TS SET

Notations :

1.Options shown in green color and with ✔ icon are correct.

2.Options shown in red color and with ✖ icon are incorrect.

Subject Name :	COMPUTER SCIENCE & APPLICATIONS
Duration :	180
Total Marks :	300
Display Marks:	Yes
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

Teaching and Research Aptitude

Group Number :	1
Group Id :	270282245
Group Maximum Duration :	60
Group Minimum Duration :	60
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	100
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Teaching and Research Aptitude

Section Id :	270282245
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	42
Number of Questions to be attempted :	42
Section Marks :	100
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	2702821365
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 1 Question Id : 27028218628 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No Correct Marks : 2 Wrong Marks : 0

The main objective of teaching at Higher Education Level is:
ఉన్నత విద్యా బోధనలో ప్రధాన లక్ష్యం

Options :

1. ✖ To prepare students to pass examination
విద్యార్థులను పరీక్ష ఉత్తీర్ణతకు సిద్ధం చేయడం

2. ✔ To develop the capacity to take decisions
నిర్ణయాలు తీసుకునే సామర్థ్యం పెంపొందించడం

3. ✖ To give new information
నూతన సమాచారాన్ని ఇవ్వడం

4. ✖ To promote teacher-centred learning
ఉపాధ్యాయ కేంద్రీకృతమైన విద్యను ప్రోత్సాహించటం

Question Number : 2 Question Id : 27028218629 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No Correct Marks : 2 Wrong Marks : 0

The primary duty of the teacher is to
ఉపాధ్యాయుని ప్రధాన కర్తవ్యం

Options :

1. ✖ Raise the intellectual standard of the students.
విద్యార్థుల ప్రజ్ఞా సామర్థ్యాన్ని పెంపొందించడం

2. ✖ Improve the physical standard of the students.
విద్యార్థుల భౌతిక-ధారుడ్యాన్ని పెంచడం

3. ✔ Help all round development of the students.
విద్యార్థుల సమగ్రాభివృద్ధికి దోహదపడటం

4. ✖ Inculcate value system in the students.
విద్యార్థులందు విలువలను పెంచడం

Question Number : 3 Question Id : 27028218630 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Generally the most effective approach dealing with the child's aggressive behaviour is
పిల్లలలోగల దూకుడు ప్రవర్తన అడ్డుకునేందుకు గల ప్రతిభావంతమైన పద్ధతి:

Options :

1. ✔ to channel his/her aggression into legitimate areas of competition.
ఆమె/అతని దూకుడు ప్రవర్తనను వివిధ పోటీల్లో రాణించేట్లు చేయడం

2. ✖ to reward him/her for friendly behaviour and to ignore his/her aggressive behaviour.
ఆమె/అతని దూకుడు ప్రవర్తనని పట్టించుకోకుండా మంచి ప్రవర్తనకి ప్రోత్సాహకాలు ఇవ్వాలి

to give him due punishments, when he shows aggressive tendencies.

3. ✖ దూకుడు ప్రవర్తన కనబరచినపుడు శిక్షించడం

to insist that he/she apologies for his undesirable behaviour.

4. ✖ అనుచిత ప్రవర్తనకు క్షమాపన కోరమని అడగడం

Question Number : 4 Question Id : 27028218631 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following statement is not correct with regard to lecture method in teaching?

బోధనలో ఉపన్యాసపద్ధతికి సంబంధం లేని ప్రవచనం

Options :

Develops reasoning

1. ✔ తార్కిక ఆలోచనను పెంపొందించడం

Improves knowledge

2. ✖ విషయ పరిజ్ఞానాన్ని పెంపొందించడం

It is one way process

3. ✖ ఇది ఏకదిశ ప్రక్రియ

In this Method students are passive

4. ✖ ఈ పద్ధతిలో విద్యార్థులు నిష్క్రియాత్మకంగా వుంటారు

Question Number : 5 Question Id : 27028218632 Question Type : MCQ Option Shuffling : No Is

Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No Correct Marks : 2 Wrong Marks : 0

"A diagram speaks more than 1000 words." The statement means that the teacher should

“ఒక చిత్రం వెయ్యి మాటలకంటే మెరుగైనది” అన్న ప్రవచనం ప్రకారం

Options :

1. ✖ use diagrams in teaching.
బోధనలో చిత్రపటాలను ఉపయోగించాలి

2. ✖ speak more and more in the class.
తరగతి గదిలో ఎక్కువగా మాట్లాడాలి.

3. ✔ use teaching aids in the class.
తరగతి గదిలో భోదనోపకరణాలను ఉపయోగించాలి

4. ✖ not speak too much in the class.
తరగతిలో ఎక్కువ మాట్లాడరాదు

Sub-Section Number :	2
Sub-Section Id :	2702821366
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 6 Question Id : 27028218633 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No Correct Marks : 2 Wrong Marks : 0

Which of the following is not a main task of research in modern society?
ఆధునిక సమాజంలో పరిశోధనా ప్రధానాంశం కానిది ఏది?

Options :

1. ✖ to keep pace with the advancement in knowledge.
ఆధునిక విషయ పరిజ్ఞానంలో ముందుండడం

2. ✖ to discover new things.
నూతనాంశాలను కనుగొనడం

3. ✔ to write a critique on the earlier writings.
గత రచనలపై విమర్శనాత్మక పరిశోధన చేయటం

4. ✖ to systematically examine and critically analyse.
క్రమబద్ధమైన పరిశీలన, విమర్శనాత్మక విశ్లేషణ చేయటం.

Question Number : 7 Question Id : 27028218634 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No Correct Marks : 2 Wrong Marks : 0

The research that applies the laws at the time of field study to draw more and more clear ideas about the problem is:
క్షేత్రస్థాయి అధ్యయనంలో సమస్యకు సంబంధించిన అంశాలను నిశితంగా పరిశీలించడానికి అవసరమైన విషయాలను అనుప్రయుక్తం చేసే పరిశోధనా రకం:

Options :

1. ✖ Historical research
చారిత్రక పరిశోధన

2. ✖ Action research
చర్యాత్మక పరిశోధన

3. ✔ Experimental research
ప్రయోగాత్మక పరిశోధన

4. ✖ Case study
సందర్భ పరిశీలన

Question Number : 8 Question Id : 27028218635 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The experimental study is based on:
ప్రయోగాత్మక అధ్యయనానికి మూలాధారం

Options :

1. ✔ The manipulation of variables
వేరియబుల్స్ యొక్క తారుమారు

2. ✖ Conceptual parameters
భావనాత్మక అంశాలు

3. ✖ Replication of research
పరిశోధన పునఃపరిశీలన

Survey of literature
సాహిత్య సర్వేక్షణ

4. ✖

Question Number : 9 Question Id : 27028218636 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No Correct Marks : 2 Wrong Marks : 0

Which of the following sampling methods is not based on probability?
క్రింది వానిలో సంభావ్యతను అనుసరించని ప్రతిచయన పద్ధతి ఏది?

Options :

Simple Random Sampling
సరళ యాదృచ్ఛిక ప్రతిచయనం

1. ✖

Stratified Sampling
వర్గీకృత ప్రతిచయనం

2. ✖

Quota Sampling
కోటా ప్రతిచయనం

3. ✔

Systematic Sampling
క్రమ ప్రతిచయనం

4. ✖

Question Number : 10 Question Id : 27028218637 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is the first step in starting the research process?
క్రింది వానిలో పరిశోధనకు సంబంధించిన మొదటి సోపానం ఏది?

Options :

1. ✖ Searching sources of tools.
పరిశోధనా పరికరాల ఆధారాలను శోధించడం

2. ✖ Survey of related literature
సంబంధిత పరిశోధనల సాహిత్యాన్ని సర్వే చేయడం

3. ✔ Identification of problem
సమస్యను గుర్తించడం

4. ✖ Searching for solutions to the problem
సమస్యకు పరిష్కారాలను వెదకడం

Sub-Section Number :	3
Sub-Section Id :	2702821367
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 27028218638 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Question Numbers : (11 to 15)

Question Label : Comprehension

Read the passage and answers the question from 11 to 15:

By the mid-nineteenth century, mass production of paper patterns, the emergence of the home sewing machine, and the convenience of mail order catalogues brought fashionable clothing into the American home. By the early twentieth century, home economists working in extension and outreach programs taught women how to use paper patterns to improve the fit and efficiency of new garments as well as how to update existing ones.

Teachers of home economics traditionally made home sewing a critical part of their curriculum, emphasizing self-sufficiency and resourcefulness for young women. However, with the increasing availability of mass-produced clothing in catalogues and department stores, more and more women preferred buying garments to making them. As a result, home economists shifted their attention to consumer education.

Through field study, analysis and research, they became experts on the purchase and preservation of ready-to-wear clothing for the family, offering budgeting instruction targeted at adolescent girls. Modern home sewing made it possible for American women to transcend their economic differences and geographic locations with clothing that was increasingly standardized. The democratization of fashion continued through the twentieth century as the ready-to-wear market expanded and home sewing became more of a pastime than a necessity.

11 నుంచి 15 వరకు గల ప్రశ్నలకు సంబంధించిన పాఠ్యభాగము ఈ క్రింద ఇవ్వబడినది. దానితోపాటు 5 బహుళ ఐచ్ఛిక ప్రశ్నలు ఇవ్వబడినవి. సరైన జవాబును ఎంచుకొని రాయండి.

పంతొమ్మిదవ శతాబ్దం మధ్య కాలం నాటికి, కాగితపు నమూనాల భారీ ఉత్పత్తి ఇంటి కుట్టు యంత్రం యొక్క ఆవిర్భావం మరియు మెయిల్ ఆర్డర్ కేటలాగ్‌ల సౌలభ్యం వలన అమెరికన్ల ఇంట్లో ఫ్యాషన్ దుస్తులను తెచ్చాయి. ఇరవయ్యవ శతాబ్దం ప్రారంభంలో మరియు ఔట్రీచ్ కార్యక్రమాలలో పనిచేస్తున్న గృహ ఆర్థికవేత్తలు నూతన వస్త్రాల అమరిక మరియు సామర్థ్యాన్ని మెరుగుపరచడానికి కాగితపు నమూనాలను ఎలా ఉపయోగించాలో, అలాగే ఇప్పటికే ఉన్న వాటిని ఎలా నవీనంగా (అప్డేట్) చేయాలో మహిళలకు నేర్పించారు.

