National Testing Agency

Question Paper Name :	87 Computer Science and Applications 22nd June 2026 Shift 2 STAC
Subject Name :	87 Computer Science and Applications
Creation Date :	2026-06-22 20:08:42
Duration :	180
Total Marks :	300
Display Marks:	Yes

Computer Science and Applications and General Paper

Group Number :	1
Group Id :	551251120
Group Maximum Duration :	0
Group Minimum Duration :	180
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	300

General Paper

Section Id :	551251250
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	42
Number of Questions to be attempted :	42
Section Marks :	100
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	551251744
Question Shuffling Allowed :	No
Is Section Default? :	No

Question Id : 55125118945 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (1 to 5)

Answer the questions from 01 to 05 on the basis of information given below:

There is a firm which provides consultancy related to various areas like, Education, Finance, Health, Social Media, Marriage and Others on the basis of applications received. The following table shows the percent of applications received for consultancy over time under different areas. The total number of applications received during Feb 2025 was larger than the number received in Apr 2025. The total number of applications received during Jan 2025 was larger than the number received in Mar 2025.

Area	Percentage of applications received			
	Jan 2025	Feb 2025	Mar 2025	Apr 2025
Education	38	33	19	17
Finance	25	30	37	45
Health	11	18	5	18
Social Media	5	3	10	6
Marriage	3	7	10	11
Others	18	9	19	3
Total Percentage	100%	100%	100%	100%

Sub questions

Question Number : 1 Question Id : 55125118946 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In which area was the percentage of applications continuously increasing over time but at a continuously decreasing rate?

1. Finance
2. Health
3. Marriage
4. Others

Options :

55125173801. 1

55125173802. 2

55125173803. 3

55125173804. 4

Question Number : 2 Question Id : 55125118947 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In the area of health, the number of applications received in Feb 2025 as compared to Apr 2025 was:

1. Equal
2. Larger
3. Smaller
4. Can not be determined

Options :

55125173805. 1

55125173806. 2

55125173807. 3

55125173808. 4

Question Number : 3 Question Id : 55125118948 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If the total number of applications received in Jan 2025 were double than the number of applications received in Feb 2025, then the applications received under area 'others' in Feb 2025 were how much percent of the applications received under the same area in Jan 2025?

1. 200%
2. 100%
3. 50%
4. 25%

Options :

55125173809. 1

55125173810. 2

55125173811. 3

55125173812. 4

Question Number : 4 Question Id : 55125118949 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If in the area of 'Social Media', the number of applications received in Jan 2025 was equal to the number of applications received in Mar 2025, then the total number of applications received under this area in Mar 2025 was _____ of the total number of applications received in Jan 2025.

1. Exact Double
2. Exact Half
3. More than Half
4. Less than Half

Options :

55125173813. 1

55125173814. 2

55125173815. 3

55125173816. 4

Question Number : 5 Question Id : 55125118950 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If the total number of applications received in Feb 2025 was less than number of applications received in Jan 2025 but more than that of in Mar 2025, then what will be the order of the months in terms of number of applications received?

1. Apr > Mar > Feb > Jan
2. Jan > Feb > Mar > Apr
3. Jan > Feb > Apr > Mar
4. can not be determined.

Options :

55125173817. 1

55125173818. 2

55125173819. 3

55125173820. 4

Question Id : 55125118945 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (1 to 5)

नीचे दी गई जानकारी के आधार पर प्रश्न क्रमशः एक से पाँच के उत्तर दीजिए:

एक फर्म है जो प्राप्त आवेदनों के आधार पर शिक्षा, वित्त, स्वास्थ्य, सोशल मीडिया, विवाह तथा अन्य विभिन्न क्षेत्रों में परामर्श प्रदान करता है। निम्नलिखित तालिका में विभिन्न क्षेत्रों के अतर्गत कतिपय समयावधि में परामर्श हेतु प्राप्त आवेदनों का प्रतिशत दर्शाया गया है। अप्रैल 2025 में प्राप्त आवेदनों की कुल संख्या की तुलना में फरवरी 2025 में प्राप्त आवेदनों की कुल संख्या अधिक थी। मार्च 2025 में प्राप्त आवेदनों की कुल संख्या की तुलना में जनवरी 2025 में प्राप्त आवेदनों की कुल संख्या अधिक थी।

क्षेत्र	प्राप्त आवेदनों का प्रतिशत			
	जनवरी 2025	फरवरी 2025	मार्च 2025	अप्रैल 2025
शिक्षा	38	33	19	17
वित्त	25	30	37	45
स्वास्थ्य	11	18	5	18
सोशल मीडिया	5	3	10	6
विवाह	3	7	10	11
अन्य	18	9	19	3
कुल	100%	100%	100%	100%

Sub questions

Question Number : 1 Question Id : 55125118946 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

किस क्षेत्र में दी गई समयावधि में आवेदनों का प्रतिशत लगातार बढ़ा है परंतु यह वृद्धि लगातार ह्रासमान दर पर है?

1. वित्त
2. स्वास्थ्य
3. विवाह
4. अन्य

Options :

55125173801. 1

55125173802. 2

55125173803. 3

55125173804. 4

Question Number : 2 Question Id : 55125118947 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

स्वास्थ्य के क्षेत्र में अप्रैल 2025 की तुलना में फरवरी 2025 में प्राप्त आवेदनों की संख्या है:

1. समान
2. अधिक
3. कम
4. निर्धारित नहीं किया जा सकता

Options :

55125173805. 1

55125173806. 2

55125173807. 3

55125173808. 4

Question Number : 3 Question Id : 55125118948 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

यदि फरवरी 2025 में प्राप्त आवेदनों की संख्या की तुलना में जनवरी 2025 में प्राप्त आवेदनों की कुल संख्या दुगुनी है, तो फरवरी 2025 में क्षेत्र 'अन्य' के अंतर्गत प्राप्त आवेदनों की संख्या इसी क्षेत्र में जनवरी 2025 में प्राप्त आवेदनों का कितना प्रतिशत है?

1. 200%
2. 100%
3. 50%
4. 25%

Options :

55125173809. 1

55125173810. 2

55125173811. 3

55125173812. 4

Question Number : 4 Question Id : 55125118949 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

'सोशल मीडिया' क्षेत्र में जनवरी 2025 में प्राप्त आवेदनों की संख्या, मार्च 2025 में प्राप्त आवेदनों की संख्या के बराबर है, तो मार्च 2025 में इस क्षेत्र में प्राप्त आवेदनों की कुल संख्या जनवरी 2025 में प्राप्त आवेदनों की कुल संख्या के _____ है।

1. बिल्कुल दोगुना
2. बिल्कुल आधा
3. आधी से अधिक
4. आधी से कम

Options :

55125173813. 1

55125173814. 2

55125173815. 3

55125173816. 4

Question Number : 5 Question Id : 55125118950 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

यदि फरवरी 2025 में प्राप्त आवेदनों की कुल संख्या जनवरी 2025 में प्राप्त आवेदनों की संख्या से कम है, परंतु मार्च 2025 में प्राप्त आवेदनों की संख्या से अधिक है, तो प्राप्त आवेदनों की संख्या संबंधी अनुक्रम क्या होगा?

1. अप्रैल > मार्च > फरवरी > जनवरी
2. जनवरी > फरवरी > मार्च > अप्रैल
3. जनवरी > फरवरी > अप्रैल > मार्च
4. निर्धारित नहीं किया जा सकता

Options :

55125173817. 1

55125173818. 2

55125173819. 3

55125173820. 4

Sub-Section Number :	2
Sub-Section Id :	551251745
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Number : 6 Question Id : 55125118951 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Planning teaching involves making decisions. Which of the following decision reflects this dictum?

1. Selection of the profession
2. Content selection and pedagogical methods
3. Selection of the course for admission
4. Planning to migrate abroad

Options :

55125173821. 1

55125173822. 2

55125173823. 3

55125173824. 4

Question Number : 6 Question Id : 55125118951 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

अध्यापन के नियोजन में निर्णय लेना सम्मिलित है। निम्नलिखित में से कौन सा निर्णय इस कथन का उदाहरण है?

1. व्यवसाय का चयन
2. विषय वस्तु का चयन तथा शैक्षिक पद्धतियाँ
3. प्रवेश हेतु पाठ्यक्रम का चयन
4. विदेश आव्रजन हेतु नियोजन

Options :

55125173821. 1

55125173822. 2

55125173823. 3

55125173824. 4

Question Number : 7 Question Id : 55125118952 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Working of the circulatory system of the human body is shown by a teacher on screen. Such simulations have tremendous potential for instructional purpose. This aligns best with-

1. Computer aided learning
2. Activity-based learning
3. Peer-tutoring
4. Heuristic-learning

Options :

55125173825. 1

55125173826. 2

55125173827. 3

55125173828. 4

Question Number : 7 Question Id : 55125118952 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

स्क्रीन पर शिक्षक द्वारा मानव शरीर के परिसंचारी तंत्र की कार्य प्रणाली को दिखाया जाता है। इस प्रकार के अनुरूपकों में अनुदेशी प्रयोजनों के लिए विशाल संभावनाएं होती हैं। इसका संरेखण निम्न में से सबसे अच्छा किसके साथ है?

1. कंप्यूटर सह अधिगम
2. कार्यकलाप आधारित अधिगम
3. समकक्षी अनुशिक्षण
4. अन्वेषणात्मक अधिगम

Options :

55125173825. 1

55125173826. 2

55125173827. 3

55125173828. 4

Question Number : 8 Question Id : 55125118953 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The UGC has given a 10 point scale for grading. Arrange the following grades for highest to lowest performance.

A. F
B. P
C. O
D. A
E. Ab

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

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

Options :

55125173829. 1

55125173830. 2

55125173831. 3

55125173832. 4

Question Number : 8 Question Id : 55125118953 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

यू जी सी ने ग्रेडिंग हेतु एक 10 प्वाइंट स्केल प्रदान किया है। निम्नलिखित ग्रेडों को उच्चतम से निम्नतम प्रदर्शन के क्रम में व्यवस्थित कीजिए:

A. F
B. P
C. O
D. A
E. Ab

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173829. 1

55125173830. 2

55125173831. 3

55125173832. 4

Question Number : 9 Question Id : 55125118954 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Select characteristics of Learner Centered Approach.

A. It is centered on the needs of learner predecided by her parents
B. It lays emphasis on skills
C. It lays emphasis on indirect strategies.
D. It is dependent on the training teacher has gone through
E. It can be used in privately managed schools only

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

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

Options :

55125173833. 1

55125173834. 2

55125173835. 3

55125173836. 4

Question Number : 9 Question Id : 55125118954 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

शिक्षार्थी केन्द्रित उपागम की विशेषताओं को चुनिए

A. यह शिक्षार्थी के माता-पिता द्वारा पूर्व निर्धारित आवश्यकताओं पर केंद्रित होता है।
B. यह कौशल पर बल देता है।
C. यह अप्रत्यक्ष युक्तियों पर बल देता है।
D. यह शिक्षक द्वारा प्रशिक्षण के दौरान प्राप्त किए गए अनुभवों पर निर्भर करता है।
E. इसका उपयोग केवल निजी रूप से संचालित विद्यालयों में किया जा सकता है।

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173833. 1

55125173834. 2

55125173835. 3

55125173836. 4

Question Number : 10 Question Id : 55125118955 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I Teaching Model		**LIST-II Feature**
A.	Personal Basis Model	I.	Working in a group
B.	Social Interaction Model	II.	Teacher as the main figure in class
C.	Behaviour Altering Model	III.	Memorization, practice and transfer of learning
D.	Information Development Model	IV.	Instruction based on human relations

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

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

Options :

55125173837. 1

55125173838. 2

55125173839. 3

55125173840. 4

Question Number : 10 Question Id : 55125118955 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

सूची-I के साथ **सूची-II** का मिलान कीजिए:

	सूची-I अध्यापन मॉडल		**सूची-II विशेषता**
A.	वैयक्तिक आधार मॉडल	I.	समूह में कार्य
B.	सामाजिक परस्पर क्रिया मॉडल	II.	शिक्षक कक्षा में मुख्य व्यक्ति के रूप में
C.	व्यवहार परिवर्तनकारी मॉडल	III.	अधिगम को याद करना, अभ्यास करना तथा अंतरित करना
D.	सूचना विकास मॉडल	IV.	मानव संबंध आधारित अनुदेश

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

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

Options :

55125173837. 1

55125173838. 2

55125173839. 3

55125173840. 4

Question Number : 11 Question Id : 55125118956 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A term drawn from theology, concerned with the theory and method of the interpretation of human action, is known as

1. Theological reasoning
2. Philosophy
3. Grounded theory
4. Hermeneutics

Options :

55125173841. 1

55125173842. 2

55125173843. 3

55125173844. 4

Question Number : 11 Question Id : 55125118956 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

एक पद, जिसे धर्मशास्त्र से लिया गया है एवं मानव क्रिया की व्याख्या के सिद्धांत तथा पद्धति से संबंधित है, कहलाता है

1. धर्मशास्त्रीय तर्क
2. दर्शन
3. ग्राउन्डिड थ्योरी
4. भाष्य विज्ञान

Options :

55125173841. 1

55125173842. 2

55125173843. 3

55125173844. 4

Question Number : 12 Question Id : 55125118957 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following steps in the process of deduction:

A. Theory
B. Hypothesis
C. Data collection
D. Revision of theory
E. Findings

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

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

Options :

55125173845. 1

55125173846. 2

55125173847. 3

55125173848. 4

Question Number : 12 Question Id : 55125118957 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

निगमन की प्रक्रिया में निम्नलिखित चरणों को व्यवस्थित कीजिए:

A. सिद्धांत
B. परिकल्पना
C. आंकड़ा संग्रह
D. सिद्धांत का संशोधन
E. निष्कर्ष

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173845. 1

55125173846. 2

55125173847. 3

55125173848. 4

Question Number : 13 Question Id : 55125118958 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the steps of a research sequentially:

A. Writing Report
B. Data analysis
C. Review of literature
D. Choice of research design
E. Sampling and Data collection

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

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

Options :

55125173849. 1

55125173850. 2

55125173851. 3

55125173852. 4

Question Number : 13 Question Id : 55125118958 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

शोध के निम्नलिखित चरणों को अनुक्रम में व्यवस्थित कीजिए :

A. आलेख लिखना
B. दत्त विश्लेषण
C. साहित्य की समीक्षा
D. शोध अभिकल्प का चयन
E. प्रतिचयन तथा दत्त संग्रह

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173849. 1

55125173850. 2

55125173851. 3

55125173852. 4

Question Number : 14 Question Id : 55125118959 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following are methods of control on intervening variables.

A. Deductive manipulation
B. Inferential manipulation
C. Statistical manipulation
D. Physical manipulation
E. Selective manipulation

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

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

Options :

55125173853. 1

55125173854. 2

55125173855. 3

55125173856. 4

Question Number : 14 Question Id : 55125118959 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

निम्नलिखित में से कौन मध्यवर्ती चरों पर नियंत्रण की विधियां हैं?

A. निगमनात्मक हस्तलाघव
B. आनुमानिक हस्तलाघव
C. सांख्यिकीय हस्तलाघव
D. भौतिक हस्तलाघव
E. चयनात्मक हस्तलाघव

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173853. 1

55125173854. 2

55125173855. 3

55125173856. 4

Question Number : 15 Question Id : 55125118960 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I Approach of Scale Construction		LIST-II Process Followed	
A.	Arbitrary approach	I.	A panel evaluates the items chosen for inclusion in the instrument according to their relevance
B.	Factor Scales	II.	Scale is developed on adhoc basis
C.	Consensus approach	III.	Intercorrelation of items which indicates that a common factor accounts for the relationship between items
D.	Cumulative Scales	IV.	Chosen on the basis of their confirming to some ranking of items with ascending or descending discriminating power.

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

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

Options :

55125173857. 1

55125173858. 2

55125173859. 3

55125173860. 4

Question Number : 15 Question Id : 55125118960 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

सूची-I के साथ **सूची-II** का मिलान कीजिए:

सूची-I अनुमाप निर्माण का उपागम		सूची-II अनुसरण की गई प्रक्रिया	
A.	यादृच्छिक उपागम	I.	एक पैनल प्रासंगिकता के अनुसार उपकरणों में शामिल किए जाने हेतु चयनित मदों का मूल्यांकन करता है
B.	कारक अनुमाप	II.	तदर्थ आधार पर अनुमाप का निर्माण किया जाता है
C.	मतैक्य उपागम	III.	उन मदों का अंतर सह-संबंध जो संकेत करती हैं कि मदों के बीच संबंध हेतु एक समान कारक उत्तरदायी है
D.	संचयी अनुमाप	IV.	आरोही अथवा अवरोही भेदमूलक शक्ति वाली मदों की कुछ रैंकिंग के अनुरूप के आधार पर चयन

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

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

Options :

55125173857. 1

55125173858. 2

55125173859. 3

55125173860. 4

Question Number : 16 Question Id : 55125118961 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The ability to access, analyze, evaluate and communicate media messages is-

1. Narrative Setting
2. Propaganda
3. Media literacy
4. Media hype

Options :

55125173861. 1

55125173862. 2

55125173863. 3

55125173864. 4

Question Number : 16 Question Id : 55125118961 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

मीडिया के संदेशों तक पहुंचने, उनका विश्लेषण, मूल्यांकन तथा संप्रेषण करने की क्षमता है:

1. विवरणात्मक विन्यास
2. अधिप्रचार
3. मीडिया साक्षरता
4. मीडिया हाइप

Options :

55125173861. 1

55125173862. 2

55125173863. 3

55125173864. 4

Question Number : 17 Question Id : 55125118962 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

'A break in the chronology of a narrative in which events from the past are disclosed to reader, listener or viewer and which have a bearing on the present situation' can be easily noticed in cinema. What is this style?

1. Flash forward
2. Flash folk
3. Flashback
4. Flak

Options :

55125173865. 1

55125173866. 2

55125173867. 3

55125173868. 4

Question Number : 17 Question Id : 55125118962 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

'किसी ऐसी आख्या के कालक्रम का भंग जिसमें भूतकालिक घटनाओं को पाठक, श्रोता अथवा दर्शक को बताया जाता है और जिसका वर्तमान स्थिति से संबंध होता है' को सिनेमा में आसानी से देखा जा सकता है। यह कौन-सी शैली है?

