4 ID : **53307214536**
Status : **Answered**
Chosen Option : **1**

Q.116 Arrange the following steps in proper sequence involved in a Genetic Algorithm :

(A) Selection
(B) Initialization
(C) Crossover
(D) Mutation
(E) Evaluation

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

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

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

Question Type : **MCQ**
Question ID : **5330723780**
Option 1 ID : **53307214717**
Option 2 ID : **53307214718**
Option 3 ID : **53307214719**
Option 4 ID : **53307214720**
Status : **Answered**
Chosen Option : **3**

Q.117 Arrange the following phases of the Agile process in the correct sequence :

(A) Design
(B) Release
(C) Testing
(D) Development
(E) Planning

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

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

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

Question Type : **MCQ**
Question ID : **5330723771**
Option 1 ID : **53307214681**
Option 2 ID : **53307214682**
Option 3 ID : **53307214683**
Option 4 ID : **53307214684**
Status : **Answered**
Chosen Option : **4**

Q.118 Arrange the following steps in the correct order to solve the Knapsack problem using Dynamic Programming.

(A) Define the base case when the capacity is zero (0) or no items are left to consider

(B) Compute the maximum value that can be obtained using items up to the i-th item and a knapsack capacity of 0

(C) Identify subproblems and their dependencies based on items weights and values

(D) Initialize a table to store results of subproblems

(E) Iterate through each item and each possible Capacity to fill the table

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

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

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

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723773**
Option 1 ID : **53307214689**
Option 2 ID : **53307214690**
Option 3 ID : **53307214691**
Option 4 ID : **53307214692**
Status : **Answered**
Chosen Option : **2**

Q.119 Consider the Grammar :

$S \rightarrow A$

$A \rightarrow \$B\$ \mid id$

$B \rightarrow B, A \mid A$

If $I_0 = CLOSURE(\{[S \rightarrow .A]\})$ then, how many items be in the set for $GOTO(I_0, \$)$

(1) 3

(2) 4

(3) 5

(4) 6

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723726**
Option 1 ID : **53307214501**
Option 2 ID : **53307214502**
Option 3 ID : **53307214503**
Option 4 ID : **53307214504**
Status : **Answered**
Chosen Option : **1**

Q.120 Given a project that uses the COCOMO model with an estimated effort of 2000 person-months and a productivity rate of 5 person-month per KLOC, what is the estimated size of the project in KLOC ?

(1) 200
(2) 400
(3) 100
(4) 50

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

Question Type : **MCQ**
Question ID : **5330723736**
Option 1 ID : **53307214541**
Option 2 ID : **53307214542**
Option 3 ID : **53307214543**
Option 4 ID : **53307214544**
Status : **Answered**
Chosen Option : **3**

Q.121 Which of the following best describes the structure of a relational database ?

(1) Data organized into tables with rows and columns
(2) Data organized into files and folders
(3) Data organized into a hierarchical tree structure
(4) Data organized into a network of interconnected nodes

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

Question Type : **MCQ**
Question ID : **5330723752**
Option 1 ID : **53307214605**
Option 2 ID : **53307214606**
Option 3 ID : **53307214607**
Option 4 ID : **53307214608**
Status : **Answered**
Chosen Option : **1**

Q.122

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

	List - I		List - II
(A)	Representation of bits	(I)	Transport layer
(B)	Physical Address	(II)	Physical layer
(C)	Logical Address	(III)	Network layer
(D)	Segmentation and reassembly	(IV)	Data link layer

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

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

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

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

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723809**
Option 1 ID : **53307214833**
Option 2 ID : **53307214834**
Option 3 ID : **53307214835**
Option 4 ID : **53307214836**
Status : **Answered**
Chosen Option : **2**

Q.123

Consider the given number $(45)_y$ where y is the base of the number. Some of the possible values of y are given below.

