

Commissionerate of School Education-Government
of Andhra Pradesh

- Notations :**
- Options shown in green color and with  icon are correct.
 - Options shown in red color and with  icon are incorrect.

Question Paper Name :	TGT NL Maths 6th June 2025 Shift 2
Subject Name :	TGT NL Maths
Creation Date :	2025-06-06 18:10:09
Duration :	150
Total Marks :	80
Display Marks:	No
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

TGT NL Maths

Group Number :	1
Group Id :	39226612
Group Maximum Duration :	0
Group Minimum Duration :	150
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	80

Section 1

Section Id :	39226665
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	20
Number of Questions to be attempted :	20
Section Marks :	10
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	39226665

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Question Shuffling Allowed :

Yes

Question Number : 1 Question Id : 3922661761 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

INCORRECT pair among the following

1. Tabla - Krishna Maharaj
2. Violin - Vishnu Gobind
3. Sitar - Usted Vilayat Khan
4. Flute - Mukesh Sharma

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 2 Question Id : 3922661762 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Hosts of the next FIH, Hockey World Cup - 2026

1. Belgium and the Netherlands
2. The USA and France
3. Germany and Spain
4. South Africa and Nigeria

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 3 Question Id : 3922661763 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The following are the Nordic Nations except

1. Ireland
2. Iceland
3. Denmark
4. Sweden

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 4 Question Id : 3922661764 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Choose the mismatched pair

1. Larry page - Co-founder Microsoft
2. Mark Zuckerberg - Facebook
3. Sunder Pichai - CEO Alphabet Inc.
4. Ratan Tata - Tata trust

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 5 Question Id : 3922661765 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Incorrect pair among the following

1. Andhra Pradesh - Rice bowl of India
2. Himachala Pradesh - State with more Hindu Population
3. Uttarakhand - Flower bowl of the World
4. Telangana - State flower is Cassia auriculata

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 6 Question Id : 3922661766 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The hottest place in the world

1. Tunisian village, Kebili
2. Death Valley, California, USA
3. Mitribath, Kuwait
4. Turbat, Pakistan

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 7 Question Id : 3922661767 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

UNIX is this type of interface

1. Commanded Line User Interface
2. Graphical User Interface
3. Touch User Interface
4. Natural Language Interface

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 8 Question Id : 3922661768 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Identify the correct set

- | | |
|-------------|---------------------------------|
| i. New York | a. International Criminal Court |
| ii. Hague | b. UNESCO |
| iii. Paris | c. ECOSOC |
| iv. Tokyo | d. UN University |

1. i - a, ii - c, iii - b, iv - d
2. i - c, ii - a, iii - b, iv - d
3. i - b, ii - a, iii - c, iv - d
4. i - a, ii - b, iii - d, iv - c

Options :

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 9 Question Id : 3922661769 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The first country to host the Asian games

1. Indonesia
2. Philippines
3. China
4. India

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 10 Question Id : 3922661770 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Identify the correct set

- | | |
|----------------------------------|--------------------------|
| i. First ICS officer | a. Hiralal J. Kaniya |
| ii. First Chief Election Officer | b. Satyendra Nath Tagore |
| iii. First C. J. Supreme Court | c. Babu Jagjivan Ram |
| iv. First Labour Minister | d. Sukumar Sen |

1. i - b, ii - d, iii - a, iv - c
2. i - c, ii - d, iii - b, iv - a
3. i - a, ii - d, iii - b, iv - c
4. i - d, ii - b, iii - a, iv - c

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3

4. ✖ 4

Question Number : 11 Question Id : 3922661771 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Choose the correct matching

- | | |
|---------------------|----------------------|
| i. Munshi Premchand | a. I am My Own Medal |
| ii. B.D. Jetti | b. The Dark room |
| iii. R.K. Narayan | c. Ranga Bhumi |
| iv. Maxim Gorky | d. Mother |

1. i - a, ii - c, iii - d, iv - b
2. i - c, ii - a, iii - b, iv - d
3. i - c, ii - d, iii - a, iv - b
4. i - d, ii - b, iii - a, iv - c

