

Andhra Pradesh State Council of Higher Education

Notations :

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✗ icon are incorrect.

Question Paper Name :	STATISTICS 3rd May 2024 Shift 1
Duration :	120
Total Marks :	140
Display Marks:	No
Share Answer Key With Delivery Engine :	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
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Research Methodology

Section Id :	971036443
Section Number :	1
Mandatory or Optional :	Mandatory
Number of Questions :	66
Section Marks :	70
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Is Section Default? :	null

Question Number : 1 Question Id : 97103631162 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is the main objective of teaching?

Options :

1. ✘ To give information related to the syllabus
2. ✘ Help the students in getting jobs
3. ✔ To develop thinking capability of students

4. ✘ Prepare the students for examination.

Question Number : 2 Question Id : 97103631163 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is not a level of teaching learning?

Options :

1. ✘ Memory level

2. ✔ Differentiation level

3. ✘ Reflective level

4. ✘ Understanding level

Question Number : 3 Question Id : 97103631164 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

An effective teacher will ensure _____

Options :

1. ✘ Laissez-failure

2. ✘ Competition among students

3. ✔ Competition or cooperation as the situation demands

4. ✘ Cooperation among his students

Question Number : 4 Question Id : 97103631165 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Morphograph is the term associated with _____

Options :

1. ✔ Corrective spelling
2. ✘ Corrective learning
3. ✘ Corrective behavior
4. ✘ Corrective reading

Question Number : 5 Question Id : 97103631166 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is NOT associated with micro-teaching ?

Options :

1. ✘ Knowledge acquiring
2. ✘ Skill training
3. ✔ Atomic teaching procedure

4. ✘ Content transfer

Question Number : 6 Question Id : 97103631167 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The main aim of 'National Council for Teacher Education' is _____

Options :

1. ✘ To promote research in education
2. ✔ To maintain standards in colleges of education
3. ✘ To provide grant to colleges of education
4. ✘ To open colleges in education

Question Number : 7 Question Id : 97103631168 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is a Massive Open Online Course (MOOCs) platform created by the MHRD, Govt. of India?

Options :

1. ✔ SWAYAM
2. ✘ PRATHAM

3. ✘ OPEN LEARN

4. ✘ FUTURE LEARN

Question Number : 8 Question Id : 97103631169 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following does not belong to a projected aid?

Options :

1. ✘ Overhead projector

2. ✔ Black board

3. ✘ Epidiascope

4. ✘ Slide projector

Question Number : 9 Question Id : 97103631170 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The purpose of formative evaluation is to _____

Options :

1. ✔ Accelerate student's learning performance

2. ✘ Provide a feedback to teacher effectiveness
3. ✘ Grade students learning outcomes
4. ✘ Check student's performance graph

Question Number : 10 Question Id : 97103631171 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Assertion (A): Learning is a lifelong process

Reason (R): Learning to be useful must be linked with life process.

Choose correct answer from the following

Options :

1. ✔ Both (A) and (R) are true and (R) is the correct explanation of (A)
2. ✘ Both (A) and (R) are true, but (R) is not the correct explanation of (A)
3. ✘ (A) is true, but (R) is false
4. ✘ (A) is false, but (R) is true

Question Number : 11 Question Id : 97103631172 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

'Gyan Darshan' launched by IGNOU refers to which one of the following?

Options :

1. ✓ Satellite based educational T.V. channel
2. ✗ Educational F.M radio network
3. ✗ Global initiative of academic networks
4. ✗ Online courses

Question Number : 12 Question Id : 97103631173 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the sets of activities best indicate the cyclic nature of action research strategy?

Options :

1. ✗ Reflect, Observe, Plan, Act
2. ✓ Plan, Act, Observe, Reflect
3. ✗ Act, Plan, Observe, Reflect
4. ✗ Observe, Act, Reflect, Plan

Question Number : 13 Question Id : 97103631174 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time : 0

Which of the following research types has a potential for enhancing teaching competencies?

Options :

1. ✘ Fundamental research
2. ✘ Applied research
3. ✘ Impact assessment research
4. ✔ Action research

Question Number : 14 Question Id : 97103631175 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is the main aim of interdisciplinary research?

Options :

1. ✔ To bring out holistic approach to research
2. ✘ To over simplify the problem of research
3. ✘ To reduce the emphasis of single subject in research domain
4. ✘ To create a new trend in research methods

Question Number : 15 Question Id : 97103631176 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Manipulation is always a part of _____

Options :

1. ✘ Fundamental research
2. ✘ Descriptive research
3. ✔ Experimental research
4. ✘ Historical research

Question Number : 16 Question Id : 97103631177 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A thesis statement is _____

Options :

1. ✘ A fact
2. ✘ An observation
3. ✘ A discussion
4. ✔ An Assumption

Question Number : 17 Question Id : 97103631178 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is an indication of the quality of a research journal?

Options :

1. ✘ g-index
2. ✘ h-index
3. ✔ impact factor
4. ✘ i10-index

Question Number : 18 Question Id : 97103631179 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A hypothesis is a _____

Options :

1. ✘ Postulate
2. ✘ Law
3. ✘ Canon
4. ✔ Supposition

Question Number : 19 Question Id : 97103631180 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Ethical norms in research do not involve guidelines for _____

Options :

1. ✘ Copyright

2. ✔ Thesis format

3. ✘ Patenting policy

4. ✘ Data sharing policies

Question Number : 20 Question Id : 97103631181 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is a research tool?

Options :

1. ✘ Illustration

2. ✘ Graph

3. ✔ Questionnaire

4. ✖ Diagram

Is Section Default? :

null

Question Id : 97103631182 Sub Question Shuffling Allowed : Yes Group Comprehension

Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A

Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (21 to 25)

Read the Passage and answer the following questions:

The Taj Mahal has become one of the world's best known monuments. This domed white marble structure is situated on a high plinth at the southern end of a four-quartered garden, evoking the gardens of paradise, enclosed within walls measuring 305 by 549 metres. Outside the walls, in an area known as Mumtazabad, were living quarters for attendants, markets, serais and other structures built by local merchants and nobles. The tomb complex and the other imperial structures of Mumtazabad were maintained by the income of thirty villages given specifically for the tomb's support. The name Taj Mahal is unknown in Mughal chronicles, but it is used by contemporary Europeans in India, suggesting that this was the tomb's popular name. In contemporary texts, it is simply called the illuminated tomb (Rauza-i-Munavvara).