(A) 5

(B) 6

(C) 7

(D) 8

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

(1) (A), (B) and (C) Only

(2) (B), (C) and (D) Only

(3) (A), (C) and (D) Only

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

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**
Question ID : **5330723783**
Option 1 ID : **53307214729**
Option 2 ID : **53307214730**
Option 3 ID : **53307214731**
Option 4 ID : **53307214732**
Status : **Answered**
Chosen Option : **2**

Q.124

Consider the following C code :

```
#include<stdio.h>
int temp = 0;
int fun(int x, int y)
{
    int z; temp++;
    if (y ==3) return(x*x*x);
    else {
          z = fun(x, y/3);
          return(z*z*z);
         }
}
int main()
{
     fun(4, 81);
     printf("%d", temp);
}
```

What will be the output of the above code ?

(1) 3
(2) 4
(3) 5
(4) 6

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

Question Type : **MCQ**
Question ID : **5330723731**
Option 1 ID : **53307214521**
Option 2 ID : **53307214522**
Option 3 ID : **53307214523**
Option 4 ID : **53307214524**
Status : **Marked For Review**
Chosen Option : **3**

Q.125 Translate $\forall x \exists y (x<y)$ in English. Consider domain as a real number for both the variables.

(1) For all real numbers x, there exists a real number y such that x is less than y
(2) For every real numbers y, there exists a real number x such that x is less than y
(3) For some real numbers x, there exists a real number y such that x is less than y
(4) For each and every real numbers x and y, x is less than y

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

Question Type : **MCQ**
Question ID : **5330723762**
Option 1 ID : **53307214645**
Option 2 ID : **53307214646**
Option 3 ID : **53307214647**
Option 4 ID : **53307214648**
Status : **Answered**
Chosen Option : **1**

Q.126 Consider the transactions T_1, T_2, T_3 and the schedules S_1 and S_2 given below.

$T_1 : r_1(x); r_1(z); w_1(z)$
$T_2 : r_2(y); r_2(z); w_2(z)$
$T_3 : r_3(y); r_3(x); w_3(y)$
$S_1 : r_1(x); r_3(y); r_3(x); r_2(y); r_2(z); w_3(y); w_3(z); r_1(z); w_1(x); w_1(z)$
$S_2 : r_1(x); r_3(y); r_2(y); r_3(x); r_1(z); r_2(z); w_3(y); w_1(x); w_2(z); w_1(z)$

Which one of the following statements about the schedules is TRUE ?

(1) Only S_1 is conflict-serializable
(2) Only S_2 is conflict-serializable
(3) Both S_1 and S_2 are conflict-serializable
(4) Neither S_1 nor S_2 is conflict-serializable

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

Question Type : **MCQ**
Question ID : **5330723757**
Option 1 ID : **53307214625**
Option 2 ID : **53307214626**
Option 3 ID : **53307214627**
Option 4 ID : **53307214628**
Status : **Answered**
Chosen Option : **3**

Q.127 Consider a CSMA/CD network that transmits data at the rate of 100 Mbps over a 1 Kilometre cable with no repeater. If the minimum frame size required for this network is 1250 bytes, what is the signal speed (km/sec) in the cable.

(1) 8000
(2) 16000
(3) 12000
(4) 20000

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

Question Type : **MCQ**
Question ID : **5330723742**
Option 1 ID : **53307214565**
Option 2 ID : **53307214566**
Option 3 ID : **53307214567**
Option 4 ID : **53307214568**
Status : **Answered**
Chosen Option : **3**

Q.128 Out the following steps in the proper sequence for simplifying a Boolean function using a Karnaugh map (K-map).

(A) Identify and group the largest possible cluster of 1's
(B) Draw the K-map for the given Boolean function
(C) Write the simplified Boolean expression from the grouped clusters
(D) Transfer the truth table values to the K-map

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

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

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

Question Type : **MCQ**
Question ID : **5330723767**
Option 1 ID : **53307214665**
Option 2 ID : **53307214666**
Option 3 ID : **53307214667**
Option 4 ID : **53307214668**
Status : **Answered**
Chosen Option : **1**

Q.129 Match **List - I** with **List - II**.