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 12 Question Id : 3922661772 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Lok Adalat – People's court was held for the first time in the year

1. 1986
2. 1990
3. 1975
4. 1982

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 13 Question Id : 3922661773 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The river Penna originates from

1. Seshachalam hills
2. Nallamala hills
3. Nandi hills
4. Papi hills

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 14 Question Id : 3922661774 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Indian Army Officer's Training Academy is situated in

1. Kanpur
2. Jaipur
3. Delhi
4. Chennai

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 15 Question Id : 3922661775 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

One of the following is NOT with Geographical Indication Tag

1. Kondapalli Toys
2. Thirupati Laddu
3. Pulasa fish
4. Totapuri Mango

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 16 Question Id : 3922661776 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

This Railway station got 'Eat Right Station – 2025' certificate from Food Safety Authority of India

1. Guntur
2. Rajamahendravaram
3. Tirupathi
4. Vijayawada

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 17 Question Id : 3922661777 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

‘Aframax’ is type of cargo capacity of

1. Oil Tanker
2. Coal
3. Food materials
4. Dress materials

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 18 Question Id : 3922661778 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The captain of the Indian cricket team under -19 women's T20 is

1. Shafali Verma
2. Niki Prasad
3. Shanu Mukherjee
4. Rachel Singh

Options :

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 19 Question Id : 3922661779 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Green World Environment Award 2024 winner is

1. Mishra Dhatu Nigam Limited
2. Bharat Heavy Electrical Limited
3. Coal India Limited
4. Indian Oil Corporation

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 20 Question Id : 3922661780 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

G20 – 2024 Summit was held in

1. Copenhagen
2. Belarus
3. Soho
4. Rio de Janeiro

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Section 2

Section Id :	39226666
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	5

Maximum Instruction Time : 0
Sub-Section Number : 1
Sub-Section Id : 39226666
Question Shuffling Allowed : Yes

Question Number : 21 Question Id : 3922661781 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The Commission to propose the establishment of rural universities is

1. Secondary Education Commission
2. Radha Krishna Commission
3. Kothari Commission
4. Justice Verma Commission

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 22 Question Id : 3922661782 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

“Education is the influence of the matured on those who are not matured,” is opined by

1. Redden
2. Emerson
3. Froebel
4. Spencer

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3

4. ✖ 4

Question Number : 23 Question Id : 3922661783 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

This section of RTI Act – 2005 allows for inspection of documents and records held by or under the control of Government

1. Section 4 (1)
2. Section 2 (J)
3. Section 6 (A)
4. Section 19 (3)

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 24 Question Id : 3922661784 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Section 24 of RTE Act – 2009 deals with

1. Duties of a Headmaster
2. Responsibilities of citizens
3. Responsibilities of students
4. Duties of a teacher

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 25 Question Id : 3922661785 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Acquittance register is this type of register

1. General Register
2. Monitoring Register
3. Academic Register
4. Finance Register

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 26 Question Id : 3922661786 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

PWD Act 1995 is related to

1. Children with special needs
2. Students from backward areas
3. Adults
4. Talented students

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 27 Question Id : 3922661787 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

One of the following pair is not comes under chaturvidha purushardha

1. Wealth, intuition
2. Self-realization, truth
3. Righteousness, Self-realization
4. Pleasure, Aesthetics

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 28 Question Id : 3922661788 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

As per the NCF – 2005 recommendations, number of periods to be allotted for a school library in a week

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

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 29 Question Id : 3922661789 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Civics should be taught as Political Science as per the recommendation of

1. Mudiliar Committee
2. NEP - 1986
3. NCF - 2005
4. NEP - 2020

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 30 Question Id : 3922661790 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

According to NEP – 2020 the age group of ‘Preparatory Stage’ (in years)

1. 6 - 8
2. 8 - 11
3. 11 - 14
4. 14 - 18

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Section 3

Section Id :	39226667
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory

Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	5
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	39226667
Question Shuffling Allowed :	Yes

Question Number : 31 Question Id : 3922661791 Question Type : MCQ Option Shuffling : No
 Display Question Number : Yes
 Correct Marks : 0.5 Wrong Marks : 0

Identify the TRUE statement regarding summative assessment

1. It is to observe the ongoing process of learning.
2. It is done to take the feedback on learning.
3. It is a formal observation of day to day learning activities.
4. It is an evaluation of learning at the end of terminal annual examination.