హోమ్ ఎకనామిక్స్ యొక్క ఉపాధ్యాయులు సాంప్రదాయకంగా తమ పాఠ్యప్రణాళికలో కీలకమైన భాగాలైన కుట్టు, యువతకు స్వయం సమృద్ధి మరియు వనరులకు ప్రాధాన్యతనిచ్చారు. ఏదేమైనా, డిపార్టుమెంటు దుకాణాలలో సామూహిక ఉత్పత్తి చేసే వస్తువుల పెరుగుతున్న లభ్యతతో, ఎక్కువ మంది మహిళలు వాటిని తయారు చేయటానికి వస్త్రాలు కొనుకున్నారు. ఫలితంగా గృహ ఆర్థికవేత్తలు వినియోగదారులకు అవగాహన పెంచడంపై తమ దృష్టిని సారించారు. క్షేత్రస్థాయి అధ్యయనం, విశ్లేషణ మరియు పరిశోధన ద్వారా, వారు ఇంట్లో ఉన్నవారు ధరించే దుస్తులను కొనుగోలు మరియు సంరక్షణలో నిపుణులయ్యారు, కౌమార బాలికల్లో లక్ష్యంగా ఉన్న బడ్జెటింగ్ సూచనలను అందించారు. ఆధునిక గృహ కుట్టుపని అమెరికన్ మహిళలు వారి ఆర్థిక వ్యత్యాసాలను మరియు భౌగోళిక ప్రదేశాలను మరింత ప్రామాణికమైన దుస్తులతో అధిగమించటానికి సాధ్యపడింది. ఇరవయ్యో శతాబ్దంలో ఫ్యాషన్ యొక్క ప్రజాస్వామ్యీకరణ కొనసాగింది. ఎందుకంటే సిద్ధంగా ధరించే మార్కెట్ విస్తరించింది మరియు గృహ కుట్టుపని ఒక అవసరాన్ని కన్నా ఎక్కువ కాలక్షేపంగా మారింది.

Sub questions

Question Number : 11 Question Id : 27028218639 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

No

Correct Marks : 2 Wrong Marks : 0

How did home sewing help American women?

గృహ కుట్టు అమెరికన్ మహిళలకు ఎలా సహాయపడింది?

Options :

1. ✖ They became field analysts and researchers.
వారు ఫీల్డ్ విశ్లేషకులు మరియు పరిశోధకులు అయ్యారు.

2. ✔ They went beyond economic boundaries.
వారు ఆర్థిక సరిహద్దులను దాటి వెళ్ళారు

3. ✖ They found good jobs.
వారు మంచి ఉద్యోగాలను కనుగొన్నారు

4. ✖ They became excellent teachers.
వారు అద్భుతమైన ఉపాధ్యాయులు అయ్యారు

Question Number : 12 Question Id : 27028218640 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What improved the fit and efficiency of new garments?

నూతన వస్త్రాల అమరిక మరియు సామర్థ్యాన్ని మెరుగుపర్చినవి ఏవి?

Options :

1. ✖

Sewing machines
కుట్టుపని యంత్రాలు

2. ✖ Economists
ఆర్థికవేత్తలు

3. ✖ Mass production
భారి ఉత్పత్తి

4. ✔ Paper patterns
పేపర్ నమూనాలు

Question Number : 13 Question Id : 27028218641 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What were the skills that were emphasized for young women?
యువతుల కొరకు నొక్కి చెప్పిన నైపుణ్యాలు ఏమిటి?

Options :

1. ✖ Self-confidence and self esteem
ఆత్మ విశ్వాసం మరియు ఆత్మ గౌరవం

2. ✔ Self-sufficiency and resourcefulness
స్వయం సమృద్ధి మరియు వనరులపరమైన సంసిద్ధత

Resourcefulness and self-confidence

వనరులపరమైన సంసిద్ధత మరియు ఆత్మ విశ్వాసం

3. ✖

Prudence and resourcefulness.

జాగరూకత మరియు వనరులపరమైన సంసిద్ధత

4. ✖

Question Number : 14 Question Id : 27028218642 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Who became experts on the purchase and preservation of ready-to-wear clothing for the family?

కుటుంబం కోసం ధరించేందుకు సిద్ధంగా వున్న దుస్తులు కొనుగోలు మరియు సంరక్షణ నిపుణులుగా ఎవరు అయినారు?

Options :

Owners of department stores

1. ✖ డిపార్టుమెంటు దుకాణాల యజమానులు

Field-study analysts

2. ✖ క్షేత్ర (ఫీల్డ్) అధ్యయన విశ్లేషకులు

Young women

3. ✖ యువ మహిళలు

Teachers of home economics

4. ✔ గృహ ఆర్థిక ఉపాధ్యాయులు

Question Number : 15 Question Id : 27028218643 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Who was the target group?

లక్ష్య సమూహం ఎవరు?

Options :

1. ✖ Young women
యువ మహిళలు

2. ✖ School children
పాఠశాల విద్యార్థులు

3. ✔ Adolescent girls
కౌమార బాలికలు

4. ✖ Working women
పనిచేస్తున్న (వర్కింగ్) మహిళలు

Sub-Section Number :	4
Sub-Section Id :	2702821368
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 16 Question Id : 27028218644 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The following are the barriers to effective communication except one. Find it out.

ఈ క్రింది వాటిలో ఒకటి మాత్రమే సమర్థవంతమైన సమాచార మార్పిడికి ఉండే అడ్డంకులు. దాన్ని కనుగొనండి.

1. Bypassing
   ఉపమార్గం
2. Proper encoding
   సరైన ఎన్కోడింగ్
3. Frame of reference
   ఫ్రేమ్ రిఫరెన్స్
4. Physical distraction
   భౌతిక పరధ్యానం
5. Psychological interference
   మానసిక జోక్యం
6. Emotional interference
   భావోద్వేగ జోక్యం
7. Cultural differences
   సాంస్కృతిక భేదాలు

   The right code is:
   సరైన కోడ్:

Options :

1. ✖ 3

2. ✔ 2

3. ✖ 5

4. ✖ 6

Question Number : 17 Question Id : 27028218645 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

A teacher should have good communication skills. He / she will be a good communicator if he / she

ఒక గురువు మంచి సంభాషణ నైపుణ్యాలను కలిగి ఉండాలి. అతను / ఆమె ఒక మంచి ప్రసారకుడిగా ఉండటానికి:

Options :

1. ✖ Asks questions about his / her classroom
అతను / ఆమె తరగతి గది గురించి ప్రశ్నలు అడుగుతారు.

2. ✖ Helps students to score good marks / grades
విద్యార్థులు మంచి మార్కులు/గ్రేడ్స్ స్కోర్ చేయటానికి సహాయపడుతారు

3. ✔ Helps students to ask relevant questions
సంబంధిత ప్రశ్నలను అడగటానికి విద్యార్థులకు ప్రోత్సాహిస్తారు

4. ✖ Uses and provides instructional material
బోధనా సామాగ్రిని ఉపయోగిస్తూ, వాటిని అందచేస్తారు

Question Number : 18 Question Id : 27028218646 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

In the question given below are two statements labelled as **Assertion (A)** and **Reason (R)**.
In the context of two which one of the following is correct?

క్రింద ఇచ్చిన ప్రశ్నలో రెండు ప్రకటనలు ఉన్నాయి. ప్రకటన (**A**) మరియు కారణం (**R**) అని పిలువబడతాయి.

Assertion (A): Women are depicted in a negative way in the media.

ప్రకటన (A) : మీడియాలో మహిళలను ప్రతికూలమైన పద్ధతిలో చిత్రీకరించారు.

Reason (R): Media has turned completely unethical in modern times.

కారణం (R): మీడియా ఆధునిక కాలంలో పూర్తిగా అనైతికంగా మారిపోయింది.

Options :

1. ✖ Both A and R are true, R is the correct explanation of A
A మరియు R రెండూ నిజం, R అనేది A యొక్క సరైన వివరణ

2. ✖ Both A and R are true, R is not the correct explanation of A
A మరియు R రెండూ నిజమైనవి, R అనేది A యొక్క సరైన వివరణ కాదు

3. ✖ A is false, R is true
A తప్పు, R నిజం

4. ✔ A is true, R is false
A నిజం , R తప్పు

Question Number : 19 Question Id : 27028218647 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is 'Synchronous Media?'

'సింక్రోనస్ మీడియా' అంటే ఏమిటి?

Options :

1. ✖ Printed media
ప్రింట్ మీడియా

2. ✖ Media providing information about the issues and events
సమస్యలు మరియు సంఘటనలు గురించి సమాచారాన్ని అందించేది

3. ✔ Live telecast
ప్రత్యక్ష ప్రసారం

4. ✖ Media in digital environment
డిజిటల్ వాతావరణంలో మీడియా

Question Number : 20 Question Id : 27028218648 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Mr. Ajay completed MA Economics. He is going to attend an interview. He dressed for the occasion. This is an example of _____communication.

మిస్టర్ విజయ్ ఎం.ఎ అర్థశాస్త్రం పూర్తి చేసాడు. అతను ఒక ఇంటర్వ్యూకు హాజరు కానున్నాడు అతను సందర్భానుసారంగా దుస్తులను ధరించాడు. ఇది _____కమ్యూనికేషన్ యొక్క ఒక ఉదాహరణ

Options :

1. ✖ Verbal
శబ్ద

2. ✔ Non-verbal
అశాబ్ధిక

3. ✖ Emotional
భావోద్వేగ

4. ✖ Psychological
మానసిక

Sub-Section Number : 5

Sub-Section Id : 2702821369

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 21 Question Id : 27028218649 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The ratio to earnings expenditure of 'A' is 5:3 and that of 'B' is 7:6. If the savings of 'A' is twice that of 'B' then what could be the ratio of total earnings of 'A' and 'B' together to the total expenditure of 'A' and 'B'.

'A' యొక్క ఆదాయం వ్యయం నిష్పత్తి 5: 3 మరియు 'B' 7: 6 ఉంటుంది. 'A' యొక్క పొదుపులు 'B' కి రెండురెట్లు ఉంటే, 'A' మరియు 'B' మొత్తం ఆదాయం ఖర్చు నిష్పత్తి ఎంత అవుతుంది.