	List - I (software design principles)		**List - II (Definition)**
(A)	Cohesion	(I)	Degree to which one module relies on another module.
(B)	Coupling	(II)	Dividing a software system into distinct modules.
(C)	Abstration	(III)	Degree to which elements of a module belong together.
(D)	Modularity	(IV)	Simplifying complex reality by modeling classes appropriate to the problem.

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

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

Question Type : **MCQ**
Question ID : **5330723811**
Option 1 ID : **53307214841**
Option 2 ID : **53307214842**
Option 3 ID : **53307214843**
Option 4 ID : **53307214844**
Status : **Answered**
Chosen Option : **3**

Q.130 In a token ring network the transmission speed is 10^7 bps and the propagation speed is 200 m/μs. The 1-bit delay in this network is equivalent to _____.

(1) 20 m
(2) 30 m
(3) 50 m
(4) 40 m

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

Question Type : **MCQ**
Question ID : **5330723741**
Option 1 ID : **53307214561**
Option 2 ID : **53307214562**
Option 3 ID : **53307214563**
Option 4 ID : **53307214564**
Status : **Answered**
Chosen Option : **1**

Q.131 What will be the output of the following C code?

```
#include<stdio.h>
void main()
{
        int arr[5] = {10, 20, 30, 40, 50};
        int *p = (int*) (&arr + 1);
        printf("%d%d", *(arr + 1), *(p - 1));
}
```

(1) 10 50
(2) 20 50
(3) 30 40
(4) 20 40

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

Question Type : **MCQ**
Question ID : **5330723746**
Option 1 ID : **53307214581**
Option 2 ID : **53307214582**
Option 3 ID : **53307214583**
Option 4 ID : **53307214584**
Status : **Answered**
Chosen Option : **4**

Q.132

What is the output of code given below :

```
#include<iostream.h>
using namespace std;
class Base {
public:
Base(){
        cout<<"Base Const";
      }
virtual ~Base()
      {
        cout<<"Base dest";
      }
          };
class derived : public Base {
public:
Derived() {
            cout<<"Derived Const";
           }
~Derived() {
            cout<<"Derived dest";
           }
           };
int main()
{
     Base *b=new Derived();
     delete b;
     return 0;
}
```

(1) Base Const Derived Const Derived dest Base dest
(2) Base Const Derived Const Base dest Derived dest
(3) Derived Const Base Const Base dest Derived dest
(4) Base Const Derived Const Base dest

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

Question Type : **MCQ**
Question ID : **5330723747**
Option 1 ID : **53307214585**
Option 2 ID : **53307214586**
Option 3 ID : **53307214587**
Option 4 ID : **53307214588**
Status : **Marked For Review**
Chosen Option : **4**

Q.133 If L_1 and L_2 are context free languages, which of the following is True about $L_1 \cap L_2$?

(1) $L_1 \cap L_2$ is context free
(2) $L_1 \cap L_2$ is Regular
(3) $L_1 \cap L_2$ is Recursively Enumerable
(4) $L_1 \cap L_2$ is Context Sensitive

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

Question Type : **MCQ**
Question ID : **5330723728**
Option 1 ID : **53307214509**
Option 2 ID : **53307214510**
Option 3 ID : **53307214511**
Option 4 ID : **53307214512**
Status : **Answered**
Chosen Option : **1**

Q.134 Let P be "It is hot day" and q be "The temperature is 48°C". Write in simple sentences the meaning of ~p∧~q.

(1) It is hot day or temprature is 48°C
(2) It is cold day or temprature is 48°C
(3) It is neither a hot day nor temperature is 48°C
(4) It is not a hot day

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

Question Type : **MCQ**
Question ID : **5330723760**
Option 1 ID : **53307214637**
Option 2 ID : **53307214638**
Option 3 ID : **53307214639**
Option 4 ID : **53307214640**
Status : **Answered**
Chosen Option : **3**

Q.135 Consider the three way hand shaking process followed during TCP connection establishment between two hosts A and B. Let S and R be two random 32-bit starting sequence numbers chosen by A and B, respectively. Suppose A sends a TCP segment having SYN bit = 1, SEQ number = S and ACK bit = 0 and B accepts the connection request.
Which one of the following choices represents the information present in the TCP segment header that is sent by B to A ?