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 32 Question Id : 3922661792 Question Type : MCQ Option Shuffling : No
 Display Question Number : Yes
 Correct Marks : 0.5 Wrong Marks : 0

According to Vygotsky, Cognitive development takes place through

1. Biological maturity
2. Reward and Punishment
3. Social interaction
4. Genetic inheritance

Options :

1. ✖ 1

2. ✖ 2

3. ✔ 3

4. ✖ 4

Question Number : 33 Question Id : 3922661793 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The learning theory that has more space for creativity, critical thinking and problem solving is

1. Classical conditioning theory
2. Operant conditioning theory
3. Insightful learning theory
4. Observational learning theory

Options :

1. ✖ 1

2. ✖ 2

3. ✔ 3

4. ✖ 4

Question Number : 34 Question Id : 3922661794 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

A Mental Mechanism by which an individual's anti social impulses are made socially acceptable is

1. Sublimation
2. Repression
3. Regression
4. Projection

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 35 Question Id : 3922661795 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

“Mental hygiene is the adjustment of individuals to themselves and the world at large with a maximum of effectiveness, satisfaction, cheerfulness and socially considerate behaviour and the ability to facing and accepting the realities of life,” defined by

1. Clifford Beers
2. International Mental Hygiene Congress (IMHC)
3. Bernard
4. National Committee for Mental Health (NCMH)

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 36 Question Id : 3922661796 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

“The development of the country can be done by building the distinction, between the students of the individual education system.” This statement on individual difference is give by

1. Sir Francis Galton
2. John Dewey
3. Mackerel Cattle
4. Plato

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 37 Question Id : 3922661797 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Choose correct answer

- | | |
|-----------------------------|--------------------------|
| i. Mentality of apes | a. Multiple Intelligence |
| ii. Normal child | b. Defense Mechanism |
| iii. Creative child | c. Insight |
| iv. Differently abled child | d. Maslow |

1. i – a ii – b iii – c iv – d
2. i – d ii – a iii – b iv – c
3. i – c ii – d iii – a iv – b
4. i – c ii – a iii – b iv – d

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 38 Question Id : 3922661798 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

In one of the following stages of a typical learning curve, represent the final stage

1. Initial spurt
2. Physiological limit
3. Plateau stage
4. Secondary spurt

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 39 Question Id : 3922661799 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

One of the following characteristics features is NOT related to 'More Intelligent people'

1. They are disliked by people.
2. They make friendship with elders
3. They like to play
4. They are more socially matured

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 40 Question Id : 3922661800 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

One of the following is not a central tendency

1. Median
2. Range
3. Arithmetic mean
4. Mode

Options :

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Section 4

Section Id : 39226668
Section Number : 4

Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	80
Number of Questions to be attempted :	80
Section Marks :	40
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	39226668
Question Shuffling Allowed :	Yes

Question Number : 41 Question Id : 3922661801 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The value of $\log_{\sqrt{2}} \sqrt{8} - \log_{\sqrt{2}} (\tan 22^\circ) - \log_{\sqrt{2}} (\tan 68^\circ)$

1. $\tan^2 60^\circ$
2. $\cot^2 60^\circ$
3. $\sin^2 60^\circ$
4. $\cos^2 60^\circ$

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 42 Question Id : 3922661802 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If $4 \tan \theta = 3$, then the value of $\frac{\cos \theta + \sin \theta}{\cos \theta - \sin \theta}$

1. $-\frac{1}{7}$
2. 7
3. $\frac{3}{5}$
4. $-\frac{5}{4}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 43 Question Id : 3922661803 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