Options :

1. ✖ 2:1

2. ✔ 4:3

3. ✖ 5:3

4. ✖ 5:4

Question Number : 22 Question Id : 27028218650 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Two trains running at 45kmph and 54 kmph cross each other in 12 seconds when they run in opposite directions. When they run in same direction, a person in the faster train observes that he crossed the other train in 32 seconds. The lengths of the two trains are (in meters)

గంటకు 45 కిలోమీటర్ల మరియు 54 కిలోమీటర్ల వేగముతో, వ్యతిరేక దిశలో నడుస్తున్న రెండు రైళ్ళు ఒకదానితో ఒక దానినొకటి దాటుటకు 12 సెకనులు పట్టెను. అవి ఒకే దిశలో పయనం చేస్తున్నప్పుడు ఎక్కువ వేగము తో నడుస్తున్న రైలు లోని ఒక వ్యక్తి అతనిని 32 సెకన్లలో ఇతర రైలు దాటినట్లు గమనించాడు. రెండు రైళ్ల పొడవులు ____, ____ ఉన్నాయి (మీటర్లలో)

Options :

1. ✖ 54, 45

2. ✖ 180, 150

3. ✔ 250, 80

4.

✖ 220, 110

Question Number : 23 Question Id : 27028218651 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

In a factory, for every five unskilled workers, there are two skilled workers. If 10 unskilled workers are dismissed and two skilled workers are taken, then the ratio of skilled workers is half. How many skilled workers are there in the factory?

ఒక కర్మాగారంలో ప్రతి ఐదుగురు నైపుణ్య లేని పనివాళ్ళకి ఇద్దరు నైపుణ్యగల పనివాళ్ళు వున్నారు. నైపుణ్యలేని 10 మంది పనివారిని తొలగించి, ఇద్దరు నైపుణ్యగల పనివార్ని తీసుకొనిన నైపుణ్యగల పనివారి నిష్పత్తి సగము అయినది. ఆకర్మాగారములోనున్న నైపుణ్యగల పనివారి సంఖ్య

Options :

1. ✖ 8

2. ✖ 12

3. ✔ 14

4. ✖ 16

Question Number : 24 Question Id : 27028218652 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The missing number in the sequence : 6, 14, 36, 98, _____ is

అనుక్రమంలో లోపించిన సంఖ్య: 6, 14, 36, 98, _____

Options :

1. ✖ 196

2. ✖ 212

3. ✔ 276

4. ✖ 300

Question Number : 25 Question Id : 27028218653 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

BUTTER is coded as 123345 then the code for TUBE is

'BUTTER' '123345' గా కోడ్ చేయబడింది. అప్పుడు 'TUBE' కోసం కోడ్

Options :

1. ✖ 1234

2. ✖ 4321

3. ✖ 3412

4. ✔ 3214

Sub-Section Number : 6

Sub-Section Id : 2702821370

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 26 Question Id : 27028218654 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Missing group of letters in the following

క్రింది క్రమంలో లోపించిన అక్షరాల సమూహం

BAZ, DBY, FCX, ____

Options :

1. ✖ FXW

2. ✖ EFX

3. ✖ FEY

4. ✔ HDW

Question Number : 27 Question Id : 27028218655 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

As 'BDEG' is related to 'DFGI' so 'HKMO' related to

'BDEG' కి 'DFGI' తో సంబంధము కలదు. అదే విధముగా 'HKMO' కి సంబంధము

Options :

1. ✖ JNOQ

2. ✖ JMOP

3. ✔ JMOQ

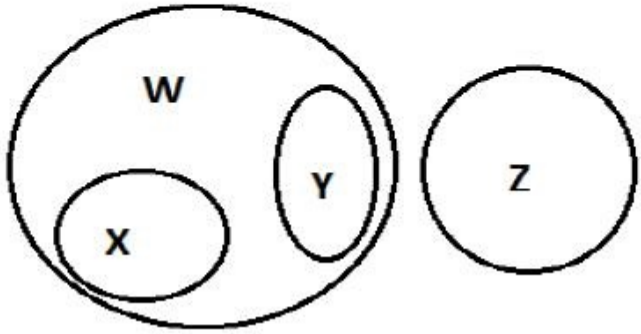
4. ✖ INLP

Question Number : 28 Question Id : 27028218656 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which among the following statements is correct based on the following Venn diagram

క్రింది వెన్ చిత్రం ఆధారంగా ప్రవచనాలలో సరైనది ఏది



Options :

1. ✖ some X's are not W. (కొన్ని X లు W లు కాదు)

2. ✖ some Y's are not W. (కొన్ని Y లు W లు కాదు)

3. ✖ X's are Y's. (X లు Y లు).

4. ✔ W's are not Z. (W లు Z లు కాదు)

Question Number : 29 Question Id : 27028218657 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The odd one among the following is

కింది వానిలో నున్న, ఒక సరిపోలని సంఖ్య

Options :

1. ✖

Rose (గులాబీ)

2. ✖ Lotus (తామర)

3. ✔ Orange (నారింజ)

4. ✖ Lilly (కలువ)

Question Number : 30 Question Id : 27028218658 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

There are three married couples in a family of three generations. A is grandson of H; G is the mother in law of C; D and E are brothers. B is only nephew of E. Fis the sister in law of D. B is the son of C. How is B related to G ?

మూడు తరాల కుటుంబంలో, మూడు వివాహిత జంటలు ఉన్నాయి. A, H యొక్క మనవడు; G అనేది C యొక్క అత్త; D మరియు E సోదరులు. B, E యొక్క మేనల్లుడు; F, D యొక్క వదిన లేదా మరుదులు (sister in law), B, C యొక్క కొడుకు, B కి G తో ఎలా సంబంధం?

Options :

1. ✖ Daughter (కూతురు)

2. ✖ Wife (భార్య)

3. ✔ Grandson (మనవడు)

4. ✖ Daughter in law (కోడలు)

Sub-Section Number :	7
Sub-Section Id :	2702821371
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 27028218659 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Question Numbers : (31 to 35)

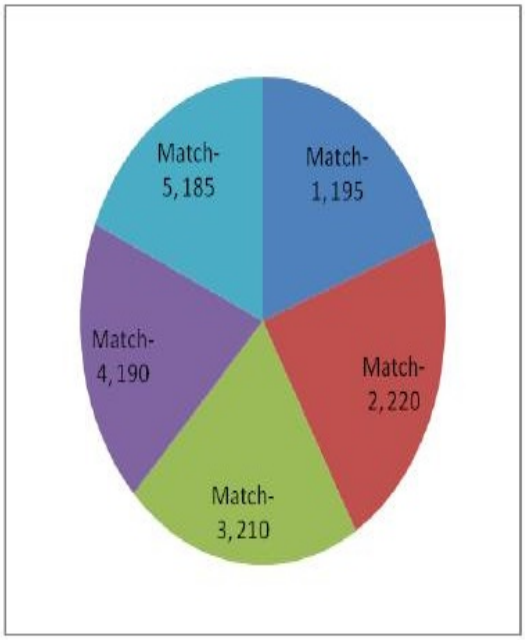
Question Label : Comprehension

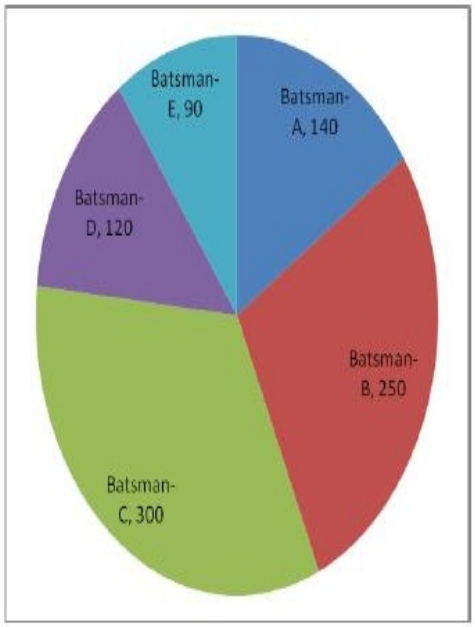
Note: The questions Q. 31 to Q. 35 are based on the following information:

గమనిక: ప్రశ్నలు Q. 31 నుండి Q. 35 వరకు , కింది సమాచారం ఆధారంగా ఉన్నాయి.

The performance of 5 batsmen A, B, C, D and E playing for a team in a cricket series of five 20-20 matches is presented in the following pie charts. The first pie chart indicates the distribution of total runs scored by the team in the five matches and the second pie chart indicates the distribution of total runs scored by each batsman in the entire series. Assume each batsmen played in each match and the sum of individual scores of batsmen constitutes 90% of the total runs scored by the team in each match.

ఒక ఐదు 20-20 మ్యాచ్ ల క్రమములో, ఒక జట్టు కొరకు ఆడుతున్న A, B, C, D మరియు E అను ఐదుగురు బ్యాటింగ్ ఆటగాళ్ల యొక్క పరుగుల ప్రదర్శనను, కింది రెండు వృత్తాకార పటములలో పొందు పరచబడినది. మొదటి పై చార్ట్ ఐదు మ్యాచ్‌లలో జట్టు చేసిన మొత్తం పరుగుల విభజనను సూచిస్తుంది. మరియు రెండవ పటము ప్రతి ఆటగాడు అన్ని మ్యాచ్ లలో కలిపి చేసిన పరుగుల విభజనను సూచిస్తుంది. ప్రతి ఆటగాడు అన్ని మ్యాచ్ లలో ఆడెను, మరియు అన్ని మ్యాచ్ లలో ఐదుగురు ఆటగాళ్ల పరుగుల మొత్తము, ఆ జట్టు చేసిన మొత్తము పరుగులలో 90% అనుకొనుము.





Sub questions

Question Number : 31 Question Id : 27028218660 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The percentage of runs scored by the batsman E in the five matches scored by the team is

ఒక జట్టు ఐదు మ్యాచ్‌లలో చేసిన పరుగులలో, బ్యాట్స్మన్ E చే సాధించిన పరుగుల శాతం

Options :

1. ✖ 8

2. ✔ 9

3. ✖ 10

4. ✖ 13

Question Number : 32 Question Id : 27028218661 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The percentage of runs scored by batsman E in the runs scored by batsman C is

బ్యాట్స్మన్ C చేసిన పరుగులలో, బ్యాట్స్ మాన్ E చేసిన పరుగుల శాతం

Options :

1. ✖ 10

2. ✖ 13.33

3. ✔ 30

4. ✖ 33.33

Question Number : 33 Question Id : 27028218662 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

By what percent C scored runs more than that of D?