Mumtaz Mahal died shortly after delivering her fourteenth child in 1631. The Mughal court was then residing in Burhanpur. Her remains were temporarily buried by the grief-stricken emperor in a spacious garden known as Zainabad on the bank of the river Tapti. Six months later, her body was transported to Agra, where it was interred in land chosen for the mausoleum. This land, situated south of the Mughal city on the bank of the Jamuna, had belonged to the Kachwaha rajas since the time of Raja Man Singh and was purchased from the then current raja, Jai Singh. Although contemporary chronicles indicate Jai Singh's willing cooperation in this exchange, extant farmans (imperial commands) indicate that the final price was not settled until almost two years after the mausoleum's commencement. Jai Singh's further cooperation was insured by imperial orders issued between 1632 and 1637 demanding that he provide stone masons and carts to transport marble from the mines at Makrana, within his 'ancestral domain', to Agra where both the Taj Mahal and Shah Jahan's additions to the Agra fort were constructed concurrently.

Work on the mausoleum was commenced early in 1632. Inscriptional evidence indicates much of the tomb was completed by 1636. By 1643, when Shah Jahan most lavishly celebrated the 'Urs ceremony for Mumtaz Mahal', the entire complex was virtually complete.

Sub questions

Question Number : 21 Question Id : 97103631183 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Marble stone used for the construction of Taj Mahal was brought from the ancestral domain of Raja Jai Singh. The name of the place where mines of marble were situated, is _____

Options :

1. ✘ Burhanpur
2. ✔ Makrana
3. ✘ Amber
4. ✘ Jaipur

Question Number : 22 Question Id : 97103631184 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The popular name Taj Mahal was given by____

Options :

1. ✘ Shah Jahan
2. ✘ Muntaz Mahal
3. ✘ Jai Singh
4. ✔ Europeans

Question Number : 23 Question Id : 97103631185 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Point out the true statement from the following.

Options :

1. ✘ Marble was not used for construction of the Taj Mahal.
2. ✘ Red sand stone is non-visible in Taj Mahal complex.
3. ✔ The Taj Mahal is surrounded by a four-quartered garden known as Chahr Bagh
4. ✘ The Taj Mahal was constructed to celebrate the 'Urs ceremony for Mumtaz Mahal'

Question Number : 24 Question Id : 97103631186 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the contemporary texts, Taj Mahal is known _____

Options :

1. ✘ Mumtazabad
2. ✘ Mumtaz Mahal
3. ✘ Zainabad
4. ✔ Rauza-i-Munavvara

Question Number : 25 Question Id : 97103631187 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The document indicating the ownership of land, where Taj Mahal was built, is known as __

Options :

1. ✓ Farman
2. ✗ Sale deed
3. ✗ Sale-purchase deed
4. ✗ Gift deed

Is Section Default? : null

Question Number : 26 Question Id : 97103631188 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Telephone is an example of _____

Options :

1. ✓ Linear communication
2. ✗ Non-linear communication
3. ✗ Circular communication

4. ✘ Mechanized communication

Question Number : 27 Question Id : 97103631189 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The mode of communication that involves a single source transmitting information to a large number of receivers simultaneously, is called _____

Options :

1. ✘ Group communication
2. ✔ Mass communication
3. ✘ Interpersonal communication
4. ✘ Intrapersonal communication

Question Number : 28 Question Id : 97103631190 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In communication, the language is _____

Options :

1. ✘ The non-verbal code
2. ✔ The verbal code

3. ✘ The symbolic code

4. ✘ The iconic code

Question Number : 29 Question Id : 97103631191 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Chatting in internet is _____ type of communication

Options :

1. ✘ Parallel communication

2. ✘ Grapevine communication

3. ✔ Verbal communication

4. ✘ Non-verbal communication

Question Number : 30 Question Id : 97103631192 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which group of communicating aspects does not disrupt the communication process in the class?

Options :

1. ✘ Evaluating - focusing - exaggerating

2. ✓ Focusing – illustrating - exaggerating

3. ✘ Evaluating – focusing - illustrating

4. ✘ Reversing – Evaluating – focusing

Question Number : 31 Question Id : 97103631193 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following can be termed as verbal communication?

Options :

1. ✘ The child was crying to the attention of the mother

2. ✘ Signal at the cross-road changed from green to orange

3. ✓ Professor RAM delivered the lecture in the class room

4. ✘ Deepika wrote a letter for leave application

Question Number : 32 Question Id : 97103631194 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The first Indian satellite for serving the educational sector is _____

Options :

1.

✘ INSAT-B

2. ✔ EDUSAT

3. ✘ INSAT-C

4. ✘ SATEDU

Question Number : 33 Question Id : 97103631195 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In analog mass communication, stories are _____

Options :

1. ✔ Static

2. ✘ Dynamic

3. ✘ Interactive

4. ✘ Exploratory

Question Number : 34 Question Id : 97103631196 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If a certain code MANISH is written as NZMRHS, then how will RANJITA be written in the same code?

Options :

1. ✘ IZMPRGZ
2. ✘ IZMQRIZ
3. ✔ IZMQRGZ
4. ✘ IZMQRHZ

Question Number : 35 Question Id : 97103631197 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A is father of C and D is son of B. E is brother of A. If C is sister of D, how is B related to E?

Options :

1. ✘ Brother-in-law
2. ✔ Sister-in-law
3. ✘ Husband
4. ✘ Daughter

Question Number : 36 Question Id : 97103631198 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Complete the series Q1F, S2E, U6D, W21C, _____

Options :

1. ✘ Y66B

2. ✘ Y44B

3. ✔ Y88B

4. ✘ Z88B

Question Number : 37 Question Id : 97103631199 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If SHARP is coded as 58034 and PUSH is coded as 4658 then RUSH is coded as ____

Options :

1. ✘ 3568

2. ✔ 3658

3. ✘ 3685

4. ✘ 3583

Question Number : 38 Question Id : 97103631200 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

RIDE : LNBE :: HELP : ?

Options :

1. ✘ NINP

2. ✘ BAJP

3. ✔ BJJP

4. ✘ JPCH

Question Number : 39 Question Id : 97103631201 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The ratio of the boys and girls in a school is 7:6. If 100 boys join in the school, the ratio would become 5:4 then the number of girls in the school is _____

Options :

1. ✘ 200

2. ✘ 800

3. ✔ 1200

4. ✘ 1600

Question Number : 40 Question Id : 97103631202 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the least number to be subtracted from 696 to be it a perfect square?