1. फ्लैश फारवर्ड
2. फ्लैश फोक
3. फ्लैश बैक
4. फ्लैक

Options :

55125173865. 1

55125173866. 2

55125173867. 3

55125173868. 4

Question Number : 18 Question Id : 55125118963 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

As per Maslow's hierarchy of needs, arrange the following needs from basic to self fulfilment needs (Bottom to top)

A. Self actualization
B. Physiological needs
C. Belongingness and love needs
D. Safety needs
E. Esteem needs

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

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

Options :

55125173869. 1

55125173870. 2

55125173871. 3

55125173872. 4

Question Number : 18 Question Id : 55125118963 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

मास्लो द्वारा प्रतिपादित आवश्यकता सोपान के अनुसार, निम्नलिखित आवश्यकताओं को आधारभूत से आत्म परिपूर्णता वाली आवश्यकताओं (निम्न से उच्च) के क्रम में व्यवस्थित कीजिए:

A. आत्म सिद्धि
B. शारीरिक आवश्यकताएं
C. अपनत्व तथा लगाव-संबंधी आवश्यकताएं
D. सुरक्षा आवश्यकताएं
E. समादर आवश्यकताएं

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173869. 1

55125173870. 2

55125173871. 3

55125173872. 4

Question Number : 19 Question Id : 55125118964 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Select the correct statements in context of communication models.

A. Feedback is the transmission of receiver's reaction back to the sender
B. Encoding is the task/process done at receiver's end
C. Noise is anything that is added to the signal between its transmission and reception that is not intended by the source
D. Decoding is the task/process done at sender's end
E. Medium is the means through message is conveyed

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

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

Options :

55125173873. 1

55125173874. 2

55125173875. 3

55125173876. 4

Question Number : 19 Question Id : 55125118964 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

संचार मॉडल के संदर्भ में सही कथनों का चयन कीजिए:

A. प्रतिपुष्टि (फीडबैक) प्रेषक के प्रति प्रापक की प्रतिक्रिया का प्रसार है।
B. संकेतन प्रापक की तरफ से किया गया कार्य/ प्रक्रम है।
C. शोर वह है जिसे इसके प्रसार तथा अभिग्रहण के बीच संकेत में जोड़ा जाता है और यह स्रोत द्वारा निर्दिष्ट नहीं होता है।
D. विसंकेतन प्रेषक की तरफ से किया गया कार्य/ प्रक्रम है।
E. माध्यम वह साधन है जिसके द्वारा संदेश भेजा जाता है।

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173873. 1

55125173874. 2

55125173875. 3

55125173876. 4

Question Number : 20 Question Id : 55125118965 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I Actor		**LIST-II Film**
A.	Tom Hanks	I.	Titanic
B.	Guru Dutt	II.	Forest Gump
C.	Tom Cruise	III.	Pyasa
D.	Leonard DiCaprio	IV.	Mission Impossible

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

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

Options :

55125173877. 1

55125173878. 2

55125173879. 3

55125173880. 4

Question Number : 20 Question Id : 55125118965 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

सूची-I के साथ **सूची-II** का मिलान कीजिए:

सूची-I अभिनेता		सूची-II फिल्म	
A.	टॉम हांक्स	I.	टाइटेनिक
B.	गुरु दत्त	II.	फॉरेस्ट गंप
C.	टॉम क्रूज	III.	प्यासा
D.	लियोनार्दो- दि- केपरियो	IV.	मिशन इंपॉसिबल

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

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

Options :

55125173877. 1

55125173878. 2

55125173879. 3

55125173880. 4

Question Number : 21 Question Id : 55125118966 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A computer costs 50,000 Rupees and printer costs 20,000 Rupees. In a sale, the price of computer is reduced by 17% and that of printer is reduced by x%. If a person purchased both the printer and the computer with a total cost of 50,000 rupees, then the value of x is-

1. 57.5
2. 52.5
3. 33
4. 66

Options :

55125173881. 1

55125173882. 2

55125173883. 3

55125173884. 4

Question Number : 21 Question Id : 55125118966 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

एक कंप्यूटर की कीमत 50,000 रूपये तथा प्रिंटर की कीमत 20,000 रूपये है।एक 'सेल' में कंप्यूटर की कीमत में 17% तथा प्रिंटर की कीमत में x% की कमी की जाती है। यदि किसी व्यक्ति ने कंप्यूटर तथा प्रिंटर दोनों को कुल 50,000 रूपये में खरीदा है, तो x का मान है-

1. 57.5
2. 52.5
3. 33
4. 66

Options :

55125173881. 1

55125173882. 2

55125173883. 3

55125173884. 4

Question Number : 22 Question Id : 55125118967 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following in increasing order

A. True discount for the present worth of 5000 for a period of 4 months with rate of interest 9% per annum
B. True discount for the present worth of 8000 for a period of 3 months with rate of interest 8% per annum
C. True discount for the present worth of 6000 for a period of 6 months with rate of interest 6% per annum
D. True discount for the present worth of 7000 for a period of 4 months with rate of interest 7% per annum
E. True discount for the present worth of 9000 for a period of 6 months with rate of interest 5% per annum

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

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

Options :

55125173885. 1

55125173886. 2

55125173887. 3

55125173888. 4

Question Number : 22 Question Id : 55125118967 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

निम्नलिखित को आरोही क्रम में व्यवस्थित कीजिए-

A. किसी 5000 के वर्तमान मूल्य के लिए 9% वार्षिक ब्याज की दर से 4 माह हेतु असल बट्टा
B. किसी 8000 के वर्तमान मूल्य के लिए 8% वार्षिक ब्याज की दर से 3 माह हेतु असल बट्टा
C. किसी 6000 के वर्तमान मूल्य के लिए 6% अर्शिक ब्याज की दर से 6 माह हेतु असल बट्टा
D. किसी 7000 के वर्तमान मूल्य के लिए 7% वार्षिक ब्याज की दर से 4 माह हेतु असल बट्टा
E. किसी 9000 के वर्तमान मूल्य के लिए 5% वार्षिक ब्याज की दर से 6 माह हेतु असल बट्टा

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173885. 1

55125173886. 2

55125173887. 3

55125173888. 4

Question Number : 23 Question Id : 55125118968 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Select correct number sequeces from the following:

A. 5, 7, 13, 25, 45, 75
B. 17, 40, 109, 224, 385
C. 4, 11, 19, 41, 79, 169
D. 3, 2, 0, -9, -52, -280
E. 4, 13, 31, 67, 139, 280

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

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

Options :

55125173889. 1

55125173890. 2

55125173891. 3

55125173892. 4

Question Number : 23 Question Id : 55125118968 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

निम्नलिखित संख्याओं से संख्याओं के सही अनुक्रम का चयन कीजिए:

A. 5, 7, 13, 25, 45, 75
B. 17, 40, 109, 224, 385
C. 4, 11, 19, 41, 79, 169
D. 3, 2, 0, -9, -52, -280
E. 4, 13, 31, 67, 139, 280

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173889. 1

55125173890. 2

55125173891. 3

55125173892. 4

Question Number : 24 Question Id : 55125118969 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I (Letter- series)		LIST-II (Missing letter)	
A.	Q, N, K, H, E, ?	I.	C
B.	O, B, L, ?, I, D, F, E, C	II.	K
C.	Z, U, Q, N, L, ?	III.	B
D.	A, C, ?, G, I	IV.	E

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

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

Options :

55125173893. 1

55125173894. 2

55125173895. 3

55125173896. 4

Question Number : 24 Question Id : 55125118969 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

सूची-I के साथ **सूची-II** का मिलान कीजिए:

सूची-I (अक्षर-श्रेणी)		सूची-II (लुप्त अक्षर)	
A.	Q, N, K, H, E, ?	I.	C
B.	O, B, L, ?, I, D, F, E, C	II.	K
C.	Z, U, Q, N, L, ?	III.	B
D.	A, C, ?, G, I	IV.	E

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

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

Options :

55125173893. 1

55125173894. 2

55125173895. 3

55125173896. 4

Question Number : 25 Question Id : 55125118970 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I		LIST-II
A.	All real values of x satisfying $(4x+1) < 13$ and $(x+1) > 3$ lie in the interval	I.	(5, 6)
B.	All real values of x satisfying $1 \leq (x^2+1) < 5$ lie in the interval	II.	(3, 4)
C.	All real x satisfying $(x+7) < (3x+1) < (x+9)$ lie in interval	III.	(2, 3)
D.	All real x satisfying $5 < (4x-15) < 9$ lie in interval	IV.	(-2, 2)

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

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

Options :

55125173897. 1

55125173898. 2

55125173899. 3

55125173900. 4

Question Number : 25 Question Id : 55125118970 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

सूची-I के साथ **सूची-II** का मिलान कीजिए:

	सूची-I		सूची-II
A.	x के वे सभी वास्तविक मान जो $(4x+1) < 13$ तथा $(x+1) > 3$ का समाधान करते हैं, अंतराल में स्थित हैं	I.	(5, 6)
B.	x के वे सभी वास्तविक मान जो $1 \leq (x^2+1) < 5$ का समाधान करते हैं, अंतराल में स्थित हैं	II.	(3, 4)
C.	x के वे सभी वास्तविक मान जो $(x+7) < (3x+1) < (x+9)$ का समाधान करते हैं, अंतराल में स्थित हैं	III.	(2, 3)
D.	x के वे सभी मान जो $5 < (4x-15) < 9$ का समाधान करते हैं, अंतराल में स्थित हैं	IV.	(-2, 2)

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

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

Options :

55125173897. 1

55125173898. 2

55125173899. 3

55125173900. 4

Question Number : 26 Question Id : 55125118971 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following Pramanas (valid means of knowledge) are accepted by Nyaya school of philosophy?

1. Pratyaksha and Anumana only
2. Anumana and Verbal Testimony (Shabda) only
3. Pratyaksha and Upamana only
4. Pratyaksha, Anumana, Verbal Testimony (Shabda) and Upamana

Options :

55125173901. 1

55125173902. 2

55125173903. 3

55125173904. 4

Question Number : 26 Question Id : 55125118971 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

निम्नलिखित में से किन प्रमाणों (ज्ञान का वैध साधन) को न्याय दर्शन द्वारा स्वीकृत माना गया है?

1. केवल प्रत्यक्ष और अनुमान
2. केवल अनुमान और वाचिक साक्ष्य (शब्द)
3. केवल प्रत्यक्ष और उपमान
4. प्रत्यक्ष, अनुमान, वाचिक साक्ष्य (शब्द) और उपमान

Options :

55125173901. 1

55125173902. 2

55125173903. 3

55125173904. 4

Question Number : 27 Question Id : 55125118972 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following in a meaningful order, from particular to general :

A. Family
B. Community
C. Member
D. Locality
E. Country

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

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

Options :

55125173905. 1

55125173906. 2

55125173907. 3

55125173908. 4

Question Number : 27 Question Id : 55125118972 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

निम्नलिखित को विशिष्ट से सामान्य के सार्थक क्रम में व्यवस्थित कीजिए:

A. परिवार
B. समुदाय
C. सदस्य
D. स्थान
E. देश

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173905. 1

55125173906. 2

55125173907. 3

55125173908. 4

Question Number : 28 Question Id : 55125118973 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In the first figure, which are the valid moods?

A. AAA
B. AEE
C. EAE
D. AOO
E. EIO

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

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

Options :

55125173909. 1

55125173910. 2

55125173911. 3

55125173912. 4

Question Number : 28 Question Id : 55125118973 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

प्रथम आकृति में, निम्नलिखित में से कौन वैध मूड है?

A. AAA
B. AEE
C. EAE
D. AOO
E. EIO

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173909. 1

55125173910. 2

55125173911. 3

55125173912. 4

Question Number : 29 Question Id : 55125118974 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following, taken together, make a valid syllogism

A. Apples are not sweets.
B. Some apples are sweets.
C. All sweets are tasty.
D. Some apples are not tasty.
E. No apple is tasty.

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

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

Options :

55125173913. 1

55125173914. 2

55125173915. 3

55125173916. 4

Question Number : 29 Question Id : 55125118974 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

निम्न में से कौन से एक साथ मिलकर वैध न्याय-वाक्य बनाते हैं?

A. सेब मिठाइयां नहीं हैं
B. कुछ सेब मिठाई होते हैं
C. सभी मिठाइयां स्वादिष्ट होती हैं
D. कुछ सेब स्वादिष्ट नहीं होते हैं
E. कोई सेब स्वादिष्ट नहीं होता है

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173913. 1

55125173914. 2

55125173915. 3

55125173916. 4

Question Number : 30 Question Id : 55125118975 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I **Broken Rule**		**LIST-II** **Associated Fallacy**
A.	Middle term undistributed in the premises.	I.	Existential Fallacy
B.	Presence of two negative premises in an argument.	II.	Fallacy of illicit major and minor term
C.	Particular conclusion with negative premises.	III.	Exclusive premises
D.	Any term distributed in conclusion but undistributed in premises.	IV.	Undistributed Middle

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

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

Options :

55125173917. 1

55125173918. 2

55125173919. 3

55125173920. 4

Question Number : 30 Question Id : 55125118975 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

सूची-I के साथ **सूची-II** का मिलान कीजिए:

सूची-I खंडित नियम		सूची-II संबद्ध दोष	
A.	आधारिकाओं में अव्याप्त मध्य	I.	अस्तित्व परक दोष
B.	किसी तर्क में दो निषेधात्मक आधारिकाएं	II.	अव्याप्त- साध्य तथा पक्ष-पद दोष
C.	निषेधात्मक आधारिकाओं के साथ विशिष्ट निष्कर्ष	III.	व्यावर्तक आधारिकाएं
D.	कोई पद निष्कर्ष में वितरित, परंतु आधारिकाओं में अवितरित	IV.	अव्याप्त मध्य

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

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

Options :

55125173917. 1

55125173918. 2

55125173919. 3

55125173920. 4

Question Number : 31 Question Id : 55125118976 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

SSD stands for

1. Solid State Disk
2. Serial State Disk
3. Solid Stage Disk
4. Serial Stage Disk

Options :

55125173921. 1

55125173922. 2

55125173923. 3

55125173924. 4

Question Number : 31 Question Id : 55125118976 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

एस एस डी का पूर्ण रूप है:

1. सॉलिड स्टेट डिस्क
2. सीरियल स्टेट डिस्क
3. सॉलिड स्टेज डिस्क
4. सीरियल स्टेज डिस्क

Options :

55125173921. 1

55125173922. 2

55125173923. 3

55125173924. 4

Question Number : 32 Question Id : 55125118977 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following computers in a chronological order:

A. The Atanasoft Berry Computer (ABC)
B. IBM- 701
C. The Mark I Computer
D. UNIVAC I
E. IBM-650

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

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

Options :

55125173925. 1

55125173926. 2

55125173927. 3

55125173928. 4

Question Number : 32 Question Id : 55125118977 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

अग्रांकित कंप्यूटरों को कालक्रमानुसार व्यवस्थित कीजिए:

A. द एटनासॉफ बेरी कम्प्यूटर (ए. बी. सी.)
B. आई बी एम- 701
C. द मार्क I कम्प्यूटर
D. यू एन आई वी ए सी I
E. आई बी एम- 650

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173925. 1

55125173926. 2

55125173927. 3

55125173928. 4

Question Number : 33 Question Id : 55125118978 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

E-learning strategies are supported by:

A. Virtual Classroom
B. TCP/IP
C. Instant messaging
D. Satellite classroom
E. Web casting

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

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

Options :

55125173929. 1

55125173930. 2

55125173931. 3

55125173932. 4

Question Number : 33 Question Id : 55125118978 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

ई-अधिगम (ई-लर्निंग) को सहायता किससे मिलती है?

A. आभासी कक्षा
B. टी सी पी/ आई पी
C. तात्क्षणिक संदेश प्रेषण
D. सेटेलाइट कक्षा
E. वेब कास्टिंग

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173929. 1

55125173930. 2

55125173931. 3

55125173932. 4

Question Number : 34 Question Id : 55125118979 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following are used as Social Networking Sites?

A. Twitter
B. Instagram
C. LinkedIn
D. Blackbox
E. Snapchat

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

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

Options :

55125173933. 1

55125173934. 2

55125173935. 3

55125173936. 4

Question Number : 34 Question Id : 55125118979 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

निम्नलिखित में से किनका उपयोग सोशल नेटवर्किंग साइट के रूप में किया जाता है?