బ్యాట్స్ మాన్ D కంటే C ఎక్కువగా చేసిన పరుగుల శాతం ఎంత ?

Options :

1. ✖ 10

2. ✖ 13.33

3. ✔ 20

4. ✖ 33.33

Question Number : 34 Question Id : 27028218663 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

In the runs scored by the team in all matches, the batsmen scored less than 26 % runs are

అన్ని మ్యాచ్‌లలో జట్టు స్కోర్ చేసిన పరుగులలో, 26 శాతం కంటే తక్కువ పరుగులు చేసిన బ్యాట్స్‌మెన్

Options :

1. ✖ A and B
A మరియు B

2. ✖ A, B and D
A, B మరియు D

3. ✔ A, D and E
A, D మరియు E

4. ✖ A, B, D and E
A, B, D మరియు E

Question Number : 35 Question Id : 27028218664 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

In the total runs scored by the team, the percentage of runs scored by B and C together is

జట్టు స్కోర్ చేసిన మొత్తము పరుగులలో, B మరియు Cకలిపి చేసిన పరుగుల శాతం

Options :

1. ✖ 27.77

2. ✖ 42.85

3. ✖ 55.00

4. ✔ 61.11

Sub-Section Number : 8

Sub-Section Id : 2702821372

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 36 Question Id : 27028218665 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which device is required for the Internet connection?

ఇంటర్‌నెట్ అనుసంధానికి ఏ పరికరం అవసరం

Options :

1. ✖ Joystick
జాయ్‌స్టిక్

2. ✔ Modem
మోడెమ్

3. ✖ CD Drive
సి.డి. డ్రైవ్

NIC Card

ఎన్.ఐ.సి. కార్డు

4. ✖

Question Number : 37 Question Id : 27028218666 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Junk e-mail is also called

జంక్ ఇ-మెయిల్‌ను ఈ విధంగా కూడ పిలుస్తారు.

Options :

spam

స్పామ్

1. ✔

spoof

స్పూఫ్

2. ✖

sniffer script

స్నిఫర్ స్రిప్ట

3. ✖

spool

స్పూల్

4. ✖

Question Number : 38 Question Id : 27028218667 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is not a protocol used for internet communication

ఇంటర్‌నెట్ ప్రసారాలలో క్రింది వాటిలో ఏ ప్రోటోకాల్‌ను వాడము.

Options :

1. ✖ TCP/IP

2. ✖ HTTP

3. ✖ PPP

4. ✔ ISP

Question Number : 39 Question Id : 27028218668 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following files can be opened in browser without any plugins

ఏ ప్లగ్ ఇన్‌లు లేకుండా బ్రోజర్‌లో క్రింది వాటిలో ఏ ఫైల్ తెరవగలము.

Options :

1. ✖ index.doc
ఇండక్స్.డాక్

2. ✔ index.html
ఇండక్స్.ఎచ్‌టిఎమ్‌ఎల్

3. ✖ index ppt
ఇండక్స్ పిపిటి

4. ✖ index dot
ఇండక్స్ డాట్

Question Number : 40 Question Id : 27028218669 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

ICT in governance will not aim at

ప్రభుత్వ ICT యొక్క లక్ష్యం ఇదికాదు

Options :

1. ✖ E-government : the application of IT for intra-governmental operations
(Government to government or G2G)
ఇ-ప్రభుత్వం: అంతర ప్రభుత్వ ప్రకియలకు IT వాడకం
(ప్రభుత్వం నుంచి ప్రభుత్వం లేదా G2G)

2. ✖ E-service : the application of IT to transform the delivery of public services
(Government to Citizens or G2C)
ఇ-సేవలు: ప్రజాసేవలను మార్చటానికి IT వాడకం
(ప్రభుత్వం మంచి పౌరులకు లేదా G2C)

3. ✖

E-business : the application of IT to operations performed by government in the manner of G2B transactions (e.g. procurement)

ఇ-వాణిజ్యం : ప్రభుత్వం ద్వారా G2B తరహా వ్యవహారాలలో వాణిజ్యం చేయటానికి

E- education

ఇ-విద్య

4. ✔

Sub-Section Number :	9
Sub-Section Id :	2702821373
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 41 Question Id : 27028218670 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Laterite soil contains more of

లాటరైట్ మట్టి ఇవి ఎక్కువగా ఉంటాయి.

Options :

Iron and Aluminium

ఇనుము, అల్యూమినియం

1. ✔

Magnesium and boron

మెగ్నీషియం, బోరాన్

2. ✖

3. ✖

Manganese and Silicates

మాంగనీసు, సిలికేట్లు

Potassium and lead

4. ✖ పొటాషియం, సీసం

Question Number : 42 Question Id : 27028218671 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Match the following:

క్రింది వాటిని జతపర్చుము.

1.	World Environmental Day ప్రపంచ పర్యావరణ దినం	a.	February, 2nd ఫిబ్రవరి, 2
2.	World Ozone day ప్రపంచ ఓజోన్ దినం	b.	April, 22nd ఏప్రిల్, 22
3.	World Wetlands day ప్రపంచ చిత్తడి నేలల దినం	c.	June, 5th జూన్, 5
4.	Earth day ధరిత్ర దినం	d.	September, 16th సెప్టెంబర్ 16

Options :

1. ✖ 1-b, 2-d, 3-a, 4-c

2. ✖ 1-d, 2-c, 3-b, 4-a

3. ✔ 1-c, 2-d, 3-a, 4-b

4. ✖ 1-b, 2-c, 3-d, 4-a

Question Number : 43 Question Id : 27028218672 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Eco-labelling of Commerical Products is regulated by

వాణిజ్య ఉత్పత్తులపై పర్యావరణ ముద్రను ఇది నియంత్రిస్తుంది.

Options :

1. ✔ ISO 14020

2. ✖ ISO 14010

3. ✖ ISO 14030

4. ✖ ISO 14040

Question Number : 44 Question Id : 27028218673 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The EL Nino disappears in March and re-appears in

ఇఎల్ నినో మార్చిలో అంతర్ధానమవుతుంది. మరియు ఎపుడు పునరుద్ధానమవుతుంది.

Options :

1. ✖ May

మే

2. ✖ August

ఆగష్టు

3. ✖ October

అక్టోబర్

4. ✔ December

డిసెంబర్

Question Number : 45 Question Id : 27028218674 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Match the following:

ఈ క్రింది వాటిని జతపరచుము.

List - I (పట్టిక - 1)		List - II (పట్టిక-2)	
1.	CFC	a.	Water Pollution జల కాలుష్యం
2.	Co_2, Methane	b.	Bhopal tragedy భోపాల్ విషాదం
3.	BOD & COD	c.	Noise Pollution ధ్వని కాలుష్యం
4.	MIC	d.	Ozone Depletion ఓజోన్ తగ్గుదల
		e.	Global Warming భూతాపం

Options :

1. ✖ 1-b, 2-c, 3-e, 4-a

2. ✖ 1-c, 2-b, 3-a, 4-d

3. ✖ 1-d, 2-b, 3-c, 4-e

4. ✔ 1-d, 2-e, 3-a, 4-b

Sub-Section Number : 10

Sub-Section Id : 2702821374

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 46 Question Id : 27028218675 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The mode of educational transaction in ancient system of Gurukul education used to be

పురాతన కాలంలోని గురుకులాలల్లో విద్యా ప్రక్రియ క్రింది అంశాల ద్వారా కొనసాగింది.

Options :

1. ✖ Vocational based
వృత్తిపాతిపదికన

2. ✖ Values based
విలువల ప్రాతిపదికన

3. ✖ Skills based
నైపుణ్యాల ప్రాతిపదికన

4. ✔ All the above
పైవన్నీ

Question Number : 47 Question Id : 27028218676 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

According to Radhakrishnan Commission, which of the following is not the aim of Higher Education?

రాధాక్రిష్ణన్ కమీషన్ ప్రకారం క్రిందివానిలో ఉన్నత విద్యా లక్ష్యం కానిది

Options :

1. ✖ To develop the democratic values, peace and harmony
ప్రజాస్వామ్య విలువలు, శాంతిసామరస్యాలను పెంపొందించడం

2. ✖ To develop great personalities who can give their contributions in various fields
వివిధ రంగాలలో రాణించగల వ్యక్తిత్వాలను రూపుదిద్దడం

3. ✔ To develop vocational skills and traditional crafts
వృత్తి నైపుణ్యాలు, సాంప్రదాయ చేతివృత్తులను అభివృద్ధి చేయడం

4. ✖ To develop reasoning and critical thinking
తార్కిక, విమర్శనాత్మక దృష్టి పెంపొందించడం

Question Number : 48 Question Id : 27028218677 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Foundation training to the newly recruited IAS (Probationers) is imparted by:
నూతనంగా ఎంపికైన ఐఎఎస్ ప్రొబేషనరీ అభ్యర్థులకు శిక్షణ ఇచ్చే సంస్థ

Options :

1. ✖ Indian Institute of Public Administration
భారత ప్రజాపరిపాలన సంస్థ

2. ✖ Administrative Staff College of India
భారత పరిపాలన శిక్షణ కళాశాల

L.B.S. National Academy of Administration
లాల్‌బహదూర్‌శాస్త్రి జాతీయ పరిపాలన అకాడమి

3. ✔

Centre for Advanced Studies
ఆధునిక అధ్యయనాల కేంద్రం

4. ✖

Question Number : 49 Question Id : 27028218678 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The full form of NAAC is _____
NAAC యొక్క పూర్తి రూపం _____

Options :

National Assessment Accreditation Council
నేషనల్ ఎసెస్‌మెంట్ ఆండ్ ఎక్రెడిటేషన్

1. ✔

National Assessment and Accreditation Chamber
నేషనల్ ఎసెస్‌మెంట్ ఆండ్ ఎక్రెడిటేషన్ చేంబర్

2. ✖

National Assessment and Adjudication Council
నేషనల్ ఎసెస్‌మెంట్ ఆండ్ ఎడ్‌జూడికేషన్ కౌన్సిల్

3. ✖

National Accession and Accreditation Council
నేషనల్ ఎక్సషన్ ఆండ్ ఎక్రెడిటేషన్ కౌన్సిల్

4. ✖

Question Number : 50 Question Id : 27028218679 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following type of universities cannot award degrees

క్రింది వానిలోఉన్నత విద్యకు సంబంధించిన పట్టాలు ఇవ్వడానికి అనుమతిలేని విశ్వవిద్యాలయాలు

Options :

1. ✖ State University
రాష్ట్ర విశ్వవిద్యాలయం

2. ✖ Private University
ప్రైవేటు విశ్వవిద్యాలయము

3. ✖ Deemed to be University
డిమ్డ్ విశ్వవిద్యాలయం

4. ✔ None of the above
పైవేవి కావు

COMPUTER SCIENCE & APPLICATIONS

Group Number :	2
Group Id :	270282246
Group Maximum Duration :	120

Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	200
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

COMPUTER SCIENCE & APPLICATIONS

Section Id :	270282246
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	100
Number of Questions to be attempted :	100
Section Marks :	200
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	2702821375
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 51 Question Id : 27028218680 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

No

Correct Marks : 2 Wrong Marks : 0

Which of the following is not a tautology?