Options :

1. ✘ 1

2. ✘ 16

3. ✔ 20

4. ✘ 71

Question Number : 41 Question Id : 97103631203 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If a trader sold two cars each at Rs.325475 and gains 12% on the first and losses 12% on the second, then his profit or loss percentage on the whole is _____

Options :

1. ✘ 14.4% profit

2. ✔ 1.44% loss

3. ✘ 14.4% loss

4. ✘ 0%

Question Number : 42 Question Id : 97103631204 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

At what rate of interest is an amount doubled in two years, when compounded annually?

Options :

1. ✘ 30 %

2. ✘ 45.2 %

3. ✔ 41.4 %

4. ✘ 73.2 %

Question Number : 43 Question Id : 97103631205 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If 24 men can do a work in 35 days, how many men are required to complete the work in 21 days?

Options :

1. ✘ 38

2. ✘ 36

3. ✔ 40

4. ✘ 42

Question Number : 44 Question Id : 97103631206 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A train travels for 9 hours. It travelled the first half of the distance at 12 kmph and remaining distance at 15 kmph. Find the distance.

Options :

1. ✔ 120

2. ✘ 180

3. ✘ 920

4. ✘ 60

Question Number : 45 Question Id : 97103631207 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following groups of fractions is in descending order?

Options :

1. ✘ $\frac{8}{5}, \frac{9}{13}, \frac{6}{11}$

2. ✘ $\frac{8}{15}, \frac{6}{11}, \frac{9}{13}$

3. ✔ $\frac{9}{13}, \frac{6}{11}, \frac{8}{15}$

4. ✘ $\frac{6}{11}, \frac{8}{15}, \frac{9}{13}$

Question Number : 46 Question Id : 97103631208 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Consider the statements :

- I. I watch TV only if I am bored
- II. I am never bored when I have my brother's company
- III. Whenever I go to the theatre I take my brother along.

Which one of the following conclusions is valid in the content of the above statements.

Options :

1. ✘ If I am bored, I watch TV

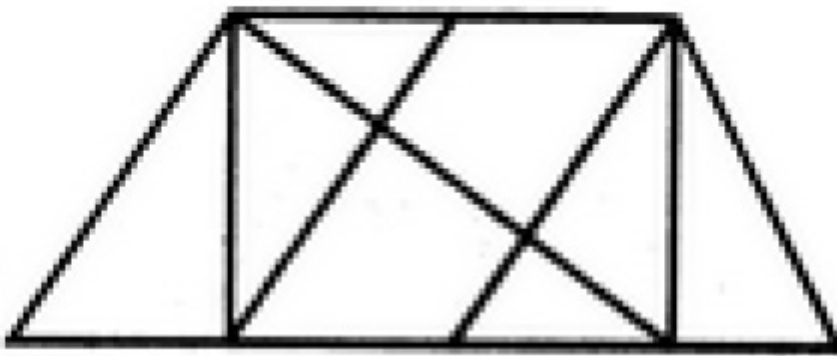
2. ✘ If I am bored, I seek my brother's company.

3. ✘ If I am not with my brother, then I watch TV

4. ✔ If I am not bored, I do not watch TV

Question Number : 47 Question Id : 97103631209 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Find the number of triangles in the given figure.



Options :

1. ✘ 8

2. ✘ 10

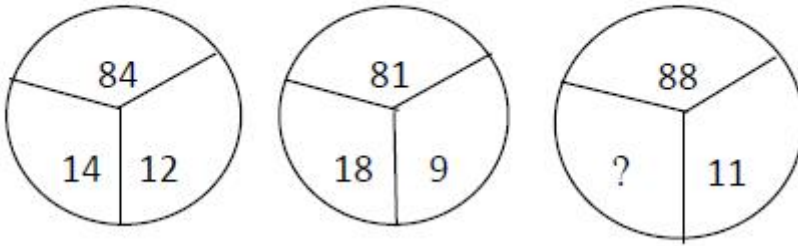
3. ✔ 14

4. ✘ 12

Question Number : 48 Question Id : 97103631210 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time : 0

Select the missing number from the following.



Options :

1. ✘ 10

2. ✘ 12

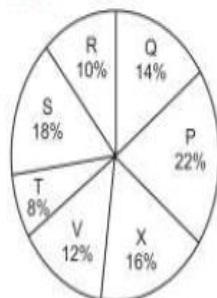
3. ✘ 14

4. ✔ 16

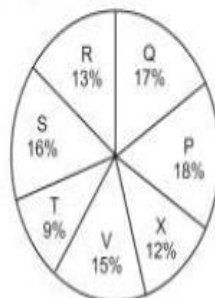
Question Number : 49 Question Id : 97103631211 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following pie graphs carefully and answer the questions given below. Distribution of Candidates Enrolled For M.B.A. Entrance Examination And Those Who Passed In Different Institutes : P, Q, R, S, T, V and X.

Candidates Enrolled
= 8550



Candidates Who Passed
= 5700



What percentage of candidates passed the Exam from institute T out of the total number of candidates enrolled from the same institute?

Options :

1. ✘ 50%

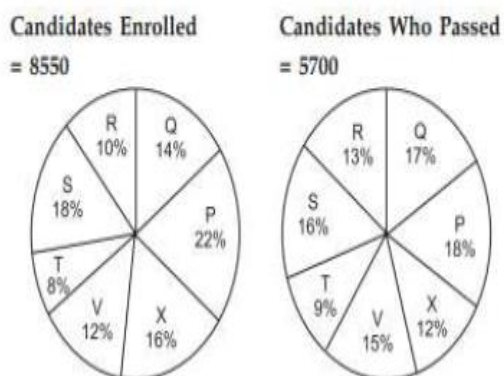
2. ✘ 62.5%

3. ✔ 75%

4. ✘ 80%

Question Number : 50 Question Id : 97103631212 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following pie graphs carefully and answer the questions given below. Distribution of Candidates Enrolled For M.B.A. Entrance Examination And Those Who Passed In Different Institutes : P, Q, R, S, T, V and X.



What is the ratio of candidates passed to the candidates enrolled from institute P?