A. ट्विटर
B. इंस्टाग्राम
C. लिंक्डइन
D. ब्लैक बॉक्स
E. स्नेपचैट

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173933. 1

55125173934. 2

55125173935. 3

55125173936. 4

Question Number : 35 Question Id : 55125118980 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I (Concept)		**LIST-II (Feature)**
A.	Algorithm	I.	Range of frequencies over which signals are transmitted
B.	Modem	II.	Converts digital signals to sine waves and vice-versa
C.	Bandwidth	III.	Pictorial representation of a computational procedure
D.	Flowchart	IV.	Finite sequence to solve a problem

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

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

Options :

55125173937. 1

55125173938. 2

55125173939. 3

55125173940. 4

Question Number : 35 Question Id : 55125118980 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

सूची-I के साथ **सूची-II** का मिलान कीजिए:

	सूची-I (संप्रत्यय)		**सूची-II (विशेषता)**
A.	एल्गोरिदम	I.	तरंग-श्रेणी जिस पर संकेत प्रसारित होते हैं।
B.	मॉडम	II.	डिजिटल संकेतों को साइन-तरंगों में परिवर्तन करना व विलोमत:
C.	बैण्डविड्थ	III.	एक गणना प्रक्रिया का चित्रात्मक आरेख
D.	फ्लोचार्ट	IV.	समस्या-समाधान हेतु एक सीमित श्रृंखला

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

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

Options :

55125173937. 1

55125173938. 2

55125173939. 3

55125173940. 4

Question Number : 36 Question Id : 55125118981 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The difference in sea-surface temperature between one location in the Western Indian Ocean and one location in the Eastern Indian Ocean is called:

1. Indian Ocean Dipole
2. Indian Ocean Oscillation
3. El Nino Southern Oscillation
4. Madden Julian Oscillation

Options :

55125173941. 1

55125173942. 2

55125173943. 3

55125173944. 4

Question Number : 36 Question Id : 55125118981 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

पश्चिमी हिंद महासागर में एक स्थान पर तथा पूर्वी हिंद महासागर में एक स्थान पर समुद्र-सतह के तापमानों के बीच का अंतर कहलाता है :

1. हिंद महासागर द्विध्रुव
2. हिंद महासागर दोलन
3. अल-नीनो दक्षिणी दोलन
4. मैडेन जूलियन दोलन

Options :

55125173941. 1

55125173942. 2

55125173943. 3

55125173944. 4

Question Number : 37 Question Id : 55125118982 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following United Nations Conferences/Conventions according to the year they were held:

A. The Stockholm Conference
B. The Kyoto Protocol
C. Montreal Protocol
D. Vienna Convention for the protection of ozone layer
E. The Biodiversity Convention

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

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

Options :

55125173945. 1

55125173946. 2

55125173947. 3

55125173948. 4

Question Number : 37 Question Id : 55125118982 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

निम्नलिखित संयुक्त राष्ट्र सम्मेलनों/ अभिसमयों को उनके आयोजित होने के वर्ष के क्रम में व्यवस्थित कीजिए :

A. स्टॉकहोम सम्मेलन
B. क्योटो प्रोटोकॉल
C. मांट्रियल प्रोटोकॉल
D. ओजोन परत की सुरक्षा हेतु वियेना अभिसमय (कंवेंशन)
E. जैवविविधता अभिसमय (बायो डाइवर्सिटी कंवेंशन)

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173945. 1

55125173946. 2

55125173947. 3

55125173948. 4

Question Number : 38 Question Id : 55125118983 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following industrial sources of noise in descending order as per their noise level (in dB)

A. Steel plate riveting
B. High speed drill
C. Circular saw
D. Farm tractor
E. Milling machine

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

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

Options :

55125173949. 1

55125173950. 2

55125173951. 3

55125173952. 4

Question Number : 38 Question Id : 55125118983 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

ध्वनि के औद्योगिक स्रोतों को उनकी शोर प्रबलता (dB में) के अनुसार अवरोही क्रम में व्यवस्थित कीजिए:

A. स्टील प्लेट कीलन (रिवेंटिंग)
B. द्रुत चाल ड्रिल
C. वृत्तीय आरी
D. खेत का ट्रैक्टर
E. मिलिंग मशीन

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173949. 1

55125173950. 2

55125173951. 3

55125173952. 4

Question Number : 39 Question Id : 55125118984 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Per and Polyfluorinated alkyl substances are called Forever Chemicals which are highly persistent. They can be found in

A. Paper and Cardboard food packaging
B. Textiles
C. DDT
D. Cosmetics
E. Nuclear Industry waste

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

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

Options :

55125173953. 1

55125173954. 2

55125173955. 3

55125173956. 4

Question Number : 39 Question Id : 55125118984 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

पर तथा पॉली फ्लूओरिनीकृत क्षारीय पदार्थ अनन्तकालीय रसायन कहलाते हैं तथा ये अति दीर्घस्थायी होते हैं। ये कहाँ पाए जाते हैं?

A. कागज तथा कार्डबोर्ड खाद्य पैकेजिंग
B. कपड़ा
C. डी डी टी
D. प्रसाधन सामग्री
E. परमाणु उद्योग कचरा

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173953. 1

55125173954. 2

55125173955. 3

55125173956. 4

Question Number : 40 Question Id : 55125118985 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I Fuel Alcohol		**LIST-II Characteristic**
A.	Methanol	I.	Mixture of ethanol and gasoline
B.	Ethanol	II.	High energy content
C.	Gasohol	III.	Produced by bacterial anaerobic digestion
D.	Butanol	IV.	Can be derived from potato waste

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

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

Options :

55125173957. 1

55125173958. 2

55125173959. 3

55125173960. 4

Question Number : 40 Question Id : 55125118985 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

सूची-I के साथ **सूची-II** का मिलान कीजिए:

सूची-I **ईंधन अल्कोहल**		**सूची-II** **विशेषताएं**	
A.	मेथनॉल	I.	एथनॉल तथा गैसोलिन का मिश्रण
B.	एथनॉल	II.	उच्च ऊर्जा वाली
C.	गैसोहोल	III.	बैक्टिरियाई अवायवीय पाचन द्वारा उत्पादित
D.	ब्यूटानॉल	IV.	आलू के अपशिष्ट से प्राप्त किया जा सकता है

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

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

Options :

55125173957. 1

55125173958. 2

55125173959. 3

55125173960. 4

Question Number : 41 Question Id : 55125118986 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The NPE 1986 envisaged setting up of residential schools with an aim of providing excellence coupled with equity and social justice. This led to the establishment of:

1. Kendriya Vidyalayas
2. Navyug Schools
3. Navodaya Vidyalayas
4. Eklavya Residential Schools

Options :

55125173961. 1

55125173962. 2

55125173963. 3

55125173964. 4

Question Number : 41 Question Id : 55125118986 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

एन पी ई 1986 में उत्कृष्टता के साथ-साथ समानता एवं सामाजिक न्याय प्रदान करने के उद्देश्य से आवासीय विद्यालय स्थापित करने की संकल्पना की गई थी। इसके फलस्वरूप _____ की स्थापना हुई।

1. केंद्रीय विद्यालय
2. नवयुग विद्यालय
3. नवोदय विद्यालय
4. एकलव्य आवासीय विद्यालय

Options :

55125173961. 1

55125173962. 2

55125173963. 3

55125173964. 4

Question Number : 42 Question Id : 55125118987 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following chronologically

A. University of Bombay, Calcutta and Madras
B. University Grants Commission
C. Panjab University, Lahore
D. Banaras Hindu University
E. University of Delhi

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

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

Options :

55125173965. 1

55125173966. 2

55125173967. 3

55125173968. 4

Question Number : 42 Question Id : 55125118987 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

निम्नलिखित को कालक्रमानुसार व्यवस्थित कीजिए-

A. यूनिवर्सिटी ऑफ बंबई, कलकत्ता एंड मद्रास
B. विश्वविद्यालय अनुदान आयोग
C. पंजाब विश्वविद्यालय, लाहौर
D. बनारस हिंदू विश्वविद्यालय
E. दिल्ली विश्वविद्यालय

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173965. 1

55125173966. 2

55125173967. 3

55125173968. 4

Question Number : 43 Question Id : 55125118988 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Select the CORRECT statements pertaining to NEP 2020:

A. It promotes secular and minorities education vehemently
B. It promotes multiple entry-multiple exit in higher education
C. It recommends that the state must spend 10 percent of GDP on education
D. It affirms that Sanskrit has more literature than Latin and Persian
E. It promotes private philanthropic education

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

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

Options :

55125173969. 1

55125173970. 2

55125173971. 3

55125173972. 4

Question Number : 43 Question Id : 55125118988 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

एन ई पी 2020 के संबंध में सही कथन चुनिए:

A. इसमें धर्मनिरपेक्ष तथा अल्पसंख्यकों की शिक्षा को सशक्त ढंग से बढ़ावा दिया गया है।
B. इसमें उच्चतर शिक्षा में बहु-प्रवेश बहु-निकास को बढ़ावा दिया गया है।
C. इसमें यह संस्तुति की गई है कि राज्य को अपनी जी डी पी का 10 प्रतिशत शिक्षा पर अवश्य खर्च करना चाहिए।
D. इसमें यह दावा किया गया है कि लैटिन तथा फ़ारसी की तुलना में संस्कृत में अधिक साहित्य है।
E. इसमें निजी परोपकारी शिक्षा को बढ़ावा दिया गया है।

नीचे दिए गए विकल्पों में से **सही** उत्तर चुनें:

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

Options :

55125173969. 1

55125173970. 2

55125173971. 3

55125173972. 4

Question Number : 44 Question Id : 55125118989 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I **Scheme/Institution**		**LIST-II** **Function**
A.	Rashtriya Avishkar Abhiyan	I.	Identification of talented students
B.	e-Pathshala	II.	Assessment of learning outcomes
C.	NAS	III.	To promote scientific temper and innovation
D.	NTSE	IV.	Digital access to textbooks and resources

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

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

Options :

55125173973. 1

55125173974. 2

55125173975. 3

55125173976. 4

Question Number : 44 Question Id : 55125118989 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

सूची-I के साथ **सूची-II** का मिलान कीजिए:

	सूची-I **स्कीम/ संस्थान**		**सूची-II** **कार्य**
A.	राष्ट्रीय आविष्कार अभियान	I.	मेधावी विद्यार्थियों की पहचान करना
B.	ई-पाठशाला	II.	अधिगम प्रतिफलों का आकलन
C.	एन ए एस	III.	वैज्ञानिक दृष्टिकोण तथा नवाचार को बढ़ावा
D.	एन टी एस ई	IV.	पाठ्य पुस्तकों तथा संस्थानों तक डिजिटल पहुँच

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

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

Options :

55125173973. 1

55125173974. 2

55125173975. 3

55125173976. 4

Question Number : 45 Question Id : 55125118990 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I Institutions		**LIST-II Known for**
A.	Nalanda	I.	Medicine and Arts
B.	Ujjain	II.	Hinyana Buddhism
C.	Takshashila	III.	Mahayana Buddhism and Secular Studies
D.	Vallabhi	IV.	Physics and Astronomy

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

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

Options :

55125173977. 1

55125173978. 2

55125173979. 3

55125173980. 4

Question Number : 45 Question Id : 55125118990 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

सूची-I के साथ **सूची-II** का मिलान कीजिए:

	सूची-I संस्थान		**सूची-II किसके लिए विख्यात है**
A.	नालंदा	I.	आयुर्विज्ञान तथा कला
B.	उज्जैन	II.	हीनयान बौद्ध मत
C.	तक्षशिला	III.	महायान बौद्ध मत तथा धर्मनिरपेक्ष शिक्षा
D.	वल्लभी	IV.	भौतिक शास्त्र तथा खगोल विज्ञान

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

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

Options :

55125173977. 1

55125173978. 2

55125173979. 3

55125173980. 4

Sub-Section Number : 3

Sub-Section Id : 551251746

Question Shuffling Allowed : No

Is Section Default? : No

Question Id : 55125118991 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (46 to 50)

Perhaps the best known of these sociologists is Oliver (1990), who argues that the biomedical model of disability leads to what he calls an ideology of personal tragedy which stresses the need for the individual disabled person to come to terms with 'their' problem, by struggling to cope as best they can.

Oliver calls this the personal tragedy model because it tends to describe disability as some terrible personal problem, which has ruined that person's life. He suggests that this model has now become taken for granted, achieving 'ideological hegemony' in the way that disabled people are viewed.

In place of the individualistic or personal tragedy model, Oliver argues that disability should be seen as a social problem and that it can only be understood within a wider social and economic framework, that is, within a social model.

Oliver argues that a clear distinction can be made between impairment and disability. A person may have a physical impairment of some kind, but it only becomes a disability when society organises social and economic features in such a way as to translate the impairment into a disability. For example, if the only means to enter a cinema is by using steps, then a person who has an impairment which leads them to use a wheelchair becomes disabled. However, if a ramp is provided and the ticket booth is at a lower height, and adequate spaces are provided for wheelchair users, then the person is no longer disabled. So, disability derives from organising society in such a way as to change impairment into disability.

Sub questions

Question Number : 46 Question Id : 55125118992 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Oliver argues that disability is a social problem because:

1. It is a divine curse to be suffered by the society.
2. Physical impairment translates into disability due to social and economic structures.
3. Individual as a part of society has gone through personal tragedy.
4. Impairment and disability are one and the same.

Options :

55125173981. 1

55125173982. 2

55125173983. 3

55125173984. 4

Question Number : 47 Question Id : 55125118993 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Oliver rebuts personal tragedy model because:

1. It is an accident that makes one impaired, not a willful choice.
2. In society, disability is a taboo.
3. It sees disability as an individualistic problem that disrupts one's life.
4. It is not the willingness of God to make someone disabled.

Options :

55125173985. 1

55125173986. 2

55125173987. 3

55125173988. 4

Question Number : 48 Question Id : 55125118994 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Disability can be done away by:

1. Giving adequate medical treatment to everyone.
2. Reorganizing society to facilitate access of all social space to the impaired.
3. By re-orienting disabled persons.
4. By re-orienting parents to prevent birth of disabled children.

Options :

55125173989. 1

55125173990. 2

55125173991. 3

55125173992. 4

Question Number : 49 Question Id : 55125118995 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The clear distinction between impairment and disability is:

1. Impairment is physical whereas disability is a mental problem.
2. Impairment is personal whereas disability is social.
3. Impairment can be treated medically and disability can not be cured.
4. Impairment is inaccessibility to social spaces whereas disability is fair access to every social space.

Options :

55125173993. 1

55125173994. 2

55125173995. 3

55125173996. 4

Question Number : 50 Question Id : 55125118996 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The society organizes social and economic features in such a way that:

1. Enabled bodied are more intelligent citizens.
2. Impairment translates into quality of social adjustment of everyone.
3. Accessing social space becomes a challenge for the impaired.
4. Impaired people must be provided everything within their residence.

Options :

55125173997. 1

55125173998. 2

55125173999. 3

55125174000. 4

Question Id : 55125118991 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (46 to 50)

निम्नलिखित गद्यांश को पढ़िए तथा नीचे दिए गए प्रश्नों के उत्तर दीजिए:

कदाचित इन समाज विज्ञानियों में सर्वाधिक विख्यात ओलिवर (1990) हैं जिनका तर्क है कि नि:शक्तता के जैव चिकित्सा मॉडल से व्यक्तिगत त्रासदी की विचारधारा उत्पन्न होती है जो उस नि:शक्त व्यक्ति के लिए इस आवश्यकता पर बल देती है कि वह यथासंभव संघर्ष करते हुए अपनी समस्या का सामना करने के लिए उसे स्वीकार करे।
ओलिवर इसे व्यक्तिगत त्रासदी इसलिए कहते हैं क्योंकि इससे नि:शक्तता को भीषण व्यक्तिगत समस्या के रूप में उल्लेख करने की प्रवृत्ति उत्पन्न होती है जिसने उस व्यक्ति का जीवन बरबाद कर दिया है। उसका सुझाव है कि इस मॉडल को अब बिलकुल अंतिम-सा मान लिया गया है जो निशक्त लोगों को देखने के तरीके में एक 'वैचारिक वर्चस्व' प्राप्त कर ले रहा है। ओलिवर व्यक्तिपरक अथवा व्यक्तिगत त्रासदी मॉडल के स्थान पर, यह तर्क देते हैं कि नि:शक्तता को सामाजिक समस्या समझा जाना चाहिए तथा इसे एक व्यापक सामाजिक तथा आर्थिक ढांचे में समझा जा सकता है, यानि एक सामाजिक मॉडल के भीतर।
ओलिवर का तर्क है कि अपंगता तथा नि:शक्तता में स्पष्ट अंतर है। किसी व्यक्ति में किसी प्रकार की अपंगता हो सकती है, परंतु यह अपंगता नि:शक्तता का रूप तभी लेगी जब समाज सामाजिक तथा आर्थिक विशेषताओं को इस प्रकार संगठित करता है कि अपंगता नि:शक्तता बन जाती है। उदाहरण के लिए, यदि किसी सिनेमा हॉल में प्रवेश का एकमात्र साधन सीढ़ियों का उपयोग है, तब अपंग व्यक्ति के लिए व्हील चेअर का उपयोग नि:शक्त हो जाता है। परंतु, यदि किसी रैंप का प्रावधान हो जाए, तथा टिकट बूथ कम ऊँचाई पर हो, व्हील चेअर प्रयोक्ता के लिए, पर्याप्त स्थान प्रदान किया जाए, तो वह व्यक्ति अब नि:शक्त नहीं होगा। अत: नि:शक्तता समाज को इस प्रकार के संगठित करने से उत्पन्न होती है कि अपंगता नि:शक्तता का रूप ले लेती है।

Sub questions

Question Number : 46 Question Id : 55125118992 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

ओलिवर का तर्क है कि नि:शक्तता एक सामाजिक समस्या है क्योंकि:

1. यह एक दैवीय अभिशाप है जिसे पूरे समाज को भुगतना है।
2. शारीरिक अपंगता सामाजिक एवं आर्थिक संरचनाओं के कारण निशक्तता में परिवर्तित हो जाती है।
3. समाज के घटक के रूप में व्यक्ति निजी हादसे से गुजरता है।
4. अपंगता और निशक्तता एक ही हैं।

Options :

55125173981. 1

55125173982. 2

55125173983. 3

55125173984. 4

Question Number : 47 Question Id : 55125118993 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

ऑलिवर व्यक्तिगत त्रासदी मॉडल का विरोध करते हैं क्योंकि:

1. यह एक दुर्घटना है जो व्यक्ति को अपंग बनाती है, न कि ऐच्छिक चयन।
2. समाज में नि:शक्तता एक कलंक (टैबू) है।
3. इसमें नि:शक्तता को वैयक्तिक समस्या माना जाता है जिससे जीवन बाधित होता है।
4. यह ईश्वर की इच्छा नहीं है जिससे कोई व्यक्ति नि:शक्त होता है।

Options :

55125173985. 1

55125173986. 2

55125173987. 3

55125173988. 4

Question Number : 48 Question Id : 55125118994 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

नि:शक्तता से निम्नलिखित द्वारा छुटकारा पाया जा सकता है

1. प्रत्येक को पर्याप्त चिकित्सा प्रदान कर
2. अपंग व्यक्ति के लिए सभी सामाजिक स्थानों तक पहुँच बनाने हेतु समाज की पुनर्संरचना कर
3. नि:शक्त व्यक्तियों को नई दिशा प्रदान कर
4. नि:शक्त बच्चों के जन्म को रोकने हेतु माता-पिता को नई दिशा प्रदान कर

Options :

55125173989. 1

55125173990. 2

55125173991. 3

55125173992. 4

Question Number : 49 Question Id : 55125118995 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

अपंगता एवं निशक्तता में स्पष्ट अंतर है कि :

1. अपंगता शारीरिक होती है जबकि निशक्तता एक मानसिक समस्या है।
2. अपंगता वैयक्तिक है जबकि निशक्तता सामाजिक है।
3. अपंगता का चिकित्सकीय इलाज है जबकि निशक्तता लाइलाज है।
4. अपंगता सभी सामाजिक स्थानों हेतु दुर्गमता है जबकि निशक्तता सभी सामाजिक स्थानों हेतु सुगमता है।

Options :

55125173993. 1

55125173994. 2

55125173995. 3

55125173996. 4

Question Number : 50 Question Id : 55125118996 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

समाज सामाजिक तथा आर्थिक क्रियाकलापों को इस प्रकार आयोजित करता है कि

1. समर्थ व्यक्ति ज्यादा बुद्धिमान नागरिक हैं।
2. अपंगता प्रत्येक के सामाजिक समायोजन की गुणवत्ता में परिणत हो जाती है।
3. सामाजिक स्थान तक पहुँच हो पाना अपंग व्यक्तियों के लिए एक चुनौती बन जाता है।
4. अपंग व्यक्तियों को उनके आवास के भीतर ही सब कुछ प्रदान किया जाना चाहिए।

Options :

55125173997. 1

55125173998. 2

55125173999. 3

55125174000. 4

Computer Science and Applications

Section Id :	551251251
Section Number :	2
Section type :	Online

Mandatory or Optional :	Mandatory
Number of Questions :	92
Number of Questions to be attempted :	92
Section Marks :	200
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	551251747
Question Shuffling Allowed :	Yes
Is Section Default? :	No

Question Number : 51 Question Id : 55125118997 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Let $<H_1, * >$ and $<H_2, * >$ be subgroups of group $<G, * >$. Which of the following is False?