Options :

1. ✖ $(P \Rightarrow Q) \equiv (\neg P \vee Q)$

2. ✖ $(P \Leftrightarrow Q) \equiv (P \wedge Q) \vee (\neg P \wedge \neg Q)$

3. ✖ $\neg(X \Rightarrow Y) \Rightarrow (Y \Rightarrow X)$

4. ✔ $(\neg P \wedge \neg Q) \Rightarrow (R \Rightarrow Q)$

Question Number : 52 Question Id : 27028218681 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

How many numbers in the set $\{1, 2, 3, \ldots, 10000\}$ are divisible by 2, 3, 5, or 7?

Options :

1. ✖ 2000

2. ✖ 3333

3. ✔ 7715

4. ✖ 3333

Question Number : 53 Question Id : 27028218682 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the GCD (2016, 208)?

Options :

1. ✖ 208

2. ✔ 16

3. ✖ 144

64

4. ✖

Question Number : 54 Question Id : 27028218683 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is the Simplified Boolean Function for the given function F (A, B, C, D) = Σ (0,1,2,4,5, 7,8,10,13,15).

Options :

1. ✔ $A'C' + B \odot D$

2. ✖ $B'C' + A \odot D$

3. ✖ $A'D' + B \odot D$

4. ✖ $A'D' + B \odot C$

Question Number : 55 Question Id : 27028218684 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Let A be a set with 'n' distinct elements. How many of them are reflexive and symmetric relations?

Options :

1. ✔ $2^{(n*k)/2}$ where $k = n-1$

2. ✖ $2^{(n*k)/2}$ where $k = n^2$

3. ✖ $2^{k-(n*k)/2}$ where $k = n^2$

4. ✖ $2^{(n*k)/2}$ where $k = n$

Question Number : 56 Question Id : 27028218685 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the logical notation of the given assertion " **Not all primes are odd**" where E(x) denotes " x is even" and P(x) denotes "X is prime ", O(x) denotes "x is odd"?

Options :

1. ✖ $\exists!x[E(x) \vee O(x)]$

2. ✖ $\exists x[E(x) \vee P(x)]$

3. ✔ $\exists x[P(x) \wedge \neg O(x)]$

4. ✖ $\exists x[\neg E(x) \vee O(x)]$

Question Number : 57 Question Id : 27028218686 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Let A={0,1,2} and B={1,2,3}, then what is the value of A-B and B-A?

Options :

1. ✔ A-B = {0} and B-A ={3}

2. ✖ A-B = {0} and B-A ={0,2}

3. ✖ A-B = {0,1,2} and B-A ={2,3}

4. ✖ A-B = {0,1} and B-A ={3}

Question Number : 58 Question Id : 27028218687 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is correct?

Options :

1. ✖ The relation of equality on any set is only symmetric

2. ✖ The relation of equality on any set is only reflexive

3. ✔ The relation of equality on any set is both symmetric and antisymmetric

4. ✖ The relation of equality on any set is only transitive

Question Number : 59 Question Id : 27028218688 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

In a group of 400 people in India, 250 can speak Hindi and 275 can speak English. How many people can speak both Hindi and English?

Options :

1. ✔ 125

2. ✖ 100

3. ✖ 525

4. ✖ 75

Question Number : 60 Question Id : 27028218689 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Let T be a rooted binary tree whose vertices are labelled with symbols a, b, c, d, e, f, g, h, i, j, k.
Suppose the in-order and post-order traversals of T produce the following sequences.

in-order: a, b, c, d, e, f, g, h, i, j, k

post-order: a, c, b, e, f, h, j, k, i, g, d

How many leaves does the tree have and what is the height of the tree?

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.

Options :

1. a,c,e,h,j

2. a,e,h,i,j

3. c,b,h,i,j

4. b,c,h,i,j

Question Number : 61 Question Id : 27028218690 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is correct to implement the Boolean function F(A,B,C,D) = Σ (0,1,2,4,7,8, 9,11, 14) using 4:1 MUX. Where C, D are selection variables?

Options :

1. ✔ $I_0 = (C'D' + C \text{ XOR } D)$, $I_1 = C \text{ XNOR } D$, $I_2 = C \text{ XNOR } D$, $I_3 = CD'$

2. ✖ $I_0 = (C \text{ XOR } D)$, $I_1 = C \text{ XNOR } D$, $I_2 = C \text{ XNOR } D$, $I_3 = CD'$

3. ✖ $I_0 = (C'D')$, $I_1 = C$ XNOR D , $I_2 = C$ XNOR D , $I_3 = CD'$

4. ✖ $I_0 = (C'D' + CD')$, $I_1 = C$ XNOR D , $I_2 = C$ XNOR D , $I_3 = CD'$

Question Number : 62 Question Id : 27028218691 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

. What is the simplified Boolean Expression for the function F (A,B,C,D,E) = ∑(0, 2, 4, 6, 9,13,21,23,25,31) ?

Options :

1. ✖ A'B'C' +C'E'+AB

2. ✔ A'B'E'+ ACE+ BD'E

3. ✖ A'B'E'+ ACE+ BD'E+B'DE'

4. ✔ A'B'E'+ ACE+ BD'E

Note: For this question, ambiguity is found in question/answer. Candidate will get full marks for this question if any of the correct options are chosen.

Question Number : 63 Question Id : 27028218692 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Multiple variable XNOR function F= (A⊕ B⊕C)' is defined as.....

Options :

1. ✖ Odd function

2. ✔ Even function

3. ✖ Parity function

4. ✖ Parity generator function

Question Number : 64 Question Id : 27028218693 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Assuming single precision IEEE 754 format, what decimal number is represent by this word:

101111101 00100000000000000000000 if biased exponent form is used?

Options :

1. ✔ 0.03125

2.

✖ 0.0325

3. ✖ 0.2125

4. ✖ 0.225

Question Number : 65 Question Id : 27028218694 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Computer A with CPI of 1.3 run at a clock rate of 600MHz. Computer B with CPI of 2.5 run at a clock rate of 750 Mhz. When a program P compiled for computer A has exactly 100,000 instructions. How many instructions would the program need to have when compiled for Computer B, in order for the two computers to have exactly the same execution time for program P?

Options :

1. ✔ 65000

2. ✖ 10000

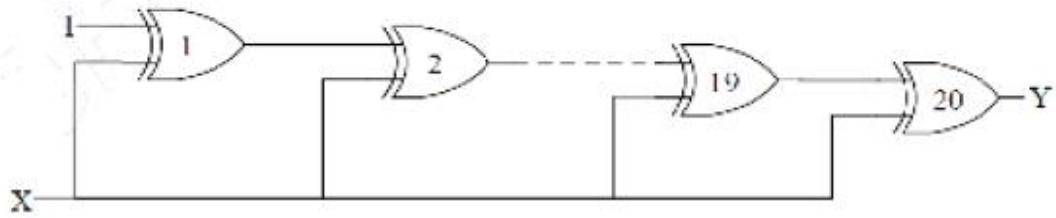
3. ✖ 75000

4. ✖ 80000

Question Number : 66 Question Id : 27028218695 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the value of Y if the number of cascaded gates are 20?



Options :

1. ✔ 1

2. ✖ 0

3. ✖ X

4. ✖ X'

Question Number : 67 Question Id : 27028218696 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

If 16 bytes are pulled from stack, having the top of stack address as 00CDH. What will be new top of the stack if on pushing into stack decrements top of stack and popping increments the top of stack?

Options :

1. ✖ 00ADH

2. ✖ 00DDH

3. ✖ 10CDH

4. ✔ 00BDH

Question Number : 68 Question Id : 27028218697 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the average time to read or write a 512-byte sector for a typical disk rotating at 7200 RPM? The average seek time is 8ms, the transfer rate is 20MB/sec, and the controller overhead is 2ms. Assume that the disk is idle so that there is no waiting time.

Options :

1. ✖ 14.16

2. ✖ 8

3.

✖ 14.15

4. ✔ 14.17

Question Number : 69 Question Id : 27028218698 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Assume a memory access to main memory on a cache "miss" takes 30 ns and a memory access to the cache on a cache "hit" takes 3 ns. If 80% of the processor's memory requests result in a cache "hit", what is the average memory access time?

Options :

1. ✖ 20ns

2. ✖ 24ns

3. ✖ 33ns

4. ✔ 8.4ns

Question Number : 70 Question Id : 27028218699 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On

Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

How many memory access required for the following instructions:

add r1, r2, r3

add r4,r5,(r6)

sub r2,r1,(r3)

Options :

1. ✖ One

2. ✔ Six

3. ✖ Three

4. ✖ Two

Question Number : 71 Question Id : 27028218700 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is correct for the given code snippet?

```
int i;
for (i=0;i<10000000;i++);
```

Options :

1. ✖ Syntax error

2. ✔ Time delay loop

3. ✖ Conditional selective loop

4. ✖ Selective loop

Question Number : 72 Question Id : 27028218701 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider two raster systems with the resolutions of 640 x 480 and 1280 x 1024. How many pixels could be accessed per second in each of these systems by a display controller that refreshes the screen at a rate of 60 frames per second?