Options :

1. ✘ 9 : 11

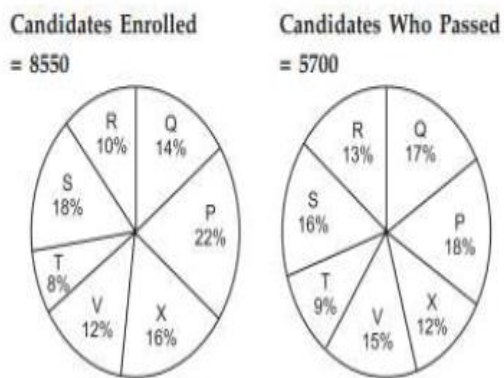
2. ✘ 14 : 17

3. ✔ 6 : 11

4. ✘ 9 : 17

Question Number : 51 Question Id : 97103631213 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following pie graphs carefully and answer the questions given below. Distribution of Candidates Enrolled For M.B.A. Entrance Examination And Those Who Passed In Different Institutes : P, Q, R, S, T, V and X.



What is the percentage of candidates passed to the candidates enrolled for institutes Q and R together?

Options :

1. ✘ 68%

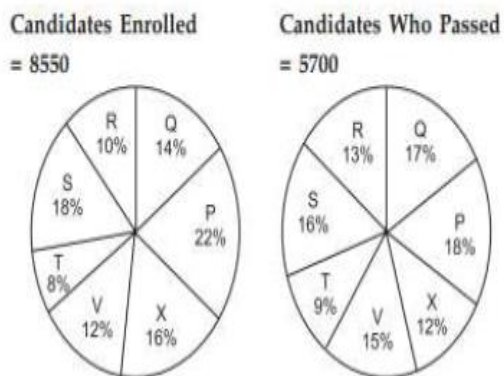
2. ✔ 83%

3. ✘ 74%

4. ✘ 65%

Question Number : 52 Question Id : 97103631214 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following pie graphs carefully and answer the questions given below. Distribution of Candidates Enrolled For M.B.A. Entrance Examination And Those Who Passed In Different Institutes : P, Q, R, S, T, V and X.



Which institute has the highest percentage of candidates passed to the candidates enrolled?

Options :

1. ✘ Q

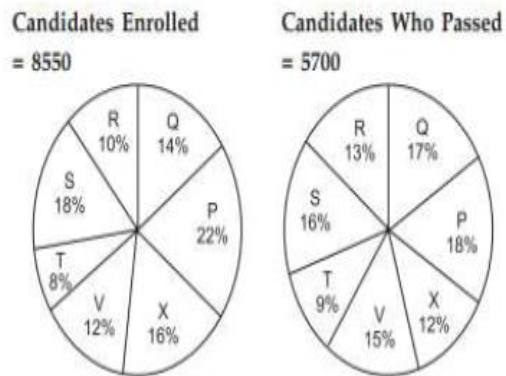
2. ✔ R

3. ✘ V

4. ✘ T

Question Number : 53 Question Id : 97103631215 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Study the following pie graphs carefully and answer the questions given below. Distribution of Candidates Enrolled For M.B.A. Entrance Examination And Those Who Passed In Different Institutes : P, Q, R, S, T, V and X.



The number of candidates passed from institutes S and P together exceeds the number of candidates enrolled from institutes T and R together by

Options :

1. ✘ 228
2. ✘ 279
3. ✔ 399
4. ✘ 407

Question Number : 54 Question Id : 97103631216 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is not a network device?

Options :

1. ✓ CPU

2. ✗ Switch

3. ✗ Hub

4. ✗ Router

Question Number : 55 Question Id : 97103631217 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A Gigabyte is equal to _____

Options :

1. ✗ 1024 bytes

2. ✗ 1024 kilobytes

3. ✓ 1024 megabytes

4. ✗ 1024 terabytes

Question Number : 56 Question Id : 97103631218 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A computer program that translates a program statement by statement into machine language is called _____

Options :

1. ✘ A compiler
2. ✔ An interpreter
3. ✘ A translator
4. ✘ A simulation

Question Number : 57 Question Id : 97103631219 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is correct for $(17)_{10}$.

Options :

1. ✘ $(10011)_2$
2. ✘ $(10111)_2$
3. ✔ $(10001)_2$

4. ✘ $(11001)_2$

Question Number : 58 Question Id : 97103631220 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following protocol supports to link from one webpage to another page?

Options :

1. ✘ HTML

2. ✘ IP

3. ✘ FTP

4. ✔ HTTP

Question Number : 59 Question Id : 97103631221 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is the biggest news agency in India?

Options :

1. ✘ UNI

2. ✔ PTI

3. ✘ NAAP

4. ✖ Samachar Bharathi

Question Number : 60 Question Id : 97103631222 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The purpose of ICT use in education is to _____

Options :

1. ✖ Make teaching interesting
2. ✖ Attract students
3. ✔ Optimize learning process
4. ✖ Promote technology in teaching

Question Number : 61 Question Id : 97103631223 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following mobile payment application is developed by the National Payments Corporation of India based on UPI?

Options :

1. ✖ MYGOV

2. ✓ BHIM

3. ✗ UMANG

4. ✗ Phone pay

Question Number : 62 Question Id : 97103631224 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Assertion(A): Night time temperature in the central parts of a city are generally higher than those over the surrounding rural areas.

Reason(R): Radiation losses over the urban areas are less than that over the rural areas.

Choose the correct answer from the options given below.

Options :

1. ✓ Both (A) and (R) are true and (R) is the correct explanation of (A).

2. ✗ Both (A) and (R) are true but (R) is not the correct explanation of (A).

3. ✗ (A) true, but (R) is false.

4. ✗ (A) is false, but (R) is true

Question Number : 63 Question Id : 97103631225 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following activity contributes more to water pollution than any other throughout world?

Options :

1. ✘ Industry
2. ✘ Hydroelectric power generation
3. ✘ Urbanization
4. ✔ Agriculture

Question Number : 64 Question Id : 97103631226 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is not a water-borne disease?

Options :

1. ✘ Cholera
2. ✘ Hepatitis
3. ✘ Typhoid
4. ✔ Dengue

Question Number : 65 Question Id : 97103631227 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is not a renewable natural resource?