1. $H_1.H_2 = \{h_1 * h_2 : h_1 \in H_1 \text{ and } h_2 \in H_1\}$ is a subgroup.
2. $H_1.H_2 = \{h_1 * h_2 : h_1 \in H_1 \text{ and } h_2 \in H_1\}$ is a normal subgroup given that H_1 and H_2 are normal subgroups.
3. $<H_1 \cap H_2, * >$ is a subgroup.
4. $<H_1 \cap H_2, * >$ is a subgroup.

Options :

55125174001. 1

55125174002. 2

55125174003. 3

55125174004. 4

Question Number : 51 Question Id : 55125118997 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Let $<H_1, * >$ and $<H_2, * >$ be subgroups of group $<G, * >$. Which of the following is False?

1. $H_1.H_2 = \{h_1 * h_2 : h_1 \in H_1 \text{ and } h_2 \in H_1\}$ is a subgroup.
2. $H_1.H_2 = \{h_1 * h_2 : h_1 \in H_1 \text{ and } h_2 \in H_1\}$ is a normal subgroup given that H_1 and H_2 are normal subgroups.
3. $<H_1 \cap H_2, * >$ is a subgroup.
4. $<H_1 \cap H_2, * >$ is a subgroup.

Options :

55125174001. 1

55125174002. 2

55125174003. 3

55125174004. 4

Question Number : 52 Question Id : 55125118998 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

How many solution does the equation
$x + y + z = 11$ have, where x, y, z are non-negative integers?

1. 33
2. 66
3. 68
4. 78

Options :

55125174005. 1

55125174006. 2

55125174007. 3

55125174008. 4

Question Number : 52 Question Id : 55125118998 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

How many solution does the equation
$x + y + z = 11$ have, where x, y, z are non-negative integers?

1. 33
2. 66
3. 68
4. 78

Options :

55125174005. 1

55125174006. 2

55125174007. 3

55125174008. 4

Question Number : 53 Question Id : 55125118999 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following in ascending order on the basis of number of district prime numbers in their prime factorization.

A. 729
B. 1001
C. 1111
D. 420

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

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

Options :

55125174009. 1

55125174010. 2

55125174011. 3

55125174012. 4

Question Number : 53 Question Id : 55125118999 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following in ascending order on the basis of number of district prime numbers in their prime factorization.

A. 729
B. 1001
C. 1111
D. 420

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

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

Options :

55125174009. 1

55125174010. 2

55125174011. 3

55125174012. 4

Question Number : 54 Question Id : 55125119000 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

Match the equivalent propositions in List-I and List-II

LIST-I		LIST-II	
A.	$P \rightarrow (Q \rightarrow P)$	I.	$(P \vee Q) \wedge \neg (P \wedge Q)$
B.	$P \rightarrow (Q \vee R)$	II.	$(P \vee R) \rightarrow Q$
C.	$(P \rightarrow Q) \wedge (R \rightarrow Q)$	III.	$(P \rightarrow Q) \vee (P \rightarrow R)$
D.	$\neg (P \rightleftharpoons Q)$	IV.	$\neg P \rightarrow (P \rightarrow Q)$

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

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

Options :

55125174013. 1

55125174014. 2

55125174015. 3

55125174016. 4

Question Number : 54 Question Id : 55125119000 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**
Match the equivalent propositions in List-I and List-II

LIST-I		LIST-II	
A.	$P \rightarrow (Q \rightarrow P)$	I.	$(P \vee Q) \wedge \neg (P \wedge Q)$
B.	$P \rightarrow (Q \vee R)$	II.	$(P \vee R) \rightarrow Q$
C.	$(P \rightarrow Q) \wedge (R \rightarrow Q)$	III.	$(P \rightarrow Q) \vee (P \rightarrow R)$
D.	$\neg (P \rightleftharpoons Q)$	IV.	$\neg P \rightarrow (P \rightarrow Q)$

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

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

Options :

55125174013. 1

55125174014. 2

55125174015. 3

55125174016. 4

Question Number : 55 Question Id : 55125119001 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Simplify the following Boolean expression using 4-variables K-map.
$F(A, B, C, D) = \Sigma\ m(3, 6, 7, 11, 12, 13, 14, 15)$

(1) $\overline{A}\overline{B} + \overline{B}C + \overline{C}\overline{D}$

(2) $\overline{A}B + C\overline{D} + A\overline{B}$

(3) $AB + BC + CD$

(4) $CD + A\overline{C} + BD$

Options :

55125174017. 1

55125174018. 2

55125174019. 3

55125174020. 4

Question Number : 55 Question Id : 55125119001 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Simplify the following Boolean expression using 4-variables K-map.
$F(A, B, C, D) = \Sigma\ m(3, 6, 7, 11, 12, 13, 14, 15)$

(1) $\overline{A}\overline{B} + \overline{B}C + \overline{C}\overline{D}$

(2) $\overline{A}B + C\overline{D} + A\overline{B}$

(3) $AB + BC + CD$

(4) $CD + A\overline{C} + BD$

Options :

55125174017. 1

55125174018. 2

55125174019. 3

55125174020. 4

Question Number : 56 Question Id : 55125119002 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Out of 32 people, 30 people save paper and 14 people save plastic bottles. What is the total number of people who save both paper and plastic bottles? Assume all people save either paper or plastic bottles or both paper and plastic bottles,

1. 12
2. 14
3. 16
4. 18

Options :

55125174021. 1

55125174022. 2

55125174023. 3

55125174024. 4

Question Number : 56 Question Id : 55125119002 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Out of 32 people, 30 people save paper and 14 people save plastic bottles. What is the total number of people who save both paper and plastic bottles? Assume all people save either paper or plastic bottles or both paper and plastic bottles,

1. 12
2. 14
3. 16
4. 18

Options :

55125174021. 1

55125174022. 2

55125174023. 3

55125174024. 4

Question Number : 57 Question Id : 55125119003 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following have true value if universe of discourse consist of all integers:

A. $\exists n\ (2n = 3n)$
B. $\forall n\ \left(n^2 \geq n\right)$
C. $\forall n\ (2n > n)$
D. $\exists n\ \left(n^2 = 2\right)$
E. $\forall x \forall y\ \exists z\ (xy = z)$

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

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

Options :

55125174025. 1

55125174026. 2

55125174027. 3

55125174028. 4

Question Number : 57 Question Id : 55125119003 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following have true value if universe of discourse consist of all integers:

A. $\exists n\ (2n = 3n)$
B. $\forall n\ \left(n^2 \geq n\right)$
C. $\forall n\ (2n > n)$
D. $\exists n\ \left(n^2 = 2\right)$
E. $\forall x \forall y\ \exists z\ (xy = z)$

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

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

Options :

55125174025. 1

55125174026. 2

55125174027. 3

55125174028. 4

Question Number : 58 Question Id : 55125119004 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

How many edges are there in a graph with 10 vertices each of degree six?

1. 60
2. 15
3. 20
4. 30

Options :

55125174029. 1

55125174030. 2

55125174031. 3

55125174032. 4

Question Number : 58 Question Id : 55125119004 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

How many edges are there in a graph with 10 vertices each of degree six?

1. 60
2. 15
3. 20
4. 30

Options :

55125174029. 1

55125174030. 2

55125174031. 3

55125174032. 4

Question Number : 59 Question Id : 55125119005 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Consider the following List-I and List-II in context of graph & model.

LIST-I		LIST-II	
A.	Planar Graph	I.	Probabilistic Model
B.	Bipartite Graph	II.	Deterministic Model
C.	PERT	III.	4 - Colorable
D.	CPM (Critical Path Method)	IV.	2 - Colorable

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

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

Options :

55125174033. 1

55125174034. 2

55125174035. 3

55125174036. 4

Question Number : 59 Question Id : 55125119005 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Consider the following List-I and List-II in context of graph & model.

LIST-I		LIST-II	
A.	Planar Graph	I.	Probabilistic Model
B.	Bipartite Graph	II.	Deterministic Model
C.	PERT	III.	4 - Colorable
D.	CPM (Critical Path Method)	IV.	2 - Colorable

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

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

Options :

55125174033. 1

55125174034. 2

55125174035. 3

55125174036. 4

Question Number : 60 Question Id : 55125119006 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A problem of size n requires n^2 bit operations. What is the largest size instance that can be solved in 1 second, if each bit operation is carried out in 10^{-9} second?

1. 10^9
2. 3.16×10^4
3. 3.96×10^7
4. 2^{10^9}

Options :

55125174037. 1

55125174038. 2

55125174039. 3

55125174040. 4

Question Number : 60 Question Id : 55125119006 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A problem of size n requires n^2 bit operations. What is the largest size instance that can be solved in 1 second, if each bit operation is carried out in 10^{-9} second?

1. 10^9
2. 3.16×10^4
3. 3.96×10^7
4. 2^{10^9}

Options :

55125174037. 1

55125174038. 2

55125174039. 3

55125174040. 4

Question Number : 61 Question Id : 55125119007 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

Each of the following relations is defined on set {1, 2, 3, 4}. Match the relation types.

	LIST-I Relation		**LIST-II Relation type**
A.	{(2, 2), (2, 3), (2, 4), (3, 2), (3, 3), (3, 4)}	I.	Anti symmetric
B.	{(2, 4), (4, 2)}	II.	Only transitive
C.	{(1, 2), (2, 3), (3, 4)}	III.	Only symmetric
D.	{(1, 3), (1, 4), (2, 3), (2, 4), (3, 1), (3, 4)}	IV.	neither symmetric, nor transitive

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

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

Options :

55125174041. 1

55125174042. 2

55125174043. 3

55125174044. 4

Question Number : 61 Question Id : 55125119007 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

Each of the following relations is defined on set {1, 2, 3, 4}. Match the relation types.

	LIST-I Relation		LIST-II Relation type
A.	{(2, 2), (2, 3), (2, 4), (3, 2), (3, 3), (3, 4)}	I.	Anti symmetric
B.	{(2, 4), (4, 2)}	II.	Only transitive
C.	{(1, 2), (2, 3), (3, 4)}	III.	Only symmetric
D.	{(1, 3), (1, 4), (2, 3), (2, 4), (3, 1), (3, 4)}	IV.	neither symmetric, nor transitive

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

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

Options :

55125174041. 1

55125174042. 2

55125174043. 3

55125174044. 4

Question Number : 62 Question Id : 55125119008 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Suppose P (·) is used for power set and Ø is usual notation of empty set. Arrange following on the basis of their cardinality in non-decreasing order:

A. P ({a, b, {a, b}})
B. P ({Ø, a, {a}, {{a}}})
C. P(P(Φ))
D. P(P({a}))
E. P({{a, b}, c})

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

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

Options :

55125174045. 1

55125174046. 2

55125174047. 3

55125174048. 4

Question Number : 62 Question Id : 55125119008 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Suppose P (·) is used for power set and Ø is usual notation of empty set. Arrange following on the basis of their cardinality in non-decreasing order:

A. P ({a, b, {a, b}})
B. P ({Ø, a, {a}, {{a}}})
C. P(P(Φ))
D. P(P({a}))
E. P({{a, b}, c})

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

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

Options :

55125174045. 1

55125174046. 2

55125174047. 3

55125174048. 4

Question Number : 63 Question Id : 55125119009 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following additional properties is supposed to be satisfied by a group (G, ∗) to be an abelian group ?

(1) Commutative
(2) Identity
(3) Inverse
(4) Associativity

Options :

55125174049. 1

55125174050. 2

55125174051. 3

55125174052. 4

Question Number : 63 Question Id : 55125119009 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following additional properties is supposed to be satisfied by a group (G, ∗) to be an abelian group ?

(1) Commutative
(2) Identity
(3) Inverse
(4) Associativity

Options :

55125174049. 1

55125174050. 2

55125174051. 3

55125174052. 4

Question Number : 64 Question Id : 55125119010 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Let $R = \{\langle 1, 2\rangle, \langle 3, 4\rangle, \langle 2, 2\rangle\}$ and
$S = \{\langle 4, 2\rangle, \langle 2, 5\rangle, \langle 3, 1\rangle, \langle 1, 3\rangle\}$ be two relations. The composite relation R o S of R and S is :

(1) $\{\langle 4, 2\rangle, \langle 3, 2\rangle, \langle 2, 5\rangle\}$

(2) $\{\langle 1, 5\rangle, \langle 3, 2\rangle, \langle 2, 5\rangle\}$

(3) $\{\langle 1, 3\rangle, \langle 3, 1\rangle, \langle 2, 5\rangle\}$

(4) $\{\langle 2, 5\rangle, \langle 3, 1\rangle, \langle 2, 3\rangle, \langle 3, 3\rangle\}$

Options :

55125174053. 1

55125174054. 2

55125174055. 3

55125174056. 4

Question Number : 64 Question Id : 55125119010 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Let $R = \{\langle 1, 2\rangle, \langle 3, 4\rangle, \langle 2, 2\rangle\}$ and
$S = \{\langle 4, 2\rangle, \langle 2, 5\rangle, \langle 3, 1\rangle, \langle 1, 3\rangle\}$ be two relations. The composite relation R o S of R and S is :

(1) $\{\langle 4, 2\rangle, \langle 3, 2\rangle, \langle 2, 5\rangle\}$

(2) $\{\langle 1, 5\rangle, \langle 3, 2\rangle, \langle 2, 5\rangle\}$

(3) $\{\langle 1, 3\rangle, \langle 3, 1\rangle, \langle 2, 5\rangle\}$

(4) $\{\langle 2, 5\rangle, \langle 3, 1\rangle, \langle 2, 3\rangle, \langle 3, 3\rangle\}$

Options :

55125174053. 1

55125174054. 2

55125174055. 3

55125174056. 4

Question Number : 65 Question Id : 55125119011 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Consider a linear program $\{\max c^T x | Ax \leq b\}$. Which of the following statements is **true** ?

(1) the dual program is $\{\min b^T y | A^T y \leqslant c, y \geqslant 0\}$

(2) the dual program is $\{\min b^T y | A^T y \geqslant c, y \geqslant 0\}$

(3) the dual program is $\{\min b^T y | A^T y = c, y \geqslant 0\}$

(4) the dual program is $\{\max b^T Y | A^T y = c\}$

Options :

55125174057. 1

55125174058. 2

55125174059. 3

55125174060. 4

Question Number : 65 Question Id : 55125119011 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Consider a linear program $\{\max c^T x | Ax \leqslant b\}$. Which of the following statements is **true** ?

(1) the dual program is $\{\min b^T y | A^T y \leqslant c, y \geqslant 0\}$

(2) the dual program is $\{\min b^T y | A^T y \geqslant c, y \geqslant 0\}$

(3) the dual program is $\{\min b^T y | A^T y = c, y \geqslant 0\}$

(4) the dual program is $\{\max b^T Y | A^T y = c\}$

Options :

55125174057. 1

55125174058. 2

55125174059. 3

55125174060. 4

Question Number : 66 Question Id : 55125119012 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The average memory access time is 130 ns and average time of cache memory is 100 ns. With 75% hit ratio, The average time to access a word is?

1. 130 ns
2. 150 ns
3. 132.5 ns
4. 107.5 ns

Options :

55125174061. 1

55125174062. 2

55125174063. 3

55125174064. 4

Question Number : 66 Question Id : 55125119012 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The average memory access time is 130 ns and average time of cache memory is 100 ns. With 75% hit ratio, The average time to access a word is?

1. 130 ns
2. 150 ns
3. 132.5 ns
4. 107.5 ns

Options :

55125174061. 1

55125174062. 2

55125174063. 3

55125174064. 4

Question Number : 67 Question Id : 55125119013 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following ICs has lowest power consumption?

1. ECL
2. MOS
3. TTL
4. CMOS

Options :

55125174065. 1

55125174066. 2

55125174067. 3

55125174068. 4

Question Number : 67 Question Id : 55125119013 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following ICs has lowest power consumption?

1. ECL
2. MOS
3. TTL
4. CMOS

Options :

55125174065. 1

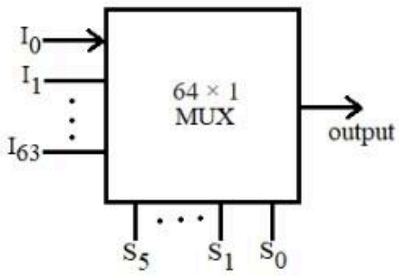
55125174066. 2

55125174067. 3

55125174068. 4

Question Number : 68 Question Id : 55125119014 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The combination of selection lines for sending the input I_{14} to output in the following multiplexer is?