(1) SYN bit = 1, SEQ number = S + 1, ACK bit = 0, ACK number = R, FiN bit = 0
(2) SYN bit = 0, SEQ number = R, ACK bit = 1, ACK number = S + 1, FiN bit = 0
(3) SYN bit = 1, SEQ number = R, ACK bit = 1, ACK number = S + 1, FiN bit = 0
(4) SYN bit = 1, SEQ number = R, ACK bit = 1, ACK number = S, FiN bit = 0

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

Question Type : **MCQ**
Question ID : **5330723738**
Option 1 ID : **53307214549**
Option 2 ID : **53307214550**
Option 3 ID : **53307214551**
Option 4 ID : **53307214552**
Status : **Marked For Review**
Chosen Option : **3**

Q.136 A coin is tossed successively three times. Find the Probability (P), Event (E), Sample space (S) of getting exactly one head or two heads, where n is number of occurrence.

(A) $n(S)=8$ and $n(E)=4$

(B) $n(E)=6$ and $n(S)=8$

(C) $P(E)=\frac{3}{4}$

(D) $P(E)=\frac{1}{2}$

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

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

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

Question Type : **MCQ**
Question ID : **5330723782**
Option 1 ID : **53307214725**
Option 2 ID : **53307214726**
Option 3 ID : **53307214727**
Option 4 ID : **53307214728**
Status : **Answered**
Chosen Option : **2**

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

	List - I		**List - II**
(A)	Dijkstra's Algorithms	(I)	Find the shortest path between all pairs of vertices in a graph with positive or negative edge weights.
(B)	Floyd-Warshall Algorithms	(II)	Finds the shortest path in a weighted graph with non-negative edge weights.
(C)	Bellman-frod Algorithms	(III)	Sorts elements by repeatedly moving them post neighboring elements that are smaller.
(D)	Prim's Algorithms	(IV)	Determines the strongest connected components in a directed graph.

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

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

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

Question Type : **MCQ**
Question ID : **5330723810**
Option 1 ID : **53307214837**
Option 2 ID : **53307214838**
Option 3 ID : **53307214839**
Option 4 ID : **53307214840**
Status : **Answered**
Chosen Option : **1**

Q.138

Arrange the following phases of database design in the correct order :

(A) Physical Design

(B) Conceptual Design

(C) Logical Design

(D) Requirement Analysis

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

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

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

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

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

Options

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

Question Type : **MCQ**
Question ID : **5330723766**
Option 1 ID : **53307214661**
Option 2 ID : **53307214662**
Option 3 ID : **53307214663**
Option 4 ID : **53307214664**
Status : **Answered**
Chosen Option : **3**

Q.139

Which of the following are typical activities in the software process lifecycle ?

(A) Requirement Analysis

(B) System Design

(C) Code Refactoring

(D) Deployment

(E) Substructure

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

(1) (A), (B), (C) Only

(2) (B), (C), (D) Only

(3) (A), (B), (D) Only

(4) (A), (D), (E) Only

Options

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

Question Type : **MCQ**
Question ID : **5330723794**
Option 1 ID : **53307214773**
Option 2 ID : **53307214774**
Option 3 ID : **53307214775**
Option 4 ID : **53307214776**
Status : **Answered**
Chosen Option : **3**

Q.140 40 software professionals were interviewed for a job. 25 knew PYTHON 20 knew JAVA and 7 knew neither language. How many knew both languages ?

(1) 20
(2) 53
(3) 10
(4) 88

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

Question Type : **MCQ**
Question ID : **5330723759**
Option 1 ID : **53307214633**
Option 2 ID : **53307214634**
Option 3 ID : **53307214635**
Option 4 ID : **53307214636**
Status : **Answered**
Chosen Option : **3**

Comprehension:

Read the below passage and answer the questions .