Options :

1. ✘ Fresh water

2. ✘ Clean water

3. ✔ Salt

4. ✘ Fertile soil

Question Number : 66 Question Id : 97103631228 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The chemical formula for Baking soda is _____

Options :

1. ✘ NH_4Cl

2. ✔ NaHCO_3

3. ✘ $\text{Na}_2\text{CO}_3\text{H}_2\text{O}$

4. ✘ CH_3COOH

Question Number : 67 Question Id : 97103631229 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which was the Cultural Capital of Andhra Pradesh?

Options :

1. ✘ Tirupati

2. ✘ Visakhapatnam

3. ✔ Rajamahendravaram

4. ✘ Amaravathi

Question Number : 68 Question Id : 97103631230 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Koundinya wildlife sanctuary is located in which of the following states?

Options :

1. ✔ Andhra Pradesh

2. ✘ Kerala

3. ✘ Tamil Nadu

4. ✘ Karnataka

Question Number : 69 Question Id : 97103631231 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

National council for women education was established in _____

Options :

1. ✔ 1958

2. ✘ 1976

3. ✘ 1989

4. ✘ 1965

Question Number : 70 Question Id : 97103631232 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Autonomy in higher education system implies freedom in _____

Options :

1. ✘ Administration

2. ✓ Curriculum development

3. ✘ Finance

4. ✘ Policy-making

STATISTICS

Section Id :	971036444
Section Number :	2
Mandatory or Optional :	Mandatory
Number of Questions :	70
Section Marks :	70
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Is Section Default? :	null

Question Number : 71 Question Id : 97103631233 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If $A = \begin{pmatrix} a & b \\ b & a \end{pmatrix}$, $A^2 = \begin{pmatrix} \alpha & \beta \\ \beta & \alpha \end{pmatrix}$ then

Options :

1. ✘ $\alpha = 2ab, \beta = a^2 + b^2$

2. ✓ $\alpha = a^2 + b^2, \beta = ab$

3. ✗ $\alpha = a^2 + b^2, \beta = 2ab$

4. ✗ $\alpha = ab, \beta = a^2 + b^2$

Question Number : 72 Question Id : 97103631234 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The values of t for which $\begin{vmatrix} t-2 & 3 \\ 4 & t-1 \end{vmatrix} = 0$ are

Options :

1. ✗ 4, 0

2. ✗ 6, 2

3. ✓ -5, 2

4. ✗ 5, -2

Question Number : 73 Question Id : 97103631235 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The solution of $|x^2 - 2x + 2| = 3x - 2$ is

Options :

1. ✘ 1, 4

2. ✘ -1, 4

3. ✔ 4, 1

4. ✘ -4, -1

Question Number : 74 Question Id : 97103631236 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The co-efficient of x^3 in $\frac{1+2x+3x^2}{e^x}$ is

Options :

1. ✘ 5/6

2. ✘ -5/6

3. ✘ 13/6

4. ✔ -13/6

Question Number : 75 Question Id : 97103631237 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

For the matrix $A = \begin{vmatrix} 2 & 3 & 4 \\ 5 & 6 & 7 \\ 8 & 9 & 1 \end{vmatrix}$, the minor of the element 5 is

Options :

1. ✘ -30
2. ✘ -31
3. ✔ -33
4. ✘ -10

Question Number : 76 Question Id : 97103631238 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

For a matrix A, $|A| = 5$ and Adjoint of A is $\begin{bmatrix} 5 & 0 & 0 \\ 0 & 5 & 0 \\ 0 & 0 & 5 \end{bmatrix}$, then A^{-1} is

Options :

1. ✘ An Orthogonal matrix
2. ✔ An Identity matrix
3. ✘ A Null matrix
4. ✘ Does not exist

Question Number : 77 Question Id : 97103631239 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

$$\text{If } \begin{bmatrix} x-2y & 5y \\ 6 & a-2b \end{bmatrix} = 5 \begin{bmatrix} 4 & 2 \\ b/5 & 6 \end{bmatrix}, a+x \text{ is equal to}$$

Options :

1. ✘ 60

2. ✔ 66

3. ✘ 62

4. ✘ 76

Question Number : 78 Question Id : 97103631240 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

$$\text{If } \begin{bmatrix} 2 & -1 & 4 \\ x & 0 & 1 \\ 1 & 2 & 0 \end{bmatrix} \text{ is a singular matrix, } x \text{ is equal to}$$

Options :

1. ✘ -2

2. ✘ 1

3. ✘ $3/8$

4. ✔ $5/8$

Question Number : 79 Question Id : 97103631241 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A and B are square matrices of size $n \times n$ such that $A^2 - B^2 = (A - B)(A + B)$, then which of the following will be true?

Options :

1. ✘ $A = B$

2. ✔ $AB = BA$

3. ✘ Either A or B is zero matrix

4. ✘ Either A or B is an identity matrix

Question Number : 80 Question Id : 97103631242 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If $A = \begin{bmatrix} 2 & 3 & 4 \\ 5 & 7 & 9 \\ -2 & 1 & 1 \end{bmatrix}$, $B = \begin{bmatrix} 4 & 0 & 5 \\ 1 & 2 & 0 \\ 0 & 3 & 1 \end{bmatrix}$, Trace(A-B) is

Options :

1.

✘ 70

2. ✘ -3

3. ✘ 2

4. ✔ 3

Question Number : 81 Question Id : 97103631243 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If $D = \text{diag}(d_1, d_2, d_3)$, where each of d_1, d_2, d_3 is non zero, D^{-1} is

Options :

1. ✘ D

2. ✔ $\text{diag}(d_1^{-1}, d_2^{-1}, d_3^{-1})$

3. ✘ I_3

4. ✘ Zero matrix

Question Number : 82 Question Id : 97103631244 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The value of $\int x^{16} (1 + x^{17})^4 dx$ is equal to

Options :

1. ✓ $\frac{1}{85} (1+x^{17})^5 + c$

2. ✗ $\frac{1}{85} \frac{(1+x^{16})^5}{5} + c$

3. ✗ $\frac{x^{17}}{85} + c$

4. ✗ $\frac{1}{85} \frac{(1+x^{17})^6}{5} + c$

Question Number : 83 Question Id : 97103631245 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If $\frac{x+1}{(x-a)(x-3)} = \frac{2}{(x-a)} + \frac{b}{(x-3)}$, the value of (a, b)

Options :

1. ✓ (7, -1)

2. ✗ (-4, 1)

3. ✗ (4, 1)

4. ✘ (-4, -1)