1. 001111
2. 110000
3. 111100
4. 001110

Options :

55125174069. 1

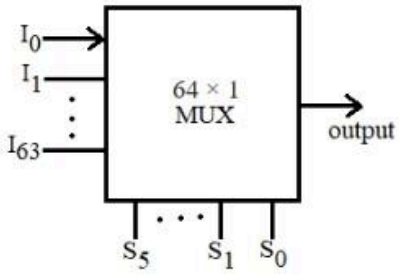
55125174070. 2

55125174071. 3

55125174072. 4

Question Number : 68 Question Id : 55125119014 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The combination of selection lines for sending the input I_{14} to output in the following multiplexer is?



1. 001111
2. 110000
3. 111100
4. 001110

Options :

55125174069. 1

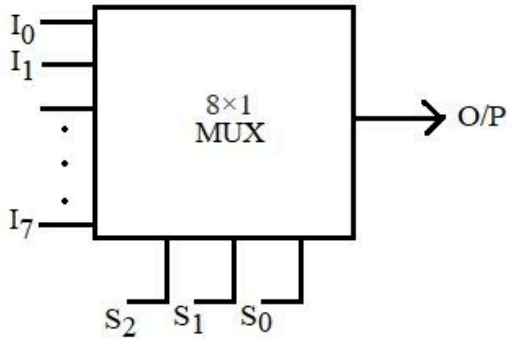
55125174070. 2

55125174071. 3

55125174072. 4

Question Number : 69 Question Id : 55125119015 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

For sending input I_6 on the output line of a 8×1 multiplexer,



Which of the following will represent the combination of selection lines?

1. 001
2. 100
3. 110
4. 111

Options :

55125174073. 1

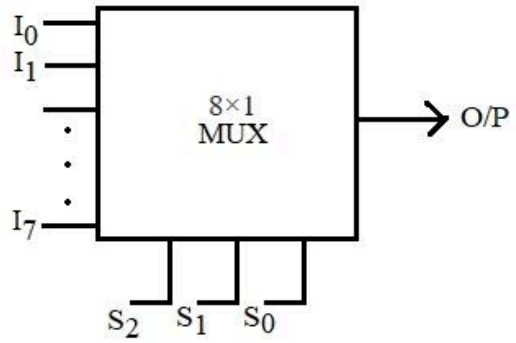
55125174074. 2

55125174075. 3

55125174076. 4

Question Number : 69 Question Id : 55125119015 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

For sending input I_6 on the output line of a 8×1 multiplexer,



Which of the following will represent the combination of selection lines?

1. 001
2. 100
3. 110
4. 111

Options :

55125174073. 1

55125174074. 2

55125174075. 3

55125174076. 4

Question Number : 70 Question Id : 55125119016 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

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

	List - I		**List - II**
A.	Latency	I.	number of tasks completed in a given time period
B.	Delay	II.	causes the current activity to be deferred
C.	Throughput	III.	time elapsed before next activity starts
D.	Interrupt	IV.	time to complete a single task

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

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

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

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

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

Options :

55125174077. 1

55125174078. 2

55125174079. 3

55125174080. 4

Question Number : 70 Question Id : 55125119016 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

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

	List - I		List - II
A.	Latency	I.	number of tasks completed in a given time period
B.	Delay	II.	causes the current activity to be deferred
C.	Throughput	III.	time elapsed before next activity starts
D.	Interrupt	IV.	time to complete a single task

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

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

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

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

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

Options :

55125174077. 1

55125174078. 2

55125174079. 3

55125174080. 4

Question Number : 71 Question Id : 55125119017 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is memory interleaving ?

(1) Layering of memory stacks one above the other

(2) Hierarchy of different type of memories

(3) Division of memory into multiple modules, allowing the CPU to access multiple modules simultaneously

(4) Combining different type of memories

Options :

55125174081. 1

55125174082. 2

55125174083. 3

55125174084. 4

Question Number : 71 Question Id : 55125119017 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is memory interleaving ?

(1) Layering of memory stacks one above the other

(2) Hierarchy of different type of memories

(3) Division of memory into multiple modules, allowing the CPU to access multiple modules simultaneously

(4) Combining different type of memories

Options :

55125174081. 1

55125174082. 2

55125174083. 3

55125174084. 4

Question Number : 72 Question Id : 55125119018 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	FDM	I.	has four possible Minterms
B.	Digital Circuits	II.	Frequency Division Multiplexing
C.	A Two-Variable function	III.	Universal flip-flop
D.	J-K flip flop	IV.	Combinational or Sequential

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

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

Options :

55125174085. 1

55125174086. 2

55125174087. 3

55125174088. 4

Question Number : 72 Question Id : 55125119018 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	FDM	I.	has four possible Minterms
B.	Digital Circuits	II.	Frequency Division Multiplexing
C.	A Two-Variable function	III.	Universal flip-flop
D.	J-K flip flop	IV.	Combinational or Sequential

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

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

Options :

55125174085. 1

55125174086. 2

55125174087. 3

55125174088. 4

Question Number : 73 Question Id : 55125119019 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What does "Amdahl's Law" describe in the cantext of parallel processing ?

(1) Maximum speedup achievable, considering serial and parallel portions of a program

(2) The efficiency of message passing in a distributed memory system

(3) Computational efficiency of a parallel algorithm

(4) The reliability of a fault tolerant system

Options :

55125174089. 1

55125174090. 2

55125174091. 3

55125174092. 4

Question Number : 73 Question Id : 55125119019 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What does "Amdahl's Law" describe in the cantext of parallel processing ?

(1) Maximum speedup achievable, considering serial and parallel portions of a program

(2) The efficiency of message passing in a distributed memory system

(3) Computational efficiency of a parallel algorithm

(4) The reliability of a fault tolerant system

Options :

55125174089. 1

55125174090. 2

55125174091. 3

55125174092. 4

Question Number : 74 Question Id : 55125119020 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following in terms of their capacity from smallest to largest :

A. L3 Cache

B. L1 Cache

C. CPU Register

D. L2 Cache

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

(1) C, D, B, A

(2) C, A, B, D

(3) C, B, D, A

(4) A, C, D, B

Options :

55125174093. 1

55125174094. 2

55125174095. 3

55125174096. 4

Question Number : 74 Question Id : 55125119020 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following in terms of their capacity from smallest to largest :

A. L3 Cache

B. L1 Cache

C. CPU Register

D. L2 Cache

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

(1) C, D, B, A

(2) C, A, B, D

(3) C, B, D, A

(4) A, C, D, B

Options :

55125174093. 1

55125174094. 2

55125174095. 3

55125174096. 4

Question Number : 75 Question Id : 55125119021 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The term "double buffered" is used in which of the following:

1. Synchronous Communication Interface
2. Asynchronous Communication Interface
3. Addressing Mode
4. Serial Communication

Options :

55125174097. 1

55125174098. 2

55125174099. 3

55125174100. 4

Question Number : 75 Question Id : 55125119021 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The term "double buffered" is used in which of the following:

1. Synchronous Communication Interface
2. Asynchronous Communication Interface
3. Addressing Mode
4. Serial Communication

Options :

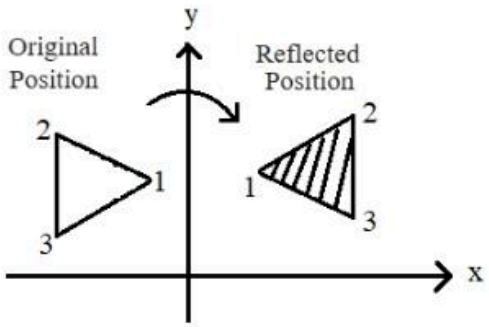
55125174097. 1

55125174098. 2

55125174099. 3

55125174100. 4

Question Number : 76 Question Id : 55125119022 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical



The above figure shows:

A. Reflection of object about x axis.
B. Reflection of object about y axis.
C. Reflection of object about x = 0
D. Reflection of object about y = 0

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

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

Options :

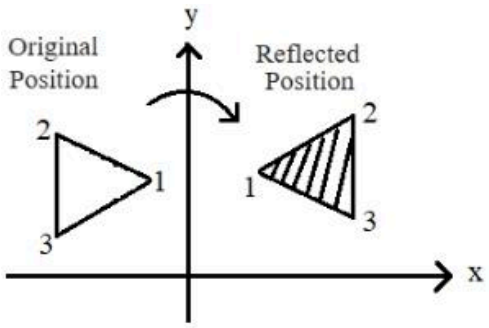
55125174101. 1

55125174102. 2

55125174103. 3

55125174104. 4

Question Number : 76 Question Id : 55125119022 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical



The above figure shows:

A. Reflection of object about x axis.
B. Reflection of object about y axis.
C. Reflection of object about x = 0
D. Reflection of object about y = 0

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

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

Options :

55125174101. 1
55125174102. 2
55125174103. 3
55125174104. 4

Question Number : 77 Question Id : 55125119023 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What will be the output of the following program

```
#include<stdio.h>

int main ()

{   int i;

    for (i = 0; i++<10;)

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

    return 0;

}
```

1. 0 1 2 3 4 5 6 7 8 9
2. 1 2 3 4 5 6 7 8
3. 1 3 5 7 9
4. 2 4 6 8

Options :

55125174105. 1
55125174106. 2
55125174107. 3
55125174108. 4

Question Number : 77 Question Id : 55125119023 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What will be the output of the following program

```
#include<stdio.h>

int main ()

{   int i;

    for (i = 0; i++<10;)

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

    return 0;

}
```

1. 0 1 2 3 4 5 6 7 8 9
2. 1 2 3 4 5 6 7 8
3. 1 3 5 7 9
4. 2 4 6 8

Options :

55125174105. 1
55125174106. 2
55125174107. 3
55125174108. 4

Question Number : 78 Question Id : 55125119024 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following would be the value of z for the C program code?

```
x = 16;

y = 4;

z = x >> y;
```

1. 5
2. 4
3. 2
4. 1

Options :

55125174109. 1
55125174110. 2
55125174111. 3
55125174112. 4

Question Number : 78 Question Id : 55125119024 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following would be the value of z for the C program code?

```
x = 16;

y = 4;

z = x >> y;
```

1. 5
2. 4
3. 2
4. 1

Options :

55125174109. 1

55125174110. 2

55125174111. 3

55125174112. 4

Question Number : 79 Question Id : 55125119025 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	long signed int	I.	% lf
B.	double	II.	% Lf
C.	long double	III.	% c
D.	unsigned character	IV.	% ld

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

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

Options :

55125174113. 1

55125174114. 2

55125174115. 3

55125174116. 4

Question Number : 79 Question Id : 55125119025 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	long signed int	I.	% lf
B.	double	II.	% Lf
C.	long double	III.	% c
D.	unsigned character	IV.	% ld

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

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

Options :

55125174113. 1

55125174114. 2

55125174115. 3

55125174116. 4

Question Number : 80 Question Id : 55125119026 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following are correct about constructors in C++ ?

A. They have the same name as the class.
B. They can return values.
C. They are called automatically when an object is created.
D. They can be overloaded.
E. They can be inherited.

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

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

Options :

55125174117. 1

55125174118. 2

55125174119. 3

55125174120. 4

Question Number : 80 Question Id : 55125119026 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following are correct about constructors in C++ ?

A. They have the same name as the class.
B. They can return values.
C. They are called automatically when an object is created.
D. They can be overloaded.
E. They can be inherited.

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

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

Options :

55125174117. 1

55125174118. 2

55125174119. 3

55125174120. 4

Question Number : 81 Question Id : 55125119027 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following data types in non-decreasing order according to the length of their representation in C++.

A. char
B. int
C. float
D. double

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

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

Options :

55125174121. 1

55125174122. 2

55125174123. 3

55125174124. 4

Question Number : 81 Question Id : 55125119027 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following data types in non-decreasing order according to the length of their representation in C++.

A. char

B. int

C. float

D. double

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

(1) B, A, C, D

(2) A, B, D, C

(3) D, C, B, A

(4) A, B, C, D

Options :

55125174121. 1

55125174122. 2

55125174123. 3

55125174124. 4

Question Number : 82 Question Id : 55125119028 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	Pivot point	I.	Reflection
B.	Fixed point	II.	Shear
C.	Mirror image	III.	Rotation
D.	Distortion	IV.	Scaling

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

Options :

55125174125. 1

55125174126. 2

55125174127. 3

55125174128. 4

Question Number : 82 Question Id : 55125119028 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	Pivot point	I.	Reflection
B.	Fixed point	II.	Shear
C.	Mirror image	III.	Rotation
D.	Distortion	IV.	Scaling

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

Options :

55125174125. 1

55125174126. 2

55125174127. 3

55125174128. 4

Question Number : 83 Question Id : 55125119029 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The number of pixel column divided by the number of scan lines that can be displayed by the system, is called

1. Pixmap
2. Bitmap
3. Aspect ratio
4. Depth

Options :

55125174129. 1

55125174130. 2

55125174131. 3

55125174132. 4

Question Number : 83 Question Id : 55125119029 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The number of pixel column divided by the number of scan lines that can be displayed by the system, is called

1. Pixmap
2. Bitmap
3. Aspect ratio
4. Depth

Options :

55125174129. 1

55125174130. 2

55125174131. 3

55125174132. 4

Question Number : 84 Question Id : 55125119030 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following relational algebraic expression is equivalent to the SQL query SELECT X FROM B WHERE Y ?

(1) $\sigma_y(\pi_x(B))$
(2) $\pi_y(\sigma_x(B))$
(3) $\sigma_x(\pi_x(B))$
(4) $\pi_x(\sigma_y(B))$

Options :

55125174133. 1

55125174134. 2

55125174135. 3

55125174136. 4

Question Number : 84 Question Id : 55125119030 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following relational algebraic expression is equivalent to the SQL query SELECT X FROM B WHERE Y ?

(1) $\sigma_y(\pi_x(B))$
(2) $\pi_y(\sigma_x(B))$
(3) $\sigma_x(\pi_x(B))$
(4) $\pi_x(\sigma_y(B))$

Options :

55125174133. 1

55125174134. 2

55125174135. 3

55125174136. 4

Question Number : 85 Question Id : 55125119031 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A safe expression in relational calculus is one that is guaranteed to yield

1. Finite number of tuples
2. Finite number of attributes
3. Finite number of null values
4. Finite number of indices

Options :

55125174137. 1

55125174138. 2

55125174139. 3

55125174140. 4

Question Number : 85 Question Id : 55125119031 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A safe expression in relational calculus is one that is guaranteed to yield

1. Finite number of tuples
2. Finite number of attributes
3. Finite number of null values
4. Finite number of indices

Options :

55125174137. 1

55125174138. 2

55125174139. 3

55125174140. 4

Question Number : 86 Question Id : 55125119032 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Following is not the feature/characteristics of Linked-List allocation of Files in a File system :

(1) No space is lost in this allocation to disk fragmentation (except for internal fragmentation in the last block)

(2) Reading of files or accessing them in Random access is very fast

(3) Amount of data stored in a block is not in powers of 2 as pointer takes few bytes

(4) The disadvantages of Linked-List allocation can be overcome by using Table in main memory called FAT

Options :

55125174141. 1

55125174142. 2

55125174143. 3

55125174144. 4

Question Number : 86 Question Id : 55125119032 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Following is not the feature/characteristics of Linked-List allocation of Files in a File system :

(1) No space is lost in this allocation to disk fragmentation (except for internal fragmentation in the last block)

(2) Reading of files or accessing them in Random access is very fast

(3) Amount of data stored in a block is not in powers of 2 as pointer takes few bytes

(4) The disadvantages of Linked-List allocation can be overcome by using Table in main memory called FAT

Options :

55125174141. 1

55125174142. 2

55125174143. 3

55125174144. 4

Question Number : 87 Question Id : 55125119033 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following are true?

A. A database may have only one primary key
B. Every key is a candidate key
C. There can be multiple candidate keys
D. There can be more than one super keys
E. Every candidate key is a primary key.

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

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

Options :

55125174145. 1

55125174146. 2

55125174147. 3

55125174148. 4

Question Number : 87 Question Id : 55125119033 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following are true?

A. A database may have only one primary key
B. Every key is a candidate key
C. There can be multiple candidate keys
D. There can be more than one super keys
E. Every candidate key is a primary key.

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

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

Options :

55125174145. 1

55125174146. 2

55125174147. 3

55125174148. 4

Question Number : 88 Question Id : 55125119034 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

For the relation schema r (M,Y, P, MP, C) and set of functional dependencies F = {M→MP, {M, Y} → P, MP → C}, which of the following is the key?

1. M
2. {M, Y}
3. {M, C}
4. MP

Options :

55125174149. 1

55125174150. 2

55125174151. 3

55125174152. 4

Question Number : 88 Question Id : 55125119034 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

For the relation schema r (M,Y, P, MP, C) and set of functional dependencies F = {M→MP, {M, Y} → P, MP → C}, which of the following is the key?

1. M
2. {M, Y}
3. {M, C}
4. MP

Options :

55125174149. 1

55125174150. 2

55125174151. 3

55125174152. 4

Question Number : 89 Question Id : 55125119035 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In order to define the relationship between two entity sets, which of the following operations can be used?

1. Concatenation
2. Adding
3. Cartesian product
4. Union

Options :

55125174153. 1

55125174154. 2

55125174155. 3

55125174156. 4

Question Number : 89 Question Id : 55125119035 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In order to define the relationship between two entity sets, which of the following operations can be used?

1. Concatenation
2. Adding
3. Cartesian product
4. Union

Options :

55125174153. 1

55125174154. 2

55125174155. 3

55125174156. 4

Question Number : 90 Question Id : 55125119036 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the correct sequence of database design process?

A. Create conceptual schema
B. Data model mapping
C. Requirements collection and analysis
D. Physical design

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

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

Options :

55125174157. 1

55125174158. 2

55125174159. 3

55125174160. 4

Question Number : 90 Question Id : 55125119036 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the correct sequence of database design process?