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.

Options :

1. 1.8432 x 107 pixels/second.

2. 1.9432 x 109 pixels/second.

3. 1.78932 x 105 pixels/second.

4. 1.6532 x 107 pixels/second.

Question Number : 73 Question Id : 27028218702 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

A line connecting the points (1, 1) and (5, 3) is to be drawn using the DDA algorithm. What are the values of x and y increments?

Options :

1. ✖ x-increment=1; y-increment=1

2. ✖ x-increment=0.5; y=increment=1

3. ✔ x-increment= 1; y=increment=0.5

4. ✖ x-increment= 0.5; y=increment=0.5.

Question Number : 74 Question Id : 27028218703 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the output of the C code?

```
#include<stdio.h>
int main()
{
  int y;
  int *p,**q;
  y = 7; p = &y;   q=&p;
  printf("the value 1=%d and the value 2 = %d, *p,**q);
}
```

Options :

1. ✔ value 1=7 and value 2= 7

2. ✖ value 1=7 and value 2= address of p

3. ✖ value 1=7 and value 2= garbage value

4. ✖ value 1=7 and value 2= address of y

Question Number : 75 Question Id : 27028218704 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider RGB raster system designed using 8 inch x 10 inch screen with a resolution of 100 pixels/inch in each direction. If we want to store 6 bits per pixel in the frame buffer, how much storage (in bytes) do we need for frame buffer?

Options :

1. ✖ 6×10^6 bytes.

2. ✔ 6×10^5 bytes.

3. ✖ 8×10^5 bytes.

4. ✖ 8×10^6 bytes.

Question Number : 76 Question Id : 27028218705 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is correct?

```
#include<stdio.h>
int main()
{
    char s1[20] = {"abc"}, s2[20]={"aac"};
    int i,j;
    i = strcmp(s1,s2);
    j= strcmp(s2,s1);
    printf("i=%d and j=%d",i,j);
}
```

Options :

1.

1. ✔ i=1 and j = -1

2. ✖ i=1 and j=1

3. ✖ i= -1 and j =1

4. ✖ i= 0 and j= 0

Question Number : 77 Question Id : 27028218706 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following statement is correct?

Options :

1. ✔ Cavalier projection makes 45° angle with the projection plane

2. ✖ Cavalier projection makes 63.4° angle with the projection plane

3. ✔ Cabinet projection makes 63.4° angle with the projection plane

4. ✖ Cabinet projection makes 65° angle with the projection plane

Note: For this question, ambiguity is found in question/answer. Candidate will get full marks

for this question if any of the correct options are chosen.

Question Number : 78 Question Id : 27028218707 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is correct?

Options :

1. ✖ Class template is used to create family of functions

2. ✖ Programming with templates is referred as functional programming

3. ✔ Function template is used to create family of classes and functions

4. ✔ Operators can be overloaded within class templates

Note: For this question, ambiguity is found in question/answer. Candidate will get full marks for this question if any of the correct options are chosen.

Question Number : 79 Question Id : 27028218708 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the output of the following C++ code?

```
#include<iostream.h>
#define DISPLAY(i) cout<<"b" #i "=" << b##i
int main(void)
{ int b1=10, b2=20;
 DISPLAY(1);
 DISPLAY(2);
}
```

Options :

1. ✖ Syntax error

2. ✔ b1=10 b2 =20

3. ✖ b1=10

4. ✖ b2=20

Question Number : 80 Question Id : 27028218709 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

How to define target in new page in HTML?

Options :

1. ✖ Click Here

2. ✔ Click Here

3. ✖ <a href = “http://…..com/” target = “@blank”>Click Here<t/a>

4. ✖ Click Here

Question Number : 81 Question Id : 27028218710 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Let the following relation schemas be given: R=(A, B, C) S=(D, E, F)
Let relations r(R) and s(S) be given. What is an equivalent expression in the tuple relational calculus for $\Pi_{A,F}(\sigma_{C=D}(r \times s))$

Options :

1. ✔ $\{t \mid \exists p \in r \exists q \in s(t[A]=p[A] \wedge t[F]=q[F] \wedge p[C]=q[D]\}$

2. ✖ $\{t \mid \exists q \in r(q[A]=t[A])\}$

3. ✖ $\{t \mid \exists q \in r(q[C]=t[D])\}$

4. ✖ $\{t \mid \exists q \in r(t[A]=q[F])\}$

Question Number : 82 Question Id : 27028218711 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider relation R=(A, B, C), and let r1 and r2 both be relations on schema R. What is an expression in the domain relational calculus that is equivalent to r1∪r2 ?

Options :

1. ✔ $\{<a,b,c> | <a,b,c> \in r1 \vee <a,b,c> \in r2\}$

2. ✖ $\{<a,b,c> | <a,b,c> \in r1 \wedge <a,b,c> \in r2\}$

3. ✖ $\{<a,b,c> | <a,b,c> \in r1,r2 \wedge <a,b,c> \in r1,r2\}$

4. ✖ $\{<a,b,c> | <a,b,c> \in r1,r2\}$

Question Number : 83 Question Id : 27028218712 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider the employee database where primary keys are underlined: employee (employee-name, street, city) works (employee-name, company-name, salary) company (company-name, city) manages (employee-name, manager-name)

Which of the following is correct for the SQL query? Update works set salary = salary * 1.1

Where company-name='ABC'

Options :

1. ✖ Give all managers of ABC a 10 percent raise

2. ✖ Lists all employees of ABC a 10 percent raise

3. ✖ Lists all managers of ABC a 10 percent raise

4. ✔ Give all employees of ABC a 10 percent raise

Question Number : 84 Question Id : 27028218713 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider the employee database where primary keys are underlined: employee (employee-name, street, city) works (employee-name, company-name, salary) company (company-name, city) manages (employee-name, manager-name)

Which of the following is the SQL query to Find the company that has the smallest payroll?

Options :

1. ✖ Select company-name from works group by company-name

2. ✖ Select company-name from employee group by company-name

3. ✖ select count (distinct employee-name) from works group by company-name

4. ✔

select company-name from works group by company-name having sum(salary)<=all

(select sum(salary)from works group by company-name)

Question Number : 85 Question Id : 27028218714 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider the following set of frequent 3-itemsets: {1, 2, 3}, {1, 2, 4}, {1, 2, 5}, {1, 3, 4}, {1, 3, 5}, {2, 3, 4}, {2, 3, 5}, {3, 4, 5}. Assume that there are only five items in the dataset. How many candidate 4-itemsets can be obtained by the Fk−1 × F1 candidate generation method?

Options :

1. ✖ 4

2. ✔ 5

3. ✖ 3

4. ✖ 6

Question Number : 86 Question Id : 27028218715 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the Euclidean distance between A1 and A2, where A1 (2, 10) and A2 (2, 5)?

Options :

1. ✔ Sqrt(25)

2. ✖ Sqrt(36)

3. ✖ Sqrt(2)

4. ✖ Sqrt(5)

Question Number : 87 Question Id : 27028218716 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following statements is FALSE?

Options :

1. ✖ Association analysis will yield the same frequent iterm sets and strong association rules whether a specific item occurs once or three times in an individual transaction.

2. ✔ The k-means clustering algorithm will automatically find the best value of k as part of its normal operation.

3. ✖ A density-based clustering algorithm can generate non-globular clusters.

4. ✖ In association rule mining the generation of the frequent itemsets is the computational intensive step.

Question Number : 88 Question Id : 27028218717 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

In order to turn on RPC authentication in hadoop, What is the value to be set to hadoop.security.authentication property?

Options :

1. ✖ Zero

2. ✖ One

3. ✔ Kerberoes

4. ✖ False

Question Number : 89 Question Id : 27028218718 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

A computer system can operate in two different modes. Every hour, it remains in the same mode or switches to a different mode according to the transition probability matrix.

$$P = \begin{bmatrix} 0.4 & 0.6 \\ 0.6 & 0.4 \end{bmatrix}$$

If the system is in Mode I at 5:30 pm, what is the probability that it will be in Mode I at 8:30 pm on the same day?

Options :

1. ✔ $p_{11}^{(3)} = 0.496$

2. ✖ $p_{11}^{(1)} = 0.496$

3. ✖ $p_{11}^{(2)} = 0.496$

4. ✖ $p_{11}^{(3)} = 0.52$

Question Number : 90 Question Id : 27028218719 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider the process and its arrival time and CPU burst time for each process.

Process	Arrival time	CPU Burst Time
P1	0	10
P2	2	6
P3	3	1
P4	5	3

What is the waiting time of process P3 and average turnaround time for FCFS CPU process scheduling?

Options :

1. ✔ 13 and 13.25

2. ✖ 10 and 13.25

3. ✖ 8 and 13.25

4. ✖ 2 and 13.25

Question Number : 91 Question Id : 27028218720 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider the process and its arrival time and CPU burst time for each process.

Process	Arrival time	CPU Burst Time
P1	0	10
P2	2	6
P3	3	1
P4	5	3

Using Round robin scheduling with time quantum of 4, what is the average waiting time and Average turnaround time?

Options :

1. ✖ 3.75 and 13.50

2. ✔ 3.75 and 13.25

3. ✖ 5.75 and 13.25

4. ✖ 5.0 and 13.0

Question Number : 92 Question Id : 27028218721 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

A counting semaphore was initialized to 10, then 20P (wait) operations and xV (signal) operations were completed on this semaphore. If the final value of the semaphore is 5, then the value of x is.....

Options :

1. ✔ 15

2. ✖ 10

3. ✖ 18

4. ✖ 12

Question Number : 93 Question Id : 27028218722 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

A linker reads four modules whose lengths are 400, 1000, 800 and 600 words, respectively. If they are loaded in that order, what are the relocation constants?

Options :

1. ✖ 0, 200, 400, 800

2. ✖ 400, 600, 1000, 200

3. ✖ 0, 200, 800,1000

4. ✔ 0, 400, 1400, 2200

Question Number : 94 Question Id : 27028218723 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider '4' processes sharing the CPU in a round-robin fashion. Assuming that each process switch takes 's' seconds with quantum size 'q' What is the total time taken for P1 to Schedule again after first round?