Question Number : 84 Question Id : 97103631246 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Let $a_n = \frac{2n-7}{3n+2}$ then $\lim_{n \rightarrow \infty} a_n =$

Options :

1. ✔ 2/3

2. ✘ 7/2

3. ✘ 1

4. ✘ 0

Question Number : 85 Question Id : 97103631247 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If p and q are the roots of the equation $x^2 + px + q = 0$, the value of p and q is

Options :

1. ✘ p = 2, q = 1

2. ✘ p = 1, q = 2

3. ✓ $p = 1, q = -2$

4. ✗ $p = -2, q = 1$

Question Number : 86 Question Id : 97103631248 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If $f(x)$ is an even function and $f'(x)$ exist for all x then $f'(0)$ is

Options :

1. ✗ Negative

2. ✗ Positive

3. ✗ Non-zero real number

4. ✓ Zero

Question Number : 87 Question Id : 97103631249 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The number of real solution of the equation $x^2 - 3|x| + 2 = 0$ is

Options :

1. ✓ 4

2. ✗ 1

3. ✘ 2

4. ✘ 3

Question Number : 88 Question Id : 97103631250 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The slope of the tangent line to the curve $x^2 + 2xy - 3y^2 = 9$ at the point (3,2) is

Options :

1. ✘ $2/3$

2. ✔ $5/3$

3. ✘ $3/2$

4. ✘ $3/5$

Question Number : 89 Question Id : 97103631251 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

For any square matrix A, $A (\text{adj } A)$ is equal to

Options :

1. ✘ $|A|$

2.

✘ adj A

3. ✔ |A| I

4. ✘ I

Question Number : 90 Question Id : 97103631252 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If A has an inverse; the following one is true

Options :

1. ✘ $\det A = \frac{1}{\det A}$

2. ✔ $\det A^{-1} = \frac{1}{\det A}$

3. ✘ $\det A^{-1} = \det A$

4. ✘ $\det A^{-1} = \frac{1}{\det A^{-1}}$

Question Number : 91 Question Id : 97103631253 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If B is formed from a square matrix A by multiplying every element of a row or column of A by a scalar k, then

Options :

1. ✘ $\det B$

2. ✔ $\det A = (1/k) \det B$

3. ✘ $\det B = k \det A$

4. ✘ $\det A = k \det B$

Question Number : 92 Question Id : 97103631254 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

$$2x + y - z = 3$$

The solution of $x + y + z = 1$ using determinants is

$$x - 2y - 3z = 4$$

Options :

1. ✘ $(0, 1, 2)$

2. ✘ $(2, 1, 0)$

3. ✔ $(2, -1, 0)$

4. ✘ $(-2, 1, 0)$

Question Number : 93 Question Id : 97103631255 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A complex matrix A is said to be unitary matrix if

Options :

1. ✘ $AA^T = A^T A$

2. ✘ $AA^T = A^T A = I$

3. ✘ $AA^H = A^H A$

4. ✔ $AA^H = A^H A = I$

Question Number : 94 Question Id : 97103631256 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Eigen values of the matrix $B = \begin{bmatrix} 5 & 2 & 2 \\ 3 & 6 & 3 \\ 6 & 6 & 9 \end{bmatrix}$ are

Options :

1. ✘ (3,3,10)

2. ✔ (3,3,14)

3. ✘ (3,2,10)

4. ✘ (2,3,14)

Question Number : 95 Question Id : 97103631257 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If Σ is a positive definite, so that Σ^{-1} exists, then $\Sigma e = \lambda e$ implies $\Sigma^{-1} e =$

Options :

1. ✘ λe

2. ✔ $(1/\lambda)e$

3. ✘ λ

4. ✘ $(1/\lambda)$

Question Number : 96 Question Id : 97103631258 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the total sample variance for the following sample variance covariance matrix?

$$S = \begin{bmatrix} 3 & -3/2 & 0 \\ -3/2 & 1 & 1/2 \\ 0 & 1/2 & 1 \end{bmatrix}$$

Options :

1. ✘ 2

2. ✘ $4/3$

3. ✔ 5

4. ✘ $1/5$

Question Number : 97 Question Id : 97103631259 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the mean vector of the data matrix $X = \begin{bmatrix} 4 & 5 \\ 2 & -3 \\ 3 & 1 \end{bmatrix}$?

Options :

1. ✘ $\bar{x} = \begin{bmatrix} 3 \\ -1 \end{bmatrix}$

2. ✔ $\bar{x} = \begin{bmatrix} 3 \\ 1 \end{bmatrix}$

3. ✘ $\bar{x} = \begin{bmatrix} -3 \\ 1 \end{bmatrix}$

4. ✘ $\bar{x} = \begin{bmatrix} -3 \\ -1 \end{bmatrix}$

Question Number : 98 Question Id : 97103631260 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A non-empty class of subsets of Ω that is closed under countable unions and compliments containing the null set Φ is known as

Options :

1. ✓ Sigma Field
2. ✗ Field
3. ✗ Probability Space
4. ✗ Sample Space

Question Number : 99 Question Id : 97103631261 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If X has probability density function (p.d.f.) $f(x) = e^{-x}; x > 0$ and $Y = \begin{cases} X & \text{if } X \geq 3 \\ 2X + 3 & \text{if } X < 3 \end{cases}$,
the expected value of Y is

Options :

1. ✗ $5 - 7e^{-5}$
2. ✗ $7 - 5e^{-5}$
3. ✓ $5 - 7e^{-3}$

4. ✘ $7 - 5e^{-3}$

Question Number : 100 Question Id : 97103631262 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the values of the 1st and 3rd quartiles are 20 and 30 respectively, the value of inter Quartile range is

Options :

1. ✔ 5

2. ✘ 10

3. ✘ 25

4. ✘ 0

Question Number : 101 Question Id : 97103631263 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In order to test the randomness among sample observations, we may use the following test as most suitable option

Options :

1. ✘ Median test

2. ✔ Run test

3. ✘ Sign test

4. ✘ Chi-Square test

Question Number : 102 Question Id : 97103631264 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The exact distribution of the number of defectives in a single sampling plan is

Options :

1. ✘ Binomial

2. ✘ Poisson

3. ✔ Hyper geometric

4. ✘ Geometric

Question Number : 103 Question Id : 97103631265 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In Analyze item of menu bar from where we select the button to perform multiple comparison tests

Options :

1. ✘ Ad - Hoc test

2. ✓ Post Hoc test

3. ✗ Mean test

4. ✗ Both 1 & 2

Question Number : 104 Question Id : 97103631266 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Let X have probability density function $f(x) = \begin{cases} \frac{1}{2\sqrt{3}}; & -\sqrt{3} < x < \sqrt{3} \\ 0; & \text{elsewhere} \end{cases}$

By Chebyshev's inequality the upper bound for $P\{|X| \geq 3/2\}$ is

Options :

1. ✗ $1 - \sqrt{3/2}$

2. ✗ $\sqrt{3}/2$

3. ✗ $1/2$

4. ✓ $4/9$

Question Number : 105 Question Id : 97103631267 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following distributions are having moments without moment generating function?