A. Create conceptual schema
B. Data model mapping
C. Requirements collection and analysis
D. Physical design

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

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

Options :

55125174157. 1

55125174158. 2

55125174159. 3

55125174160. 4

Question Number : 91 Question Id : 55125119037 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	Wait-for graph	I.	Holds all locks until it commits
B.	Precedence graph	II.	Holds write-locks until it commits
C.	Rigorous 2PL	III.	Use to check deadlocks
D.	Strict 2PL	IV.	Used to check serialzability

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

Options :

55125174161. 1

55125174162. 2

55125174163. 3

55125174164. 4

Question Number : 91 Question Id : 55125119037 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	Wait-for graph	I.	Holds all locks until it commits
B.	Precedence graph	II.	Holds write-locks until it commits
C.	Rigorous 2PL	III.	Use to check deadlocks
D.	Strict 2PL	IV.	Used to check serialzability

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

Options :

55125174161. 1

55125174162. 2

55125174163. 3

55125174164. 4

Question Number : 92 Question Id : 55125119038 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In Rate Monotonic scheduling, if a task has a period of 80 ms and an execution time of 55 ms, then its processor utilization and task rate will be

1. 0.69, 12.5 Hz
2. 0.58, 12.3 Hz
3. 0.48, 11.4 Hz
4. 0.38, 10.5 Hz

Options :

55125174165. 1

55125174166. 2

55125174167. 3

55125174168. 4

Question Number : 92 Question Id : 55125119038 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In Rate Monotonic scheduling, if a task has a period of 80 ms and an execution time of 55 ms, then its processor utilization and task rate will be

1. 0.69, 12.5 Hz
2. 0.58, 12.3 Hz
3. 0.48, 11.4 Hz
4. 0.38, 10.5 Hz

Options :

55125174165. 1

55125174166. 2

55125174167. 3

55125174168. 4

Question Number : 93 Question Id : 55125119039 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In disk scheduling example, suppose the disk tracks are numbered from 0 to 49. Head is presently positioned at track 15 and requests for tracks 4, 40, 11, 35, 7 and 14 have arrived (in that order). It takes 1 ms to travel from one track to the next adjacent track. Following disk scheduling algorithms are to be executed and total time traversed is to be recorded in ms in ascending order (assume arm-movement toward high numbered request first, wherever needed)

A. FCFS

B. LOOK

C. SSTF

D. SCAN

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

(1) C, B, D, A

(2) B, A, C, D

(3) C, D, B, A

(4) D, B, C, A

Options :

55125174169. 1

55125174170. 2

55125174171. 3

55125174172. 4

Question Number : 93 Question Id : 55125119039 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In disk scheduling example, suppose the disk tracks are numbered from 0 to 49. Head is presently positioned at track 15 and requests for tracks 4, 40, 11, 35, 7 and 14 have arrived (in that order). It takes 1 ms to travel from one track to the next adjacent track. Following disk scheduling algorithms are to be executed and total time traversed is to be recorded in ms in ascending order (assume arm-movement toward high numbered request first, wherever needed)

A. FCFS

B. LOOK

C. SSTF

D. SCAN

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

(1) C, B, D, A

(2) B, A, C, D

(3) C, D, B, A

(4) D, B, C, A

Options :

55125174169. 1

55125174170. 2

55125174171. 3

55125174172. 4

Question Number : 94 Question Id : 55125119040 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

For the reference string: (given that number of frames is 3)
7 0 1 2 0 3 0 4 2 3 0 3 2 1 2 0 1 7 0 1
for the optimal page replacement algorithm, which of the following will represent the hit ratio?

1. 11/20
2. 10/20
3. 9/20
4. 12/20

Options :

55125174173. 1

55125174174. 2

55125174175. 3

55125174176. 4

Question Number : 94 Question Id : 55125119040 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

For the reference string: (given that number of frames is 3)
7 0 1 2 0 3 0 4 2 3 0 3 2 1 2 0 1 7 0 1
for the optimal page replacement algorithm, which of the following will represent the hit ratio?

1. 11/20
2. 10/20
3. 9/20
4. 12/20

Options :

55125174173. 1

55125174174. 2

55125174175. 3

55125174176. 4

Question Number : 95 Question Id : 55125119041 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In open addressing, how are collisions typically resolved ?

(1) By probing and finding the next available slot in the table
(2) By creating a linked list at the point of collision
(3) By rehashing the entire table
(4) By storing the colliding elements in a separate array

Options :

55125174177. 1

55125174178. 2

55125174179. 3

55125174180. 4

Question Number : 95 Question Id : 55125119041 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In open addressing, how are collisions typically resolved ?

(1) By probing and finding the next available slot in the table

(2) By creating a linked list at the point of collision

(3) By rehashing the entire table

(4) By storing the colliding elements in a separate array

Options :

55125174177. 1

55125174178. 2

55125174179. 3

55125174180. 4

Question Number : 96 Question Id : 55125119042 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

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

	List - I		**List - II**
A.	Macros	I.	Converts high level code to object (Machine) code
B.	Assembler	II.	Used for code Expansion
C.	Loader	III.	Used to translate assembly language code to object code
D.	Compiler	IV.	Used to allocate memory and relocate program in memory

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

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

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

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

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

Options :

55125174181. 1

55125174182. 2

55125174183. 3

55125174184. 4

Question Number : 96 Question Id : 55125119042 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

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

	List - I		**List - II**
A.	Macros	I.	Converts high level code to object (Machine) code
B.	Assembler	II.	Used for code Expansion
C.	Loader	III.	Used to translate assembly language code to object code
D.	Compiler	IV.	Used to allocate memory and relocate program in memory

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

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

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

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

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

Options :

55125174181. 1

55125174182. 2

55125174183. 3

55125174184. 4

Question Number : 97 Question Id : 55125119043 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is not an interprocessor communication mechanism in UNIX?

1. Pipes
2. Messages
3. Shared memory
4. Semaphore

Options :

55125174185. 1

55125174186. 2

55125174187. 3

55125174188. 4

Question Number : 97 Question Id : 55125119043 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is not an interprocessor communication mechanism in UNIX?

1. Pipes
2. Messages
3. Shared memory
4. Semaphore

Options :

55125174185. 1

55125174186. 2

55125174187. 3

55125174188. 4

Question Number : 98 Question Id : 55125119044 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	Disk Scheduling	I.	Round Robin
B.	Batch Processing	II.	SCAN
C.	Time Sharing	III.	LIFO
D.	Interrupt Processing	IV.	FIFO

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

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

Options :

55125174189. 1

55125174190. 2

55125174191. 3

55125174192. 4

Question Number : 98 Question Id : 55125119044 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	Disk Scheduling	I.	Round Robin
B.	Batch Processing	II.	SCAN
C.	Time Sharing	III.	LIFO
D.	Interrupt Processing	IV.	FIFO

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

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

Options :

55125174189. 1

55125174190. 2

55125174191. 3

55125174192. 4

Question Number : 99 Question Id : 55125119045 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is not a part of the general activation record of a procedure?

1. Local data
2. Global data
3. Access link
4. Temporaries

Options :

55125174193. 1

55125174194. 2

55125174195. 3

55125174196. 4

Question Number : 99 Question Id : 55125119045 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is not a part of the general activation record of a procedure?

1. Local data
2. Global data
3. Access link
4. Temporaries

Options :

55125174193. 1

55125174194. 2

55125174195. 3

55125174196. 4

Question Number : 100 Question Id : 55125119046 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I (Process model)		**LIST-II (Characteristics)**
A.	Classical Waterfall Model	I.	Risk Analysis
B.	Prototype Model	II.	Large Problem with Incremental delivery
C.	Evolutionary Model	III.	Clear Requirements
D.	Spiral Model	IV.	Requirements are not well understood

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

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

Options :

55125174197. 1

55125174198. 2

55125174199. 3

55125174200. 4

Question Number : 100 Question Id : 55125119046 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I (Process model)		LIST-II (Characteristics)
A.	Classical Waterfall Model	I.	Risk Analysis
B.	Prototype Model	II.	Large Problem with Incremental delivery
C.	Evolutionary Model	III.	Clear Requirements
D.	Spiral Model	IV.	Requirements are not well understood

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

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

Options :

55125174197. 1

55125174198. 2

55125174199. 3

55125174200. 4

Question Number : 101 Question Id : 55125119047 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which document outlines the functional and non-functional requirements of a software system?

1. SRS Document
2. Design Document
3. Test Plan
4. User Manual

Options :

55125174201. 1

55125174202. 2

55125174203. 3

55125174204. 4

Question Number : 101 Question Id : 55125119047 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which document outlines the functional and non-functional requirements of a software system?

1. SRS Document
2. Design Document
3. Test Plan
4. User Manual

Options :

55125174201. 1

55125174202. 2

55125174203. 3

55125174204. 4

Question Number : 102 Question Id : 55125119048 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is not a 'concern' during the management of a software project?

1. Project/Product information
2. Product quality
3. Time
4. Money

Options :

55125174205. 1

55125174206. 2

55125174207. 3

55125174208. 4

Question Number : 102 Question Id : 55125119048 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is not a 'concern' during the management of a software project?

1. Project/Product information
2. Product quality
3. Time
4. Money

Options :

55125174205. 1

55125174206. 2

55125174207. 3

55125174208. 4

Question Number : 103 Question Id : 55125119049 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I Life Cycle Model		LIST-II Description	
A.	Waterfall Model	I.	Interactive collaboration, customer feedback, rapid releases
B.	Agile Methodology	II.	Automatic testing, frequent integration, main branch
C.	Test-driven Development (TDD)	III.	Sequential, fixed steps from requirement to maintenance
D.	Continual Integration (CI)	IV.	Write tests before code implementation

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

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

Options :

55125174209. 1

55125174210. 2

55125174211. 3

55125174212. 4

Question Number : 103 Question Id : 55125119049 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I Life Cycle Model		LIST-II Description	
A.	Waterfall Model	I.	Interactive collaboration, customer feedback, rapid releases
B.	Agile Methodology	II.	Automatic testing, frequent integration, main branch
C.	Test-driven Development (TDD)	III.	Sequential, fixed steps from requirement to maintenance
D.	Continual Integration (CI)	IV.	Write tests before code implementation

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

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

Options :

55125174209. 1

55125174210. 2

55125174211. 3

55125174212. 4

Question Number : 104 Question Id : 55125119050 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If $f(n) = \theta(g(n))$ and $g(n) = O(h(n))$, then which of the following is **true** ?

(1) $f(n) = O(h(n))$

(2) $f(n) = \theta(h(n))$

(3) $h(n) = O(f(n))$

(4) $h(n) = \theta(f(n))$

Options :

55125174213. 1

55125174214. 2

55125174215. 3

55125174216. 4

Question Number : 104 Question Id : 55125119050 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If $f(n) = \theta(g(n))$ and $g(n) = O(h(n))$, then which of the following is **true** ?

(1) $f(n) = O(h(n))$

(2) $f(n) = \theta(h(n))$

(3) $h(n) = O(f(n))$

(4) $h(n) = \theta(f(n))$

Options :

55125174213. 1

55125174214. 2

55125174215. 3

55125174216. 4

Question Number : 105 Question Id : 55125119051 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A tree is :

A. a circuitless connected graph

B. a connected graph of 'n' vertices with $(n-1)$ edges

C. a circuitless graph of 'n' vertices with $(n-1)$ edges

D. a minimally connected graph

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

(1) A, B and C only

(2) B, C and D only

(3) A, B, C and D

(4) A and B only

Options :

55125174217. 1

55125174218. 2

55125174219. 3

55125174220. 4

Question Number : 105 Question Id : 55125119051 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A tree is :

A. a circuitless connected graph

B. a connected graph of 'n' vertices with $(n-1)$ edges

C. a circuitless graph of 'n' vertices with $(n-1)$ edges

D. a minimally connected graph

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

(1) A, B and C only

(2) B, C and D only

(3) A, B, C and D

(4) A and B only

Options :

55125174217. 1

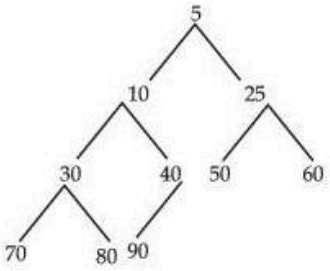
55125174218. 2

55125174219. 3

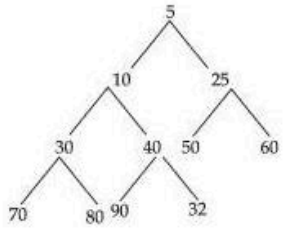
55125174220. 4

Question Number : 106 Question Id : 55125119052 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

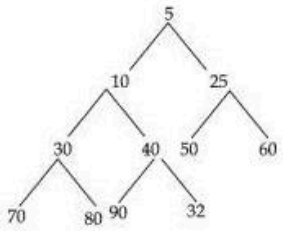
How will the following min-heap appear on inserting the key 32 ?



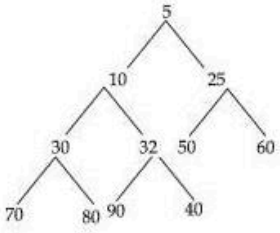
(1)



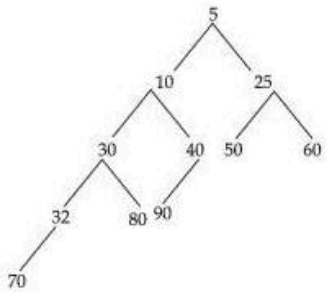
(2)



(3)



(4)



Options :

55125174221. 1

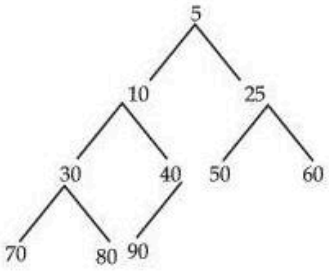
55125174222. 2

55125174223. 3

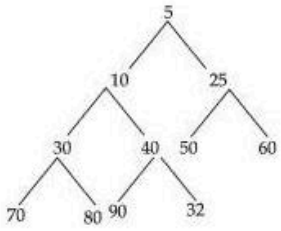
55125174224. 4

Question Number : 106 Question Id : 55125119052 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

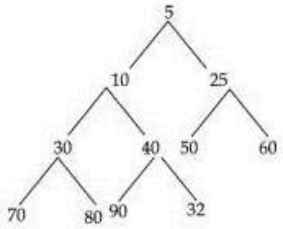
How will the following min-heap appear on inserting the key 32 ?



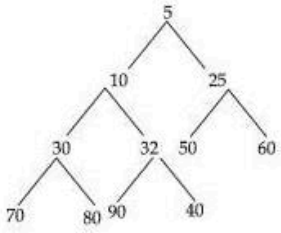
(1)



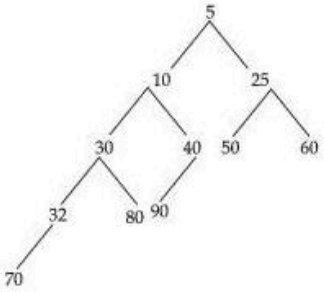
(2)



(3)



(4)



Options :

55125174221. 1

55125174222. 2

55125174223. 3

55125174224. 4

Question Number : 107 Question Id : 55125119053 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

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

	List - I		**List - II**
A.	Merge sort	I.	n^2
B.	Binary search	II.	nlogn
C.	Quick sort	III.	n
D.	Search in an unsorted array	IV.	logn

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

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

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

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

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

Options :

55125174225. 1

55125174226. 2

55125174227. 3

55125174228. 4

Question Number : 107 Question Id : 55125119053 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

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

	List - I		**List - II**
A.	Merge sort	I.	n^2
B.	Binary search	II.	nlogn
C.	Quick sort	III.	n
D.	Search in an unsorted array	IV.	logn

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

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

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

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

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

Options :

55125174225. 1

55125174226. 2

55125174227. 3

55125174228. 4

Question Number : 108 Question Id : 55125119054 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A binary search tree is obtained by inserting the words "Mathematics", "Physics", "Geography", "Zoology", "Metrology", "Geology", "Psychology" and "Chemistry" in order. Words are compared by dictionary order. Arrange the following words in increasing order of their level in the tree.

A. Mathematics
B. Zoology
C. Psychology
D. Physics

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

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

Options :

55125174229. 1

55125174230. 2

55125174231. 3

55125174232. 4

Question Number : 108 Question Id : 55125119054 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A binary search tree is obtained by inserting the words "Mathematics", "Physics", "Geography", "Zoology", "Metrology", "Geology", "Psychology" and "Chemistry" in order. Words are compared by dictionary order. Arrange the following words in increasing order of their level in the tree.

A. Mathematics
B. Zoology
C. Psychology
D. Physics

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

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

Options :

55125174229. 1

55125174230. 2

55125174231. 3

55125174232. 4

Question Number : 109 Question Id : 55125119055 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In the worst case, the smallest number of comparisons required by any sorting algorithm, which does only binary comparisons is

1. $\lceil \log n \rceil$
2. $\lceil \log n! \rceil$
3. $\lceil \log n(n-1) \rceil$
4. 2^n

Options :

55125174233. 1

55125174234. 2

55125174235. 3

55125174236. 4

Question Number : 109 Question Id : 55125119055 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In the worst case, the smallest number of comparisons required by any sorting algorithm, which does only binary comparisons is

1. $\lceil \log n \rceil$
2. $\lceil \log n! \rceil$
3. $\lceil \log n(n-1) \rceil$
4. 2^n

Options :

55125174233. 1

55125174234. 2

55125174235. 3

55125174236. 4

Question Number : 110 Question Id : 55125119056 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The number of leaf nodes in a full 4-ary rooted tree of n nodes is

1. n/2
2. (2 n – 1) / 4
3. (n + 1) / 4
4. (3 n + 1) / 4

Options :

55125174237. 1

55125174238. 2

55125174239. 3

55125174240. 4

Question Number : 110 Question Id : 55125119056 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The number of leaf nodes in a full 4-ary rooted tree of n nodes is

1. n/2
2. (2 n – 1) / 4
3. (n + 1) / 4
4. (3 n + 1) / 4

Options :

55125174237. 1

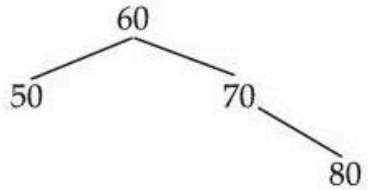
55125174238. 2

55125174239. 3

55125174240. 4

Question Number : 111 Question Id : 55125119057 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the maximum number of nodes that can be inserted in the following AVL tree without changing its height ?