Artificial Neural Networks (ANNs) are computational models inspired by the human brain's neural networks. They consist of inter-connected nodes, or neurons, organized into layers : an input layers, one or more hidden layers and an output layers. Each connection between neurons has a weight that adjusts as learning progresses allowing the network to adopt and improve its performance. ANNs are particularly effective in recognizing patterns making them valuable for tasks such as image and speech recognition, Natural language processing and predictive analytics. Learning in ANNs typically involves training algorithms like back propagation, which minimize the error by adjusting the weights. As a subset of machine learning, ANNs have revolutionized the field of Artificial Intelligence by providing solutions to complex problems that traditional algorithms struggle with.

SubQuestion No : 141

Q.141 Which of the following layers may be more than one in number ?

(1) Input layer
(2) Hidden layer
(3) Output layer
(4) Physical layer

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

Question Type : **MCQ**
Question ID : **5330723819**
Option 1 ID : **53307214869**
Option 2 ID : **53307214870**
Option 3 ID : **53307214871**
Option 4 ID : **53307214872**
Status : **Answered**
Chosen Option : **2**

Comprehension:

Read the below passage and answer the questions .

Artificial Neural Networks (ANNs) are computational models inspired by the human brain's neural networks. They consist of inter-connected nodes, or neurons, organized into layers : an input layers, one or more hidden layers and an output layers. Each connection between neurons has a weight that adjusts as learning progresses allowing the network to adopt and improve its performance. ANNs are particularly effective in recognizing patterns making them valuable for tasks such as image and speech recognition, Natural language processing and predictive analytics. Learning in ANNs typically involves training algorithms like back propagation, which minimize the error by adjusting the weights. As a subset of machine learning, ANNs have revolutionized the field of Artificial Intelligence by providing solutions to complex problems that traditional algorithms struggle with.

SubQuestion No : 142

Q.142

What is the role of Back Propagation Algorithm ?

(1) To reduce error
(2) To secure network
(3) To control speed of data
(4) To add different layers

Options

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

Question Type : **MCQ**
Question ID : **5330723817**
Option 1 ID : **53307214861**
Option 2 ID : **53307214862**
Option 3 ID : **53307214863**
Option 4 ID : **53307214864**
Status : **Answered**
Chosen Option : **1**

Comprehension:

Read the below passage and answer the questions .

Artificial Neural Networks (ANNs) are computational models inspired by the human brain's neural networks. They consist of inter-connected nodes, or neurons, organized into layers : an input layers, one or more hidden layers and an output layers. Each connection between neurons has a weight that adjusts as learning progresses allowing the network to adopt and improve its performance. ANNs are particularly effective in recognizing patterns making them valuable for tasks such as image and speech recognition, Natural language processing and predictive analytics. Learning in ANNs typically involves training algorithms like back propagation, which minimize the error by adjusting the weights. As a subset of machine learning, ANNs have revolutionized the field of Artificial Intelligence by providing solutions to complex problems that traditional algorithms struggle with.

SubQuestion No : 143

Q.143

What is the role of weights in an ANN ?

(1) To store data

(2) To adjust and improve network performance

(3) To control the speed

(4) To secure the network

Options

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

Question Type : **MCQ**
Question ID : **5330723820**
Option 1 ID : **53307214873**
Option 2 ID : **53307214874**
Option 3 ID : **53307214875**
Option 4 ID : **53307214876**
Status : **Answered**
Chosen Option : **2**

Comprehension:

Read the below passage and answer the questions .

Artificial Neural Networks (ANNs) are computational models inspired by the human brain's neural networks. They consist of inter-connected nodes, or neurons, organized into layers : an input layers, one or more hidden layers and an output layers. Each connection between neurons has a weight that adjusts as learning progresses allowing the network to adopt and improve its performance. ANNs are particularly effective in recognizing patterns making them valuable for tasks such as image and speech recognition, Natural language processing and predictive analytics. Learning in ANNs typically involves training algorithms like back propagation, which minimize the error by adjusting the weights. As a subset of machine learning, ANNs have revolutionized the field of Artificial Intelligence by providing solutions to complex problems that traditional algorithms struggle with.