Options :

1. ✖ $3s+4q$

2. ✖ $3(s+q)$

3. ✖ $4(s+q)$

4. ✔ $4s+3q$

Question Number : 95 Question Id : 27028218724 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

If an instruction takes '5' microseconds and a page fault takes an additional '6' microseconds, what is the effective instruction time if on the average a page fault occurs every k instruction?

Options :

1.

✔ 5 + 6/k

2. ✖ 11/k

3. ✖ 5+6*k

4. ✖ 5*k +6

Question Number : 96 Question Id : 27028218725 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is correct regarding the demand paging?

Options :

1. ✖ Policy for determining which page replacement algorithm to be used.

2. ✖ Policy for determining which page to replace.

3. ✔ Loading a page into memory only on a page-fault.

4. ✖ Starting a process with all of its pages resident in physical memory.

Question Number : 97 Question Id : 27028218726 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider the time taken for each of the following operations as t1, t2, t3, and t4. Which of the following is ascending order of cost of these operations?

t1 = time taken to detect a protection violation.
t2 = TLB miss.
t3 = Page fault with replacement of dirty page.
t4 = Page fault with replacement of clean page.

Options :

1. ✔ t1= t2< t4<t3

2. ✖ t1>t2>t3>t4

3. ✖ t1<t2<t3<t4

4. ✖ t1<t3<t2<t4

Question Number : 98 Question Id : 27028218727 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider a UNIX file system with 20 direct pointers, 1 indirect pointer and 1 double-indirect pointer in the i-node. Assume that disk blocks are 4K bytes and that each pointer to a disk block requires 4 bytes. What is the largest possible file that can be supported with this design?

Options :

1. ✔ 20*4KB + 1024*4KB + 1024*1024*4KB

2. ✖ 1024*4KB

3. ✖ 1024*1024*4KB

4. ✖ 1024*1024*1024KB

Question Number : 99 Question Id : 27028218728 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Match each RAID level with its primary disadvantage. Choose the best option for each.

1. RAID-0	a. Wastes disk capacity
2. RAID-1	b. Complicated calculation of data and parity location
3. RAID-4	c. Failure of one disk causes loss of data
4. RAID-5	d. Parity disk is performance bottleneck

Options :

1. ✖ 1-b, 2-a, 3-d, 4-c

2. ✔ 1-c, 2-a, 3-d, 4-b

3. ✖ 1-b, 2-c, 3-d, 4-a

4. ✖ 1-c, 2-d, 3-a, 4-b

Question Number : 100 Question Id : 27028218729 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the result of $3^{12} \bmod 11$ using Fermat's little theorem?

Options :

1. ✔ 9

2. ✖ $3 \bmod 11$

3. ✖ $3^{11} \bmod 11$

4. ✖ $12 \bmod 11$

Question Number : 101 Question Id : 27028218730 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

No

Correct Marks : 2 Wrong Marks : 0

In a community of 'n' people, how many shared secrets are needed for symmetric-key cryptography?

Options :

1. ✖ n/2

2. ✖ n

3. ✖ n(n)/2

4. ✔ n(n-1)/2

Question Number : 102 Question Id : 27028218731 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider plain text and cipher text 4-bits long and the key is 3-bits long. Assume that the function takes first and third bits of key and interprets these two bits as a decimal number, squares the number and interprets the result as 4-bit binary pattern. What is the encryption and decryption if the original key is 0111 and key is 101?

Options :

1. ✔ 1110 and 0111

2. ✖ 1001 and 1100

3. ✖ 1100 and 1001

4. ✖ 1100 and 0011

Question Number : 103 Question Id : 27028218732 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the recurrence relation for Bubble sort procedure to sort 'n' numbers in ascending order?

Options :

1. ✔ $T(n) = T(n-1) + n - 1 \quad \text{for } n>1$

2. ✖ $T(n) = T(n-1) + 1 \quad \text{for } n>1$

3. ✖ $T(n) = T(n/2) + n \quad \text{for } n>1$

4. ✖ $T(n) = T(n-2) + n - 1 \quad \text{for } n>1$

Question Number : 104 Question Id : 27028218733 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

No

Correct Marks : 2 Wrong Marks : 0

Given a weighted directed graph G with 'n' vertices and 'm' edges, the Bellman ford algorithm computes the distance from vertex 'v' to all other vertices in G in .....time.

Options :

1. ✖ O(n+m) time

2. ✖ O(n*n)

3. ✖ O(m*m)

4. ✔ O(n*m)

Question Number : 105 Question Id : 27028218734 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

During execution of Edmonds-Karp algorithm for max-flow problem on a network with 'n' vertices and 'm' edges, how many number of flow augmentations takes place?

Options :

1. ✖ Not more than 'n'

2. ✔ Not more than (n*m)

3. ✖ Not more than (n+m)

4. ✖ More than (n+m)

Question Number : 106 Question Id : 27028218735 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Let T be a binary tree with 'n' nodes. How many number of external nodes and internal nodes exists at most in T?

Options :

1. ✔ 2^h and 2^h-1, where h denotes height of T

2. ✖ 2^{h-1} and 2^h-1, where h denotes height of T

3. ✖ 2^{h+1} and 2^h-1, where h denotes height of T

4. ✖ 2^{h-2} and 2^h-1, where h denotes height of T

Question Number : 107 Question Id : 27028218736 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control :

No

Correct Marks : 2 Wrong Marks : 0

How many comparisons are required to search for a pattern ***abacab*** in a string ***abacaabadcabacabaabb*** using Boyer-Moore Pattern matching algorithm?

Options :

1. ✖ 12

2. ✖ 27

3. ✔ 13

4. ✖ 21

Question Number : 108 Question Id : 27028218737 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the total length of thesuffices of a string X of length 'N'?

Options :

1. ✖ N^2

2. ✔ $N(N+1)/2$

3.

✖ N

4. ✖ N(N-1)

Question Number : 109 Question Id : 27028218738 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the complexity of the algorithm to find the connected components of a graph G with 'n' vertices and 'm' edges represented in adjacency list structure?

Options :

1. ✖ O(n*n)

2. ✔ O(n+m)

3. ✖ O(m*n)

4. ✖ O(m*(n-1))

Question Number : 110 Question Id : 27028218739 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

For a graph G with 6 vertices and 14 edges and minimum spanning tree cost is 32. What is the minimum cost if the cost of the edges are doubled in G?

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.

Options :

1. 43

2. 46

3. 42

4. 60

Question Number : 111 Question Id : 27028218740 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The minimum number of states required for deterministic finite automaton accepting the language L = $\{w|w \in \{0,1\}^*$ the number of 0's and 1's are divisible by 3 and 5 respectively?

Options :

1. ✖ 8

2. ✖ 12

3. ✖ 10

4. ✔ 15

Question Number : 112 Question Id : 27028218741 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider S → SS|a , the number of derivation trees for *aaaaa* is .....

Options :

1. ✖ 3

2. ✖ 5

3. ✖ 7

4. ✔ 14

Question Number : 113 Question Id : 27028218742 Question Type : MCQ Option Shuffling : No

Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

. Consider the regular Language L = {111 +11111}*, The minimum number of states required for any DFA accepting accepting this language is .....

Options :

1. ✖ 3

2. ✖ 5

3. ✖ 8

4. ✔ 9

Question Number : 114 Question Id : 27028218743 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider the Language $L=\{a^n b^m c^p d^q \mid n,m,p,q >= 1\}$, then which of the following is correct?

Options :

1. ✖ L is CFL but not Regular

2. ✖ L is CSL but not CFL

3. ✔ L is regular

4. ✖ type 0 language but not type 1

Question Number : 115 Question Id : 27028218744 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Let S be a NP-Complete problem and Q and R be two other problems not known to be in NP. Q is polynomial time reducible to S and S is polynomial time reducible to R. Which one of the following statements is true?

Options :

1. ✖ R is NP Complete

2. ✔ R is NP hard

3. ✖ Q is NP Complete

4. ✖ Q is NP Hard

Question Number : 116 Question Id : 27028218745 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A

Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Let Σ ={a,b,c,d,e}. The number of strings in Σ^* of length 4 such that no symbol is used more than once in a string is.....

Options :

1. ✖ 240

2. ✖ 360

3. ✔ 120

4. ✖ 35

Question Number : 117 Question Id : 27028218746 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following statements is FALSE?

Options :

1. ✖ The union of two recursive sets is recursive

2. ✖ The complement of the recursive set is recursive

3. ✖ The Halting problem for Turing machines is recursively un decidable

4. ✔ L_1 and L_2 are recursive enumerable sets then L_1 Union L_2 are not recursively enumerable.

Question Number : 118 Question Id : 27028218747 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The minimum number of states required to construct DFSA for the set of strings over {a,b} having an even number of a's and odd number of b's is .....

Options :

1. ✔ 4

2. ✖ 5

3. ✖ 6

4. ✖ 3

Question Number : 119 Question Id : 27028218748 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

. What is the time complexity to sort 2^n numbers in ascending order using sorting network?

Options :

1. ✖ $2 \log_2 n$

2. ✖ $\log n+2$

3. ✖ $\log_2 n+n$

4. ✔ $\log_2 n$

Question Number : 120 Question Id : 27028218749 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which decomposition method is used to solve the parallel quick sort algorithm?

Options :

1. ✖ Data decomposition

2. ✔ Recursive decomposition

3. ✖ Speculative decomposition

4. ✖ Exploratory decomposition

Question Number : 121 Question Id : 27028218750 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Consider 2^n processors connected with hypercube topology. What is the communication cost to broadcast the message 'm' to all nodes if t_s is startup time and t_w is word transfer time?

Options :

1. ✔ $t_s + t_w \ (\log n)$

2. ✖ $(t_s + t_w)(\log n)$

3. ✖ $(t_s + t_w (n))$

4. ✖ $(t_s + t_w \ (n\log n))$

Question Number : 122 Question Id : 27028218751 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

. Which of the following is cache coherence snoopy based write invalidate protocol?