(1) 2

(2) 4

(3) 3

(4) 5

Options :

55125174241. 1

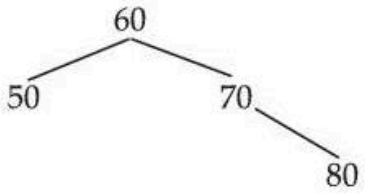
55125174242. 2

55125174243. 3

55125174244. 4

Question Number : 111 Question Id : 55125119057 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the maximum number of nodes that can be inserted in the following AVL tree without changing its height ?



(1) 2

(2) 4

(3) 3

(4) 5

Options :

55125174241. 1

55125174242. 2

55125174243. 3

55125174244. 4

Question Number : 112 Question Id : 55125119058 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the height of the binary search tree obtained by inserting the numbers
40, 60, 50, 37, 52, 15, 8, 22 in the given order

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

Options :

55125174245. 1

55125174246. 2

55125174247. 3

55125174248. 4

Question Number : 112 Question Id : 55125119058 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the height of the binary search tree obtained by inserting the numbers
40, 60, 50, 37, 52, 15, 8, 22 in the given order

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

Options :

55125174245. 1
55125174246. 2
55125174247. 3
55125174248. 4

Question Number : 113 Question Id : 55125119059 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I Data structure		**LIST-II Characteristics**
A.	Stack	I.	First-In-First-Out (FIFO) order
B.	Queue	II.	Last-In-First-Out (LIFO) order
C.	Linked list	III.	Nodes with two children ordered
D.	Binary search tree	IV.	Dynamic size, nodes linked sequentially

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

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

Options :

55125174249. 1
55125174250. 2
55125174251. 3
55125174252. 4

Question Number : 113 Question Id : 55125119059 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I Data structure		**LIST-II Characteristics**
A.	Stack	I.	First-In-First-Out (FIFO) order
B.	Queue	II.	Last-In-First-Out (LIFO) order
C.	Linked list	III.	Nodes with two children ordered
D.	Binary search tree	IV.	Dynamic size, nodes linked sequentially

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

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

Options :

55125174249. 1
55125174250. 2

55125174251. 3

55125174252. 4

Question Number : 114 Question Id : 55125119060 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The number of vertices of odd degree in any graph of 'n' vertices with 'e' edges is :

(1) odd

(2) even

(3) $(n-e)$

(4) prime

Options :

55125174253. 1

55125174254. 2

55125174255. 3

55125174256. 4

Question Number : 114 Question Id : 55125119060 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The number of vertices of odd degree in any graph of 'n' vertices with 'e' edges is :

(1) odd

(2) even

(3) $(n-e)$

(4) prime

Options :

55125174253. 1

55125174254. 2

55125174255. 3

55125174256. 4

Question Number : 115 Question Id : 55125119061 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following statements maybe false for a decision problem $X \in NP$

1. X can be solved in nondeterministic polynomial time
2. X can be solved in exponential time
3. X can be solved in polynomial space
4. X can be solved in deterministic polynomial time

Options :

55125174257. 1

55125174258. 2

55125174259. 3

55125174260. 4

Question Number : 115 Question Id : 55125119061 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following statements maybe false for a decision problem $X \in NP$

1. X can be solved in nondeterministic polynomial time
2. X can be solved in exponential time
3. X can be solved in polynomial space
4. X can be solved in deterministic polynomial time

Options :

55125174257. 1

55125174258. 2

55125174259. 3

55125174260. 4

Question Number : 116 Question Id : 55125119062 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following families of languages from specialization to generalization, defined over alphabet Σ :

A. Family of all regular languages.

B. Family of all Turing acceptable languages.

C. Family of all Turing decidable languages.

D. Family of all context free languages.

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

(1) A, B, C, D

(2) A, C, B, D

(3) A, D, C, B

(4) A, D, B, C

Options :

55125174261. 1

55125174262. 2

55125174263. 3

55125174264. 4

Question Number : 116 Question Id : 55125119062 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following families of languages from specialization to generalization, defined over alphabet Σ :

A. Family of all regular languages.

B. Family of all Turing acceptable languages.

C. Family of all Turing decidable languages.

D. Family of all context free languages.

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

(1) A, B, C, D

(2) A, C, B, D

(3) A, D, C, B

(4) A, D, B, C

Options :

55125174261. 1

55125174262. 2

55125174263. 3

55125174264. 4

Question Number : 117 Question Id : 55125119063 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If L_1 is a regular language and L_2 is a context free language, which of the following statement is correct ?

(1) Any subset of $L_1 \cup L_2$ is context free.

(2) $L_1 \cap L_2$ is a context free language.

(3) $L_1 \cap L_2$ is a regular language.

(4) $L_1 \cap L_2$ is accepted by a deterministic push down automatons.

Options :

55125174265. 1

55125174266. 2

55125174267. 3

55125174268. 4

Question Number : 117 Question Id : 55125119063 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If L_1 is a regular language and L_2 is a context free language, which of the following statement is correct ?

(1) Any subset of $L_1 \cup L_2$ is context free.

(2) $L_1 \cap L_2$ is a context free language.

(3) $L_1 \cap L_2$ is a regular language.

(4) $L_1 \cap L_2$ is accepted by a deterministic push down automatons.

Options :

55125174265. 1

55125174266. 2

55125174267. 3

55125174268. 4

Question Number : 118 Question Id : 55125119064 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Given the functions:

Predecessor function : Pred $(x) = x - 1$

and T(x,y+1) = pred (T(x,y)),T(x,0)=x.

Which of the following operations is a candidate for T?

1. Subtraction Operation
2. Addition Operation
3. Multiplication Operation
4. Division Operation

Options :

55125174269. 1

55125174270. 2

55125174271. 3

55125174272. 4

Question Number : 118 Question Id : 55125119064 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Given the functions:

Predecessor function : Pred $(x) = x - 1$

and T(x,y+1) = pred (T(x,y)),T(x,0)=x.

Which of the following operations is a candidate for T?

1. Subtraction Operation
2. Addition Operation
3. Multiplication Operation
4. Division Operation

Options :

55125174269. 1

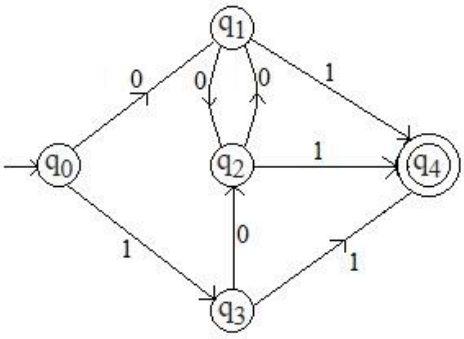
55125174270. 2

55125174271. 3

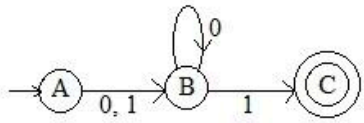
55125174272. 4

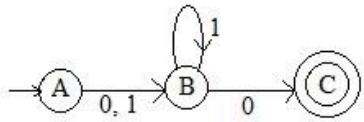
Question Number : 119 Question Id : 55125119065 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

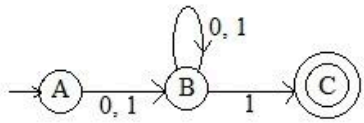
The minimum state of DFA of the following would be the

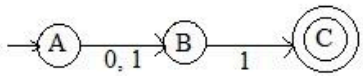


following:

1.


2.


3.


4.


Options :

55125174273. 1

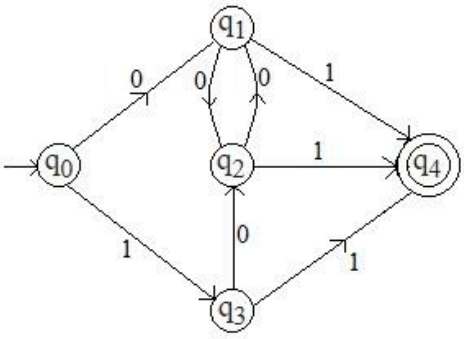
55125174274. 2

55125174275. 3

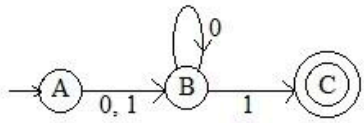
55125174276. 4

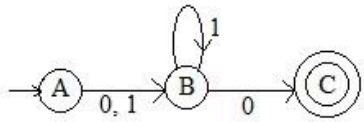
Question Number : 119 Question Id : 55125119065 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

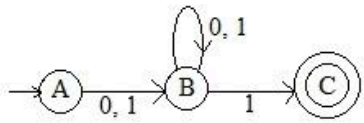
The minimum state of DFA of the following would be the

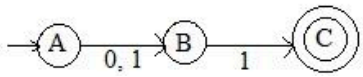


following:

1.


2.


3.


4.


Options :

55125174273. 1

55125174274. 2

55125174275. 3

55125174276. 4

Question Number : 120 Question Id : 55125119066 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I Language		LIST-II Type of Language
A.	$L_1 = \{a^n b^m \mid n, m \geq 0\}$	I.	Unrestricted
B.	$L_2 = \{a^n b^m \mid (n = m) \geq 0\}$	II.	Context Sensitive
C.	$L_3 = \{a^n b^n c^n d^n e^n \mid n \geq 1\}$	III.	Regular
D.	$L_4 = \{a^n b^n c^m d^n e^2 \mid n, m \geq 0\}$	IV.	Context Free

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

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

Options :

55125174277. 1

55125174278. 2

55125174279. 3

55125174280. 4

Question Number : 120 Question Id : 55125119066 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I Language		LIST-II Type of Language
A.	$L_1 = \{a^n b^m \mid n, m \geq 0\}$	I.	Unrestricted
B.	$L_2 = \{a^n b^m \mid (n = m) \geq 0\}$	II.	Context Sensitive
C.	$L_3 = \{a^n b^n c^n d^n e^n \mid n \geq 1\}$	III.	Regular
D.	$L_4 = \{a^n b^n c^m d^n e^2 \mid n, m \geq 0\}$	IV.	Context Free

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

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

Options :

55125174277. 1

55125174278. 2

55125174279. 3

55125174280. 4

Question Number : 121 Question Id : 55125119067 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following statements is incorrect ?

(1) Given a context free grammar G and a string x, an algorithm can be designed to decide whether $x \in L(G)$ in polynomial time.

(2) Given a context free language L, its complement is also context free.

(3) The language $\{a^n b^m c^p : m, n, p \geq 0, m \neq n \text{ or } m \neq p\}$ is not deterministic context free.

(4) Class of deterministic context free languages is closed under intersection.

Options :

55125174281. 1

55125174282. 2

55125174283. 3

55125174284. 4

Question Number : 121 Question Id : 55125119067 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following statements is incorrect ?

(1) Given a context free grammar G and a string x, an algorithm can be designed to decide whether $x \in L(G)$ in polynomial time.

(2) Given a context free language L, its complement is also context free.

(3) The language $\{a^n b^m c^p : m, n, p \geq 0, m \neq n \text{ or } m \neq p\}$ is not deterministic context free.

(4) Class of deterministic context free languages is closed under intersection.

Options :

55125174281. 1

55125174282. 2

55125174283. 3

55125174284. 4

Question Number : 122 Question Id : 55125119068 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Choose the correct order for the following sequence in the context of OSI layers (from bottom to top)

A. Transforming the datagrams into frame for transmission
B. Transmission of bits over communication channel
C. Handling user interface
D. Control and monitoring of subnet
E. Transmission of data using either connection-oriented or connection-less protocol

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

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

Options :

55125174285. 1

55125174286. 2

55125174287. 3

55125174288. 4

Question Number : 122 Question Id : 55125119068 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Choose the correct order for the following sequence in the context of OSI layers (from bottom to top)

A. Transforming the datagrams into frame for transmission
B. Transmission of bits over communication channel
C. Handling user interface
D. Control and monitoring of subnet
E. Transmission of data using either connection-oriented or connection-less protocol

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

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

Options :

55125174285. 1

55125174286. 2

55125174287. 3

55125174288. 4

Question Number : 123 Question Id : 55125119069 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Consider the following binary codes

C_1	00000
C_2	01011
C_3	10101

What is the maximum Hamming Distance value for all pairs of above mentioned codes.

1. 2
2. 3
3. 4
4. 5

Options :

55125174289. 1

55125174290. 2

55125174291. 3

55125174292. 4

Question Number : 123 Question Id : 55125119069 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Consider the following binary codes

C_1	00000
C_2	01011
C_3	10101

What is the maximum Hamming Distance value for all pairs of above mentioned codes.

1. 2
2. 3
3. 4
4. 5

Options :

55125174289. 1

55125174290. 2

55125174291. 3

55125174292. 4

Question Number : 124 Question Id : 55125119070 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I SMTP Response Code		**LIST-II Description**
A.	214	I.	Service Ready
B.	421	II.	Transaction Failed
C.	220	III.	Help message
D.	554	IV.	Service Not Available

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

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

Options :

55125174293. 1

55125174294. 2

55125174295. 3

55125174296. 4

Question Number : 124 Question Id : 55125119070 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

	LIST-I SMTP Response Code		LIST-II Description
A.	214	I.	Service Ready
B.	421	II.	Transaction Failed
C.	220	III.	Help message
D.	554	IV.	Service Not Available

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

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

Options :

55125174293. 1

55125174294. 2

55125174295. 3

55125174296. 4

Question Number : 125 Question Id : 55125119071 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Identify the incorrect statements from the following regarding the protocols used in the TCP/IP protocol suite.

A. IP is a reliable connection less protocol.
B. ARP is used to find the physical address of a node given its logical address
C. ICMP is used to send notification of datagram problems to the recipient of the message.
D. IGMP is used to facilitate simultaneous transmission of a message to a group of recipients.

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

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

Options :

55125174297. 1

55125174298. 2

55125174299. 3

55125174300. 4

Question Number : 125 Question Id : 55125119071 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Identify the incorrect statements from the following regarding the protocols used in the TCP/IP protocol suite.

A. IP is a reliable connection less protocol.
B. ARP is used to find the physical address of a node given its logical address
C. ICMP is used to send notification of datagram problems to the recipient of the message.
D. IGMP is used to facilitate simultaneous transmission of a message to a group of recipients.

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

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

Options :

55125174297. 1

55125174298. 2

55125174299. 3

55125174300. 4

Question Number : 126 Question Id : 55125119072 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following in the correct order in the context of OSI model (from bottom to top)

A. Network layer
B. Physical layer
C. Presentation layer
D. Data link layer
E. Application layer

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

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

Options :

55125174301. 1

55125174302. 2

55125174303. 3

55125174304. 4

Question Number : 126 Question Id : 55125119072 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Arrange the following in the correct order in the context of OSI model (from bottom to top)

A. Network layer
B. Physical layer
C. Presentation layer
D. Data link layer
E. Application layer

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

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

Options :

55125174301. 1

55125174302. 2

55125174303. 3

55125174304. 4

Question Number : 127 Question Id : 55125119073 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	Data link layer	I.	Encryption
B.	Network layer	II.	Connection Control
C.	Transport layer	III.	Routing
D.	Presentation layer	IV.	Framing

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

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

Options :

55125174305. 1

55125174306. 2

55125174307. 3

55125174308. 4

Question Number : 127 Question Id : 55125119073 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	Data link layer	I.	Encryption
B.	Network layer	II.	Connection Control
C.	Transport layer	III.	Routing
D.	Presentation layer	IV.	Framing

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

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

Options :

55125174305. 1

55125174306. 2

55125174307. 3

55125174308. 4

Question Number : 128 Question Id : 55125119074 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The one way propagation delay for a single bit of information (travelling at the speed of light i.e., 3×10^8 meters per second) over a fiber optic cable from point A to point B, 12000 kilometers apart would be :

(1) 20 ms

(2) 5 ms

(3) 50 ms

(4) 40 ms

Options :

55125174309. 1

55125174310. 2

55125174311. 3

55125174312. 4

Question Number : 128 Question Id : 55125119074 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The one way propagation delay for a single bit of information (travelling at the speed of light i.e., 3×10^8 meters per second) over a fiber optic cable from point A to point B, 12000 kilometers apart would be :

(1) 20 ms

(2) 5 ms

(3) 50 ms

(4) 40 ms

Options :

55125174309. 1

55125174310. 2

55125174311. 3

55125174312. 4

Question Number : 129 Question Id : 55125119075 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The problem(s) in piggybacking acknowledgement frames is :

A. There is no need to send separate acknowledgement frames

B. It requires more bandwidth

C. To ascertain, how long the data link layer must wait for a packet onto which the acknowledgement is attached

D. Numbers of acknowledgement frames decrease

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

(1) A and D only

(2) B only

(3) B and C only

(4) C only

Options :

55125174313. 1

55125174314. 2

55125174315. 3

55125174316. 4

Question Number : 129 Question Id : 55125119075 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The problem(s) in piggybacking acknowledgement frames is :

A. There is no need to send separate acknowledgement frames

B. It requires more bandwidth

C. To ascertain, how long the data link layer must wait for a packet onto which the acknowledgement is attached

D. Numbers of acknowledgement frames decrease

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

(1) A and D only

(2) B only

(3) B and C only

(4) C only

Options :

55125174313. 1

55125174314. 2

55125174315. 3

55125174316. 4

Question Number : 130 Question Id : 55125119076 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is/are true for UDP protocol ?

A. It is called Uniform Data Protocol

B. It is called User Datagram Protocol

C. It belongs to Transport Layer

D. It belongs to Network Layer

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 D only

Options :

55125174317. 1

55125174318. 2

55125174319. 3

55125174320. 4

Question Number : 130 Question Id : 55125119076 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following is/are true for UDP protocol ?

A. It is called Uniform Data Protocol

B. It is called User Datagram Protocol

C. It belongs to Transport Layer

D. It belongs to Network Layer

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 D only

Options :

55125174317. 1

55125174318. 2

55125174319. 3

55125174320. 4

Question Number : 131 Question Id : 55125119077 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the maximum bit rate of a noiseless channel with a bandwidth of 2KHz, transmitting a signal with 8 levels

1. 12000 bps
2. 16000 bps
3. 4000 bps
4. 32000 bps

Options :

55125174321. 1
55125174322. 2
55125174323. 3
55125174324. 4

Question Number : 131 Question Id : 55125119077 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What is the maximum bit rate of a noiseless channel with a bandwidth of 2KHz, transmitting a signal with 8 levels

1. 12000 bps
2. 16000 bps
3. 4000 bps
4. 32000 bps

Options :

55125174321. 1
55125174322. 2
55125174323. 3
55125174324. 4

Question Number : 132 Question Id : 55125119078 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Choose the right sequence of stages for data transmission using CSMA/CD.