Options :

1. ✘ Exponential and F-distributions
2. ✘ Weibull and F-distributions
3. ✔ Student-t and F-distributions
4. ✘ Chi square and F-distributions

Question Number : 106 Question Id : 97103631268 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following relation holds good for the following data: The values of X are 1, 2, 3, 4, 5, 6, 7, 8 and 9; their respective frequencies are 2, 18, 15, 13, 12, 9, 7, 4, 1.

Options :

1. ✘ Mode = Median
2. ✘ Mode > Mean
- 3.

✓ Mean > Mode

4. ✗ Mean = Mode

Question Number : 107 Question Id : 97103631269 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the data is having class intervals 20-30, 40-50, 0-10, 10-20, 30-40 and 50-60 which are having the frequencies 3, 5, 7, 6, 4 and 2, respectively the range of the given data is

Options :

1. ✓ 60

2. ✗ 20

3. ✗ 0

4. ✗ 5

Question Number : 108 Question Id : 97103631270 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following data is more consistent?

Options :

1. ✓ 23, 25, 26, 28, 32, 21

2. ✖ 12, 16, 34, 15, 14, 25, 19, 27, 32

3. ✖ 01, 13, 27, 12, 46, 74, 63, 26, 37, 46, 51

4. ✖ 28, 36, 24, 28, 36, 26, 37, 27, 37, 28

Question Number : 109 Question Id : 97103631271 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the value of mean for $f(x) = 6x^2(1-x^3)$, $0 \leq x \leq 1$; $f(x)=0$, Otherwise

Options :

1. ✖ 1/14

2. ✖ 4/14

3. ✔ 9/14

4. ✖ 11/14

Question Number : 110 Question Id : 97103631272 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the cumulative distribution function (c.d.f) of X is $F(x) = 0$, for $0 > X$, $F(x) = x/8$, for $0 \leq X < 2$,

$F(x) = x^2/16$, for $2 \leq X < 4$, $F(x) = 1$, for $X \geq 4$, the value of $P(1 < X < 2)$

Options :

1. ✘ $7/8$

2. ✘ $5/8$

3. ✘ $3/8$

4. ✔ $1/8$

Question Number : 111 Question Id : 97103631273 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

There is a possibility that a letter was received from either HYDERABAD or ZAHEERABAD.

On the post stamp two consecutive letters ER are legible. What is the chance that the letter is being received from HYDERABAD?

Options :

1. ✔ $9/17$

2. ✘ $10/17$

3. ✘ $12/17$

4. ✘ $11/17$

Question Number : 112 Question Id : 97103631274 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

Time : 0

If the distribution of a random variable X is symmetric about origin, the characteristic function $\phi_X(t)$ is

Options :

1. ✘ Complex
2. ✘ Zero
3. ✘ One
4. ✔ Real

Question Number : 113 Question Id : 97103631275 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the joint P.M.F. of (X, Y) is $P(x, y) = \frac{e^{-\lambda} \lambda^x p^y (1-p)^{x-y}}{y!(x-y)!}$; $x = 0, 1, \dots$; $y = 0, 1, 2, 3, \dots, x$;

the probability mass functions of X given Y and Y given X $P_{Y/X}(y/x)$ and $P_{X/Y}(x/y)$ are in the form of _____ distributions, respectively

Options :

1. ✘ Poisson and Poisson
2. ✘ Poisson and Binomial
3. ✘ Binomial and Binomial

4. ✓ Binomial and Poisson

Question Number : 114 Question Id : 97103631276 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Probability generating function of sum of independent random variables is equal to the product of their individual probability generating functions is propagated through the property named as

Options :

1. ✓ Convolution property
2. ✘ Multiplicative property
3. ✘ Additive property
4. ✘ Hybrid property

Question Number : 115 Question Id : 97103631277 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If X and Y are two independent random variables with probability generating functions A(s) and B(s) respectively, the probability generating function of Z(=X-Y) is D(s) =

Options :

1. ✘

$$E(s^{X+Y})$$

2. ✘ $E(s^X)E(s^{X+Y})$

3. ✔ $E(s^X)E\{(1/s)^Y\}$

4. ✘ $E\{s^{X/Y}\}E\{(1/s)\}$

Question Number : 116 Question Id : 97103631278 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Let $\Pr\{X_n=j/X_{n-1}=j-1\}=p$; $\Pr\{X_n=j/X_{n-1}=j+1\}=q$; where $0 < p, q < 1$; $\Pr\{X_n=0/X_{n-1}=0\}=1$;

$\Pr\{X_n=k/X_{n-1}=k\}=1$; then the above transitions represent

Options :

1. ✘ Univariate random walk of a drunkard

2. ✔ Univariate random walk of a gambler's ruin problem

3. ✘ Bivariate random walk of a drunkard

4. ✘ Bivariate random walk of a gambler's ruin problem

Question Number : 117 Question Id : 97103631279 Display Question Number : Yes Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The transition probabilities are $P_{00}=1/2$; $P_{11}=2/3$; then $P_{10}^{(2)} =$

Options :

1. ✘ $7/12$

2. ✘ $5/12$

3. ✔ $7/18$

4. ✘ $11/18$

Question Number : 118 Question Id : 97103631280 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Let $Y = a + bX$ be the straight line then the regression line of Y on X is

Options :

1. ✘ $(X - \bar{X}) = r\sigma_Y / \sigma_X$

2. ✘ $Y - \bar{Y} = r\sigma_X / \sigma_Y$

3. ✔ $Y - \bar{Y} = (r\sigma_Y / \sigma_X)(X - \bar{X})$

4. ✘ $X - \bar{X} = r\sigma_X / \sigma_Y$

Question Number : 119 Question Id : 97103631281 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The linearization of a non linear equation is based on the technique of