Options :

1. ✔ MSI

2. ✖ Cache-based protocol

3. ✖ Memory-based protocol

4. ✖ Directory-based protocol

Question Number : 123 Question Id : 27028218752 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the output of the following C code?

```
#include<stdio.h>
main()
{ int j = 2;
   while(j--) { int j=20; printf("%d", j);}
}
```

Options :

1. ✔ 20 20

2. ✖ 1 2

3. ✖ 0 0

4. ✖ 1 1

Question Number : 124 Question Id : 27028218753 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is correct for the given recurrence equation?

T(n) = 5T(n/5) + sqrt(n)

T(1) = 1

Options :

1. ✔ theta(n)

2. ✖ theta(n log n)

3. ✖ O(n*n)

4. ✖ O(n*log n)

Question Number : 125 Question Id : 27028218754 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

What is the output of the C code ?

```
#include<stdio.h>
int main()
{  int k=10, i =5;
   printf("the value of  i is:\t",  ++i, ++i);
}
```

Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.

Options :

1. 7 7

2. 7 6

3. 5 5

4. 6 5

Question Number : 126 Question Id : 27028218755 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

If the signal speed is 6 μsec/km then, what is the propagation time in milliseconds on a 3000km long cable?

Options :

1.

1. ✖ 1800

2. ✔ 18

3. ✖ 18000

4. ✖ 180

Question Number : 127 Question Id : 27028218756 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following IP address is private IP address?

Options :

1. ✖ 100.10.10.10

2. ✖ 200.216.10.10

3. ✖ 111.131.135.136

4. ✔ 192.168.0.13

Question Number : 128 Question Id : 27028218757 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Match the following port number with their application.

List – I (Port number)	List – II (Application)
1. 25	a. TFTP
2. 110	b. TELNET
3. 69	c. POP3
4. 23	d. SMTP

Options :

1. ✖ 1–d, 2-a, 3-c, 4-b

2. ✖ 1-b, 2-c, 3-a, 4-d

3. ✖ 1-b, 2-c, 3-a, 4-d

4. ✔ 1-d, 2-c, 3-a, 4-b

Question Number : 129 Question Id : 27028218758 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

In RSA crypto system, for a given primes P = 17, Q = 11 and also give public key e = 7, then calculate the value of private key'd'?

Options :

1. ✖ 160

2. ✖ 103

3. ✖ 13

4. ✔ 23

Question Number : 130 Question Id : 27028218759 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

In the Ethernet protocol, for a given bandwidth of 10Mbps, what is the baud rate (answer in terms of Mega bauds).

Options :

1. ✖ 5

2. ✖ 10

3. ✔ 20

4. ✖ 100

Question Number : 131 Question Id : 27028218760 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Calculate the Frame Checksum (FCS) for the message 10110 with generator polynomial 1101 using CRC method.

Options :

1. ✖ 010

2. ✖ 1001

3. ✔ 101

4. ✖ 110

Question Number : 132 Question Id : 27028218761 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

In TCP, the sending host sends the message of 20 bytes with starting sequence number 100. The receiving host gives the acknowledge number as.....

Options :

1. ✖ 100

2. ✖ 120

3. ✖ 160

4. ✔ 260

Question Number : 133 Question Id : 27028218762 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Given the IP address with CIDR notation as 200.100.35.250/28, what is the block ID?

Options :

1. ✖ 200.35.240.0

2. ✖ 200.0.0.0

3. ✔ 200.100.35.240

4. ✖ 200.100.35.28

Question Number : 134 Question Id : 27028218763 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Given the IP v4 address 200.200.222.200, Identify the class it belongs?

Options :

1. ✖ Class A

2. ✖ Class B

3. ✔ Class C

4. ✖ Class D

Question Number : 135 Question Id : 27028218764 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

A DNS server listens for requests on port number_____

Options :

1. ✖ 80

2. ✖ 25

3. ✔ 53

4. ✖ 23

Question Number : 136 Question Id : 27028218765 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

For the given grammar which all sentence can be parsed

S -> NP VP

VP-> V NP

NP-> ART N

NP-> N

V -> ate

ART -> the

N -> cat

N->John

Options :

1. ✔ John ate the cat

2. ✖ cat ate john the

3. ✖ dog ate the cat

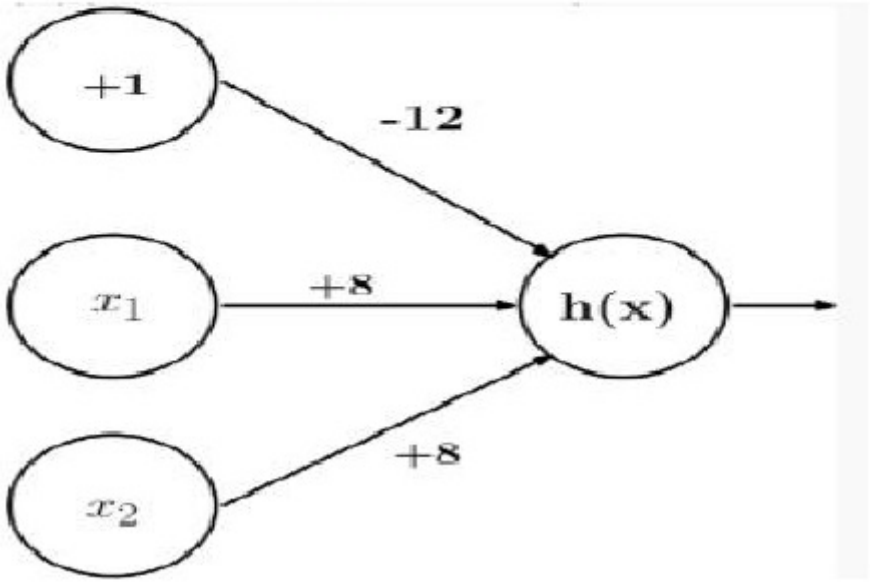
All the above

4. ✖

Question Number : 137 Question Id : 27028218766 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The neural network given bellow takes two binary valued inputs $x1,x2 \in \{0,1\}$ and the activation function is the binary threshold function (h(x)=1 if x>0; 0 otherwise). Which of the following logical functions does it compute?



Options :

1. ✖ OR

2. ✔ AND

3. ✖ NAND

4. ✖ NOR

Question Number : 138 Question Id : 27028218767 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

If a class C is derived from class B, which is derived from class A, all through public inheritance, than a class C member function can access.....

Options :

1. ✖ Only protected and public data of C and B

2. ✖ Only protected and public data of C

3. ✔ All data of C and public data of A and B

4. ✔ Public and protected data of A and B and all data of C

Note: For this question, ambiguity is found in question/answer. Candidate will get full marks for this question if any of the correct options are chosen.

Question Number : 139 Question Id : 27028218768 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

How many maximum number of edges can be there in n-node undirected graph without self-loops?

Options :

1. ✖ n*n

2. ✔ n(n-1)/2

3. ✖ n(n+1)/2

4. ✖ n/2

Question Number : 140 Question Id : 27028218769 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

How many number of NAND gates required to implement the Boolean function F(A,B,C) = A + AB' + AB'C + AB + ABC+ABC'

Options :

1. ✖ One

2. ✖ Two

3. ✖ Three

4. ✔ Zero

Question Number : 141 Question Id : 27028218770 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is not true about Incremental testing?

Options :

1. ✖ Top-Down approach can be used

2. ✖ Use of stubs or drivers are required

3. ✔ All modules need to be completed prior to testing

4. ✖ Bottom – up approach is also possible

Question Number : 142 Question Id : 27028218771 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following is a form of functional testing?

Options :

1. ✖ Usability testing

2. ✔ Boundary value analysis

3. ✖ Performance testing

4. ✖ Security testing

Question Number : 143 Question Id : 27028218772 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The model which estimates the total effort in terms of person, months of the technical project staff is _____.

Options :

1. ✖ Spiral Model

2. ✖ Waterfall model.

3. ✖ Win-win spiral model.

4. ✔ Cocomo Model

Question Number : 144 Question Id : 27028218773 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

The program counter register contains 85AC and the address part of the instruction contains 125. If the relative addressing mode is applied, what is the effective address?

Options :

1. ✖ 85AC

2. ✖ 85A1

3. ✖ 86CF

4. ✔ 86D1

Question Number : 145 Question Id : 27028218774 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Identify the following activation function: $\varphi(V) = Z + (1/\ 1 + \exp(-x * V + Y))$, Z, X, Y are parameters ?

Options :

1. ✔

Sigmoid

2. ✖ Step

3. ✖ Ramp

4. ✖ Guassian

Question Number : 146 Question Id : 27028218775 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following neural networks uses supervised learning?
i) Multilayer perceptron
ii) Self organizing feature map
iii) Hopfield network

Options :

1. ✔ (i) only

2. ✖ (ii) only

3. ✖ (iii) only

4. ✖ (i) and (ii) only

Question Number : 147 Question Id : 27028218776 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

How many number of the times given instruction sequence will loop before coming out of loop?

```
MOV AL, 00h
A1: INC AL
JNZ A1
```

Options :

1. ✖ 00

2. ✖ 01

3. ✖ 255

4. ✔ 256

Question Number : 148 Question Id : 27028218777 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which flag acts as Borrow flag for SBB instruction in 8086 architecture?

Options :

1. ✖ Auxiliary Flag

2. ✔ Carry Flag

3. ✖ Parity Flag

4. ✖ Trap Flag

Question Number : 149 Question Id : 27028218778 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

A computer system stores floating-point numbers with a 16-bit mantissa and an 8-bit exponent, each in two's complement form. What is the smallest and largest positive values that can be stored in this system?

Options :

1. ✖ $1x10^{-128}$ and $2^{15} \times 10^{128}$

2. ✖ $1x10^{-256}$ and $2^{15} \times 10^{255}$

3. ✖ $1x10^{-128}$ and $2^{15} \times 10^{127}$

4. ✔ $1x10^{-128}$ and $(2^{15}-1) \times 10^{127}$

Question Number : 150 Question Id : 27028218779 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Allowed Progression : Yes Number of Replay : 999 Play On Load : No Control Enable : Yes Time interval to replay(In Seconds) : 0 Allow Volume Control : No

Correct Marks : 2 Wrong Marks : 0

Which of the following statements will generate a random number in the range 30 to 50 ?

Options :

1. ✖ (rand ())

2. ✖ (rand() % 20 + 1)

3. ✖ (rand()% 21) + 20

4. ✔ (rand() % 21) + 30