SubQuestion No : 144

Q.144

Which of the following is/are the application area(s) of ANN ?

(A) Natural Language Processing

(B) Image Processing

(C) Pattern Recognition

(D) Speech Recognition

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

(1) (A) and (B) Only

(2) (B) and (C) Only

(3) (A), (B) and (C) Only

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

Options

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

Question Type : **MCQ**
Question ID : **5330723821**
Option 1 ID : **53307214877**
Option 2 ID : **53307214878**
Option 3 ID : **53307214879**
Option 4 ID : **53307214880**
Status : **Answered**
Chosen Option : **4**

Comprehension:

Read the below passage and answer the questions .

Artificial Neural Networks (ANNs) are computational models inspired by the human brain's neural networks. They consist of inter-connected nodes, or neurons, organized into layers : an input layers, one or more hidden layers and an output layers. Each connection between neurons has a weight that adjusts as learning progresses allowing the network to adopt and improve its performance. ANNs are particularly effective in recognizing patterns making them valuable for tasks such as image and speech recognition, Natural language processing and predictive analytics. Learning in ANNs typically involves training algorithms like back propagation, which minimize the error by adjusting the weights. As a subset of machine learning, ANNs have revolutionized the field of Artificial Intelligence by providing solutions to complex problems that traditional algorithms struggle with.

SubQuestion No : 145

Q.145

Artificial Neural Networks (ANNs) are inspired by :

(1) Quantum mechanics

(2) Human brain's neural network

(3) Computer Hardware architecture

(4) Genetic algorithm

Options

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

Question Type : **MCQ**
Question ID : **5330723818**
Option 1 ID : **53307214865**
Option 2 ID : **53307214866**
Option 3 ID : **53307214867**
Option 4 ID : **53307214868**
Status : **Answered**
Chosen Option : **2**

Comprehension:

Read the below passage and answer the questions .

The Banker's Algorithm is a critical deadlock avoidance method in operating systems, designed to facilitate resource allocation without causing deadlock. It operates by maintaining information about the maximum resources. Each process may require, the current allocated resources and the available resources in the system. The algorithm checks each resource request to determine, if granting it would leave the system in a safe state, meaning that there is always a sequence in which all processes can complete their execution without getting stuck due to resource unavailability. Each process must specify its maximum demand for each resource type before it starts execution. When a process requests additional resources, the algorithm checks if granting the request will keep the system in a safe state. If so, the resources are allocated otherwise the process must wait until its request can be safely fulfilled.

SubQuestion No : 146

Q.146 Which data structure does the Banker's Algorithm use to maintain the state of available, maximum and allocated resources ?

(1) Priority Queue
(2) Hash table
(3) Wait-for-Graph
(4) Matrices and Vectors

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

Question Type : **MCQ**
Question ID : **5330723827**
Option 1 ID : **53307214897**
Option 2 ID : **53307214898**
Option 3 ID : **53307214899**
Option 4 ID : **53307214900**
Status : **Answered**
Chosen Option : **2**

Comprehension:

Read the below passage and answer the questions .

The Banker's Algorithm is a critical deadlock avoidance method in operating systems, designed to facilitate resource allocation without causing deadlock. It operates by maintaining information about the maximum resources. Each process may require, the current allocated resources and the available resources in the system. The algorithm checks each resource request to determine, if granting it would leave the system in a safe state, meaning that there is always a sequence in which all processes can complete their execution without getting stuck due to resource unavailability. Each process must specify its maximum demand for each resource type before it starts execution. When a process requests additional resources, the algorithm checks if granting the request will keep the system in a safe state. If so, the resources are allocated otherwise the process must wait until its request can be safely fulfilled.

SubQuestion No : 147

Q.147 What is the significance of the Banker's algorithm in terms of resource management ?