Options :

1. ✘ Direct search method
2. ✘ Taylor's series expansion
3. ✔ Method of steepest descent
4. ✘ Hit or miss method

Question Number : 120 Question Id : 97103631282 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If in regression model, one of the explanatory variable includes the lagged value of dependent variable, the model is referred to as

Options :

1. ✘ Best fit model
2. ✔ Autoregressive model
3. ✘ 1st difference model

4. ✘ Dynamic model

Question Number : 121 Question Id : 97103631283 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Weights of Exponentially Weighted Moving Average control chart

Options :

1. ✔ Decreases over time
2. ✘ Remains constant over time
3. ✘ Increases over time
4. ✘ Will not always sum to one

Question Number : 122 Question Id : 97103631284 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Sampling plan in which lot disposition is made as and when a sample is inspected is known as

Options :

1. ✘ Single sampling plan
2. ✘ Double sampling plan
- 3.

✓ Sequential sampling plan

4. ✘ Multiple sampling plan

Question Number : 123 Question Id : 97103631285 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the central line of a c-chart is at 4, the values of the warning limits are

Options :

1. ✘ -2 and 10

2. ✘ 2 and 6

3. ✓ 0 and 8

4. ✘ 3 and 5

Question Number : 124 Question Id : 97103631286 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The central line of a sloping control chart is a straight line having

Options :

1. ✘ Zero slope

2. ✓ Varying slope

3. ✘ Positive slope

4. ✘ Negative slope

Question Number : 125 Question Id : 97103631287 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following does not belong to 'magnificent Five' tools summary of data?

Options :

1. ✘ Histogram

2. ✘ Pareto chart

3. ✘ Control charts

4. ✔ Box plot

Question Number : 126 Question Id : 97103631288 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following shapes will represent simplex

i) Cone,

ii) Tetrahedron,

iii) Straight line with finite length,

iv) Triangle

Options :

1. ✓ ii, iii & iv

2. ✗ i, ii & iii

3. ✗ i, iii & iv

4. ✗ i only

Question Number : 127 Question Id : 97103631289 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following costs shall not change with each item in the inventory?

Options :

1. ✗ Storage cost

2. ✗ Shortage cost

3. ✓ Setup cost

4. ✗ Production cost

Question Number : 128 Question Id : 97103631290 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Calculation of Probability of no customer in the queue shall be useful for obtaining

Options :

1. ✘ The Customer behaviour in the queue
2. ✔ The Idle Time of server in the system
3. ✘ The system of Service Mechanism in the queue
4. ✘ The nature of the Queue Model

Question Number : 129 Question Id : 97103631291 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following criteria is considered for finding the sufficient statistics using the Maximum Likelihood Estimator (MLE)?

Options :

1. ✘ Rao & Cramer
2. ✘ Chapman & Kolmogorov
3. ✔ Fisher & Neyman
4. ✘ Rao & Blackwell

Question Number : 130 Question Id : 97103631292 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

With usual notation the traffic intensity of the Queue can be calculated with the arrival rate (λ) and the Service Rate (μ) as

Options :

1. ✘ $(\lambda) - (\mu)$

2. ✔ $(\lambda) / (\mu)$

3. ✘ $(\mu) / (\lambda)$

4. ✘ $(\mu) - (\lambda)$

Question Number : 131 Question Id : 97103631293 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

“ABC” Analysis in the context of Inventory management stands for

Options :

1. ✘ Advantages Better Competition

2. ✘ Always Better Competition

3. ✔ Always Better Control

4. ✘

Above and Below Control

Question Number : 132 Question Id : 97103631294 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Total Number of Basic Variables in the System of Linear independent Equations are

Options :

1. ✘ Infinite
2. ✔ Finite
3. ✘ Unexplained
4. ✘ Increased with number of iterations

Question Number : 133 Question Id : 97103631295 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following Convex set is having 4 extreme points ?

Options :

1. ✘ Cone
2. ✘ Cylinder
3. ✘ Cube

4. ✓ Tetrahedron

Question Number : 134 Question Id : 97103631296 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following methods are not suitable for solving the ordinary LPPs? (1) Charne's Penalty Method; (2) Simplex Method; (3) Branch and Bound Method; (4) Montgomery cut plane method

Options :

1. ✗ 1 and 2

2. ✓ 3 and 4

3. ✗ 1 and 4

4. ✗ 2 and 4

Question Number : 135 Question Id : 97103631297 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If Mean and Variance of Binomial distribution are 4 and 3 respectively, the mode of the distribution is equal to

Options :

1. ✓ 4

2. ✘ 3

3. ✘ 4 and 3

4. ✘ 1

Question Number : 136 Question Id : 97103631298 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If a fair coin is tossed 4 times, the Mean deviation about Mean of the related probability distribution is

Options :

1. ✘ $1/4$

2. ✘ $2/4$

3. ✔ $3/4$

4. ✘ 1

Question Number : 137 Question Id : 97103631299 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If an unbiased coin is tossed 5 times, the probability of getting 3rd Head at the 5th trial is

Options :

1. ✘ $1/8$

2. ✔ $3/8$

3. ✘ $5/8$

4. ✘ $7/8$

Question Number : 138 Question Id : 97103631300 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If $P(A \cup B) = 0.85$; $P(A) = 0.3$; $P(B) = 0.6$ A and B are

Options :

1. ✘ Independent and Exclusive Events

2. ✘ Dependent and Exclusive Events

3. ✔ Dependent but not Exclusive

4. ✘ Independent and Equally likely Events

Question Number : 139 Question Id : 97103631301 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

For any bivariate random variable (X,Y) , the values of $F_{X,Y}(-\infty,-\infty)$ and $F_{X,Y}(-\infty,+\infty)$ respectively are

Options :

1. ✘ One & One
2. ✘ Zero & One
3. ✘ One & Zero
4. ✔ Zero & Zero

Question Number : 140 Question Id : 97103631302 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In $M/M/1: \infty/FIFO$ model, the Average waiting time of a customer in queue excluding the service is equal to

Options :

1. ✘ $(1-\rho) \lambda / \rho$
2. ✔ $\rho / \mu(1-\rho)$
3. ✘ $\rho\mu / (1-\rho\lambda)^2$
4. ✘ $\rho\lambda^2 / (1-\mu\rho)$