A. If the channel is clear, the sender sends the data.
B. The sender senses the channel for activity.
C. The sender waits for a random back off time before retransmitting.
D. Collision detection occurs if two devices transmit at the same time.

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

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

Options :

55125174325. 1
55125174326. 2
55125174327. 3
55125174328. 4

Question Number : 132 Question Id : 55125119078 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Choose the right sequence of stages for data transmission using CSMA/CD.

A. If the channel is clear, the sender sends the data.
B. The sender senses the channel for activity.
C. The sender waits for a random back off time before retransmitting.
D. Collision detection occurs if two devices transmit at the same time.

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

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

Options :

55125174325. 1

55125174326. 2

55125174327. 3

55125174328. 4

Question Number : 133 Question Id : 55125119079 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which topology requires a central controller or a hub?

1. Bus
2. Star
3. Mesh
4. Ring

Options :

55125174329. 1

55125174330. 2

55125174331. 3

55125174332. 4

Question Number : 133 Question Id : 55125119079 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which topology requires a central controller or a hub?

1. Bus
2. Star
3. Mesh
4. Ring

Options :

55125174329. 1

55125174330. 2

55125174331. 3

55125174332. 4

Question Number : 134 Question Id : 55125119080 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

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

	List - I		List - II
A.	SMTP	I.	Network layer
B.	UDP	II.	Transport layer
C.	Ethernet	III.	Application layer
D.	IP	IV.	Data Link layer

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

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

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

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

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

Options :

55125174333. 1

55125174334. 2

55125174335. 3

55125174336. 4

Question Number : 134 Question Id : 55125119080 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

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

	List - I		List - II
A.	SMTP	I.	Network layer
B.	UDP	II.	Transport layer
C.	Ethernet	III.	Application layer
D.	IP	IV.	Data Link layer

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

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

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

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

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

Options :

55125174333. 1

55125174334. 2

55125174335. 3

55125174336. 4

Question Number : 135 Question Id : 55125119081 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following technologies enables the creation of virtual servers in cloud computing environment?

1. DNS Server
2. Hypervisor
3. Firewall
4. Load Balancer

Options :

55125174337. 1

55125174338. 2

55125174339. 3

55125174340. 4

Question Number : 135 Question Id : 55125119081 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following technologies enables the creation of virtual servers in cloud computing environment?

1. DNS Server
2. Hypervisor
3. Firewall
4. Load Balancer

Options :

55125174337. 1

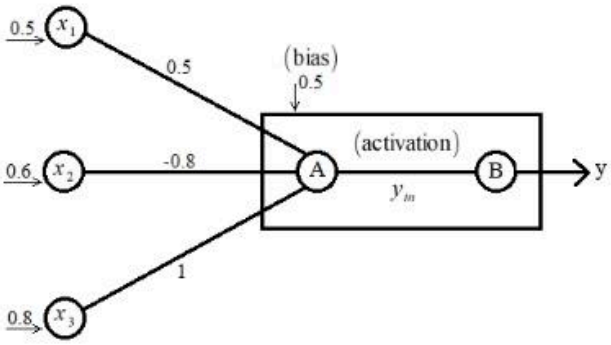
55125174338. 2

55125174339. 3

55125174340. 4

Question Number : 136 Question Id : 55125119082 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Consider the following neural network



What will be the net input yin and final output 'y' of this neural network given that the activation function is threshold function defined as follows

$$f(x)=\begin{cases}1 & if \quad x\geq 1\\ 0 & if \quad x<1\end{cases}$$

1. $y_{in} = 2.03, y = 1$
2. $y_{in} = 1.53, y = 1$
3. $y_{in} = 1.07, y = 1$
4. $y_{in} = 0.57, y = 0$

Options :

55125174341. 1

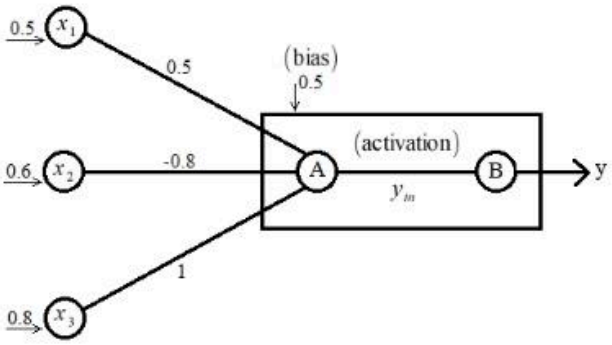
55125174342. 2

55125174343. 3

55125174344. 4

Question Number : 136 Question Id : 55125119082 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Consider the following neural network



What will be the net input yin and final output 'y' of this neural network given that the activation function is threshold function defined as follows

$$f(x)=\begin{cases}1 & if \quad x\geq 1\\ 0 & if \quad x<1\end{cases}$$

1. $y_{in} = 2.03, y = 1$
2. $y_{in} = 1.53, y = 1$
3. $y_{in} = 1.07, y = 1$
4. $y_{in} = 0.57, y = 0$

Options :

55125174341. 1

55125174342. 2

55125174343. 3

55125174344. 4

Question Number : 137 Question Id : 55125119083 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A doctor knows that the disease Meningitis causes a patient to have a stiff neck say 70% of time. The doctor also knows some unconditional facts : the prior probability that any patient has Meningitis is 1/50,000 and the prior probability that any patient has a stiff neck is 1%. Letting s be the proposition that the patient has a stiff neck and m the proposition that the patient has meningitis, compute the probability P(m/s) using Bayes' rule.

(1) .014

(2) .0014

(3) .14

(4) .00014

Options :

55125174345. 1

55125174346. 2

55125174347. 3

55125174348. 4

Question Number : 137 Question Id : 55125119083 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

A doctor knows that the disease Meningitis causes a patient to have a stiff neck say 70% of time. The doctor also knows some unconditional facts : the prior probability that any patient has Meningitis is 1/50,000 and the prior probability that any patient has a stiff neck is 1%. Letting s be the proposition that the patient has a stiff neck and m the proposition that the patient has meningitis, compute the probability P(m/s) using Bayes' rule.

(1) .014

(2) .0014

(3) .14

(4) .00014

Options :

55125174345. 1

55125174346. 2

55125174347. 3

55125174348. 4

Question Number : 138 Question Id : 55125119084 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	Commutative law	I.	$P \wedge (Q \vee R) \equiv (P \wedge Q) \vee (P \wedge R)$
B.	Distributive law	II.	$P \wedge (P \vee Q) \equiv P$
C.	Demorgan law	III.	$P \wedge Q \equiv Q \wedge P$
D.	Adsorption law	IV.	$\neg(P \vee Q) \equiv \neg P \wedge \neg Q$

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

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

Options :

55125174349. 1

55125174350. 2

55125174351. 3

55125174352. 4

Question Number : 138 Question Id : 55125119084 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Match the **LIST-I** with **LIST-II**

LIST-I		LIST-II	
A.	Commutative law	I.	$P \wedge (Q \vee R) \equiv (P \wedge Q) \vee (P \wedge R)$
B.	Distributive law	II.	$P \wedge (P \vee Q) \equiv P$
C.	Demorgan law	III.	$P \wedge Q \equiv Q \wedge P$
D.	Adsorption law	IV.	$\neg(P \vee Q) \equiv \neg P \wedge \neg Q$

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

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

Options :

55125174349. 1

55125174350. 2

55125174351. 3

55125174352. 4

Question Number : 139 Question Id : 55125119085 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following deals with the interaction between computers and humans using the natural language.

1. PROLOG
2. ELIZA
3. NLP
4. LISP

Options :

55125174353. 1

55125174354. 2

55125174355. 3

55125174356. 4

Question Number : 139 Question Id : 55125119085 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Which of the following deals with the interaction between computers and humans using the natural language.

1. PROLOG
2. ELIZA
3. NLP
4. LISP

Options :

55125174353. 1

55125174354. 2

55125174355. 3

55125174356. 4

Question Number : 140 Question Id : 55125119086 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Classifying email as spam, labeling web pages based on their context, voice recognition are the example of which of the following?

1. Reinforcement learning
2. Shortest Path Algorithm
3. Supervised learning
4. Unsupervised learning

Options :

55125174357. 1

55125174358. 2

55125174359. 3

55125174360. 4

Question Number : 140 Question Id : 55125119086 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Classifying email as spam, labeling web pages based on their context, voice recognition are the example of which of the following?

1. Reinforcement learning
2. Shortest Path Algorithm
3. Supervised learning
4. Unsupervised learning

Options :

55125174357. 1

55125174358. 2

55125174359. 3

55125174360. 4

Sub-Section Number :	2
Sub-Section Id :	551251748
Question Shuffling Allowed :	No
Is Section Default? :	No

Question Id : 55125119087 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (141 to 145)

In a particular program, it is found that 1% of the code accounts for 50% of the execution time. To code the program in FORTRAN, it takes 100 man-days. Coding in assembly language is 10 times harder than coding in FORTRAN, but runs 5 times faster. Converting (rewriting) an existing FORTRAN program to an assembly language program is 4 times harder than coding in FORTRAN.

Sub questions

Question Number : 141 Question Id : 55125119088 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

How many days will it take for 2 programmers to write the entire code in FORTRAN and then rewrite the 1% code to assembly language?

1. 52
2. 53
3. 54
4. 55

Options :

55125174361. 1

55125174362. 2

55125174363. 3

55125174364. 4

Question Number : 142 Question Id : 55125119089 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If a project team needs 13 days to completely write the program in FORTRAN and rewriting (converting) the 1% code to assembly language, then the team consists of

1. 13 Programmers
2. 10 Programmers
3. 8 Programmers
4. 100/13 Programmers

Options :

55125174365. 1

55125174366. 2

55125174367. 3

55125174368. 4

Question Number : 143 Question Id : 55125119090 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If 99% of the program is written in FORTRAN and the remaining 1% in assembly language, the percentage increase in the programming time compared to writing the entire program in FORTRAN and rewriting (converting) the 1% to assembly language is

1. 10
2. 5
3. 13
4. 8

Options :

55125174369. 1

55125174370. 2

55125174371. 3

55125174372. 4

Question Number : 144 Question Id : 55125119091 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The entire program is written in FORTRAN. The percentage decrease in the execution time, resulting from rewriting the 1% in assembly language is

1. 20
2. 32
3. 40
4. 60

Options :

55125174373. 1

55125174374. 2

55125174375. 3

55125174376. 4

Question Number : 145 Question Id : 55125119092 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If 99% of the program is written in FORTRAN and the remaining 1% in assembly language, the percentage increase in the execution time, compared to writing the entire program in FORTRAN and rewriting the 1% in assembly language is

1. 0.9
2. 1
3. 0.1
4. 0

Options :

55125174377. 1

55125174378. 2

55125174379. 3

55125174380. 4

Question Id : 55125119087 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (141 to 145)

In a particular program, it is found that 1% of the code accounts for 50% of the execution time. To code the program in FORTRAN, it takes 100 man-days. Coding in assembly language is 10 times harder than coding in FORTRAN, but runs 5 times faster. Converting (rewriting) an existing FORTRAN program to an assembly language program is 4 times harder than coding in FORTRAN.

Sub questions

Question Number : 141 Question Id : 55125119088 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

How many days will it take for 2 programmers to write the entire code in FORTRAN and then rewrite the 1% code to assembly language?

1. 52
2. 53
3. 54
4. 55

Options :

55125174361. 1

55125174362. 2

55125174363. 3

55125174364. 4

Question Number : 142 Question Id : 55125119089 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If a project team needs 13 days to completely write the program in FORTRAN and rewriting (converting) the 1% code to assembly language, then the team consists of

1. 13 Programmers
2. 10 Programmers
3. 8 Programmers
4. 100/13 Programmers

Options :

55125174365. 1

55125174366. 2

55125174367. 3

55125174368. 4

Question Number : 143 Question Id : 55125119090 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If 99% of the program is written in FORTRAN and the remaining 1% in assembly language, the percentage increase in the programming time compared to writing the entire program in FORTRAN and rewriting (converting) the 1% to assembly language is

1. 10
2. 5
3. 13
4. 8

Options :

55125174369. 1

55125174370. 2

55125174371. 3

55125174372. 4

Question Number : 144 Question Id : 55125119091 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The entire program is written in FORTRAN. The percentage decrease in the execution time, resulting from rewriting the 1% in assembly language is

1. 20
2. 32
3. 40
4. 60

Options :

55125174373. 1

55125174374. 2

55125174375. 3

55125174376. 4

Question Number : 145 Question Id : 55125119092 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

If 99% of the program is written in FORTRAN and the remaining 1% in assembly language, the percentage increase in the execution time, compared to writing the entire program in FORTRAN and rewriting the 1% in assembly language is

1. 0.9
2. 1
3. 0.1
4. 0

Options :

55125174377. 1

55125174378. 2

55125174379. 3

55125174380. 4

Sub-Section Number :	3
Sub-Section Id :	551251749
Question Shuffling Allowed :	No
Is Section Default? :	No

Question Id : 55125119093 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (146 to 150)

Consider the Following Context Free Grammar (G) :-

$S \rightarrow A\,B$

$B \rightarrow +A\,B \mid \in$

$A \rightarrow C\,D$

$D \rightarrow *\,C\,D \mid \in$

$C \rightarrow [S] \mid x$

Variable = { S, A, B, C, D }

Terminals = { +, *, [,], x }

Sub questions

Question Number : 146 Question Id : 55125119094 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What will be the FIRST(S) & FIRST(D)?

1. FIRST (S) = { +, [, x }; FIRST (D) = { +, * };
2. FIRST (S) = { [,] , x }; FIRST (D) = { +, $\in$};
3. FIRST (S) = { [, x }; FIRST (D) = {*, $\in$};
4. FIRST (S) = { [, x, $\in$}; FIRST (D) = { *, $\in$};

Options :

55125174381. 1

55125174382. 2

55125174383. 3

55125174384. 4

Question Number : 147 Question Id : 55125119095 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Find the Follow (A) & Follow (C).

1. Follow (A) = {] , $ }; Follow (C) = { +,], $ };
2. Follow (A) = { +,] , $ }; Follow (C) = { *, + ,], $ };
3. Follow (A) = { *, $, [}; Follow (C) = { *, [, $ };
4. Follow (A) = { *,] , $ }; Follow (C) = { +,], $ };

Options :

55125174385. 1

55125174386. 2

55125174387. 3

55125174388. 4

Question Number : 148 Question Id : 55125119096 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In the LL(1) Parsing table of the given CFG, how many valid non blank entities will be there in the rows for variables 'B' and 'D' ?

1. B = 3 entries ; D = 4 entries
2. B = 6 entries ; D = 5 entries
3. B = 2 entries ; D = 3 entries
4. B = 1 entry ; D = 2 entries

Options :

55125174389. 1

55125174390. 2

55125174391. 3

55125174392. 4

Question Number : 149 Question Id : 55125119097 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Identify the correct statement from the following.

1. The given CFG(G) is Left recursive
2. The given CFG(G) needs Left factorization
3. [[x * x] + x] is a valid sentence of this grammar
4. The given CFG(G) has an SLR(o) Parser as well.

Options :

55125174393. 1

55125174394. 2

55125174395. 3

55125174396. 4

Question Number : 150 Question Id : 55125119098 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The I_o state of the canonical LR(o) set of the SLR(1) parser of this CFG has how many productions?

1. 3
2. 4
3. 5
4. 6

Options :

55125174397. 1

55125174398. 2

55125174399. 3

55125174400. 4

Question Id : 55125119093 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (146 to 150)

Consider the Following Context Free Grammar (G) :-

$S \rightarrow A\,B$

$B \rightarrow +A\,B \mid \in$

$A \rightarrow C\,D$

$D \rightarrow *\,C\,D \mid \in$

$C \rightarrow [S] \mid x$

Variable = { S, A, B, C, D }

Terminals = { +, *, [,], *x* }

Sub questions

Question Number : 146 Question Id : 55125119094 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

What will be the FIRST(S) & FIRST(D)?

1. FIRST (S) = { + ,[, *x* }; FIRST (D) = { +, * };
2. FIRST (S) = { [,] , *x* }; FIRST (D) = { +, ∈};
3. FIRST (S) = { [, *x* }; FIRST (D) = {*, ∈};
4. FIRST (S) = { [, *x*, ∈}; FIRST (D) = { *, ∈};

Options :

55125174381. 1

55125174382. 2

55125174383. 3

55125174384. 4

Question Number : 147 Question Id : 55125119095 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Find the Follow (A) & Follow (C).

1. Follow (A) = {] , $ }; Follow (C) = { +,], $ };
2. Follow (A) = { +,] , $ }; Follow (C) = { *, + ,], $ };
3. Follow (A) = { *, $, [}; Follow (C) = { *, [, $ };
4. Follow (A) = { *,] , $ }; Follow (C) = { +,], $ };

Options :

55125174385. 1

55125174386. 2

55125174387. 3

55125174388. 4

Question Number : 148 Question Id : 55125119096 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

In the LL(1) Parsing table of the given CFG, how many valid non blank entities will be there in the rows for variables 'B' and 'D' ?

1. B = 3 entries ; D = 4 entries
2. B = 6 entries ; D = 5 entries
3. B = 2 entries ; D = 3 entries
4. B = 1 entry ; D = 2 entries

Options :

55125174389. 1

55125174390. 2

55125174391. 3

55125174392. 4

Question Number : 149 Question Id : 55125119097 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

Identify the correct statement from the following.

1. The given CFG(G) is Left recursive
2. The given CFG(G) needs Left factorization
3. [[x * x] + x] is a valid sentence of this grammar
4. The given CFG(G) has an SLR(o) Parser as well.

Options :

55125174393. 1

55125174394. 2

55125174395. 3

55125174396. 4

Question Number : 150 Question Id : 55125119098 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Is Question Mandatory : No Single Line Question Option : No Option Orientation : Vertical

The I_o state of the canonical LR(o) set of the SLR(1) parser of this CFG has how many productions?

1. 3
2. 4
3. 5
4. 6

Options :

55125174397. 1
55125174398. 2
55125174399. 3
55125174400. 4