(1) It enures that all processes can finish their execution without deadlock.
(2) It eliminates the need for processes to request resources.
(3) It accelerates the execution of critical sections in processes.
(4) It minimizes the number of context switches between processes.

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

Question Type : **MCQ**
Question ID : **5330723826**
Option 1 ID : **53307214893**
Option 2 ID : **53307214894**
Option 3 ID : **53307214895**
Option 4 ID : **53307214896**
Status : **Answered**
Chosen Option : **1**

Comprehension:

Read the below passage and answer the questions .

The Banker's Algorithm is a critical deadlock avoidance method in operating systems, designed to facilitate resource allocation without causing deadlock. It operates by maintaining information about the maximum resources. Each process may require, the current allocated resources and the available resources in the system. The algorithm checks each resource request to determine, if granting it would leave the system in a safe state, meaning that there is always a sequence in which all processes can complete their execution without getting stuck due to resource unavailability. Each process must specify its maximum demand for each resource type before it starts execution. When a process requests additional resources, the algorithm checks if granting the request will keep the system in a safe state. If so, the resources are allocated otherwise the process must wait until its request can be safely fulfilled.

SubQuestion No : 148

Q.148 What information is used to determine if a resource request can be granted ?

(1) Available resources and current allocation of each process
(2) CPU utilization of each process
(3) Number of processes waiting for resources
(4) Arrival time of each process

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

Question Type : **MCQ**
Question ID : **5330723823**
Option 1 ID : **53307214881**
Option 2 ID : **53307214882**
Option 3 ID : **53307214883**
Option 4 ID : **53307214884**
Status : **Answered**
Chosen Option : **1**

Comprehension:

Read the below passage and answer the questions .

The Banker's Algorithm is a critical deadlock avoidance method in operating systems, designed to facilitate resource allocation without causing deadlock. It operates by maintaining information about the maximum resources. Each process may require, the current allocated resources and the available resources in the system. The algorithm checks each resource request to determine, if granting it would leave the system in a safe state, meaning that there is always a sequence in which all processes can complete their execution without getting stuck due to resource unavailability. Each process must specify its maximum demand for each resource type before it starts execution. When a process requests additional resources, the algorithm checks if granting the request will keep the system in a safe state. If so, the resources are allocated otherwise the process must wait until its request can be safely fulfilled.

SubQuestion No : 149

Q.149 Which of the following is NOT a requirement for Banker's algorithm to grant a resource request ?

(1) The requested resources must be available.
(2) The system must be in a safe state after granting the request.
(3) The request must not exceed the maximum resources the process can request.
(4) The process must be the only one requesting resources.

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

Question Type : **MCQ**
Question ID : **5330723825**
Option 1 ID : **53307214889**
Option 2 ID : **53307214890**
Option 3 ID : **53307214891**
Option 4 ID : **53307214892**
Status : **Answered**
Chosen Option : **4**

Comprehension:

Read the below passage and answer the questions .

The Banker's Algorithm is a critical deadlock avoidance method in operating systems, designed to facilitate resource allocation without causing deadlock. It operates by maintaining information about the maximum resources. Each process may require, the current allocated resources and the available resources in the system. The algorithm checks each resource request to determine, if granting it would leave the system in a safe state, meaning that there is always a sequence in which all processes can complete their execution without getting stuck due to resource unavailability. Each process must specify its maximum demand for each resource type before it starts execution. When a process requests additional resources, the algorithm checks if granting the request will keep the system in a safe state. If so, the resources are allocated otherwise the process must wait until its request can be safely fulfilled.

SubQuestion No : 150

Q.150

What is the primary goal of the Banker's Algorithm ?

(1) To allocate resources optimally

(2) To prevent processes from requesting resources

(3) To detect and recover from deadlocks

(4) To maximise CPU utilization

Options

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

Question Type : **MCQ**
Question ID : **5330723824**
Option 1 ID : **53307214885**
Option 2 ID : **53307214886**
Option 3 ID : **53307214887**
Option 4 ID : **53307214888**
Status : **Answered**
Chosen Option : **1**