$(\cot \theta + \tan \theta) \cos \theta =$

1. $\sin \theta$
2. $\sin \theta \cos \theta$
3. $\operatorname{cosec} \theta$
4. $\tan \theta$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 44 Question Id : 3922661804 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The Value of $\frac{\sin \theta}{\cos(90^\circ - \theta)} + \frac{\cos^2 \theta}{2\sin^2(90^\circ - \theta)} - \frac{\tan \theta}{\sin \theta} \times \cos \theta$

1. $\frac{1}{2}$
2. 2
3. 3
4. 1

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 45 Question Id : 3922661805 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

$$\sin^2 \alpha \cos^2 \beta - \cos^2 \alpha \sin^2 \beta$$

1. $\sin^2(\alpha - \beta)$
2. $\cos^2(\alpha - \beta)$
3. $\sin^2 \alpha - \sin^2 \beta$
4. $\cos^2 \alpha - \cos^2 \beta$

Options :

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 46 Question Id : 3922661806 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

$$\sin^6 \theta + \cos^6 \theta =$$

1. $1 + 3 \sin^2 \theta + \cos^2 \theta$
2. $1 - 3 \sin^2 \theta - 3 \sin^4 \theta$
3. $1 + 3 \sin^2 \theta - 3 \sin^4 \theta$
4. $1 - 3 \sin^2 \theta + 3 \sin^4 \theta$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 47 Question Id : 3922661807 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

A boy observed the top of an electric pole at an angle of elevation of 60° when the observation point is 3mts away from the foot of the pole then the height of the pole is in metres ($\sqrt{3} = 1.732$)

1. 1.732
2. 3
3. 5.196
4. 5.096

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3

4. ✖ 4

Question Number : 48 Question Id : 3922661808 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The value of $\cot^{-1}\left(\frac{1}{2}\right) + \cot^{-1}\left(\frac{1}{3}\right)$

1. $\frac{5\pi}{4}$
2. $\frac{3\pi}{4}$
3. $\frac{\pi}{4}$
4. $-\frac{\pi}{4}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 49 Question Id : 3922661809 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The general solution of the equation $\sin\theta - \cos\theta = 0$ is

1. $\theta = \frac{n\pi}{4}, n \in \mathbb{Z}$

2. $\theta = (2n+1)\frac{\pi}{4}, n \in \mathbb{Z}$

3. $\theta = \frac{\pi}{4}, n \in \mathbb{Z}$

4. $\theta = n\pi + \frac{\pi}{4}, n \in \mathbb{Z}$

Options :

1. ✖ 1

2. ✖ 2

3. ✖ 3

4. ✔ 4

Question Number : 50 Question Id : 3922661810 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Value of $\sin^2\left(52\frac{1}{2}^\circ\right) - \sin^2\left(22\frac{1}{2}^\circ\right)$ is

1. $\frac{\sqrt{3} + 1}{2\sqrt{2}}$
2. $\left(\frac{\sqrt{3} - 1}{2\sqrt{2}}\right)\sqrt{3}$
3. $\frac{\sqrt{3} + 1}{4\sqrt{2}}$
4. $\frac{\sqrt{3} - 1}{4\sqrt{2}}$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 51 Question Id : 3922661811 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If $a = i - 2j - 3k$, $b = 2i + j - k$, $c = i + 3j - 2k$, then $a \cdot (b \times c) =$

1. -20
2. -10
3. 10
4. 20

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3

4. ✖ 4

Question Number : 52 Question Id : 3922661812 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If $a = i - j - k$ and $b = 2i - 3j + k$, then the projection vector of b on a is

1. $\frac{4}{3} (2i - 3j + k)$
2. $\frac{4}{3} (i - j - k)$
3. $\frac{4}{3} (3i - 4j)$
4. $\frac{4}{3} (i - 2j + 2k)$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 53 Question Id : 3922661813 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If $a = i + 2j + 3k$ and $b = 3i + j$ then the unit vector in the direction of $a + b$ is

1. $\frac{1}{\sqrt{34}}(4i+3j+3k)$
2. $\frac{1}{\sqrt{34}}(2i-j-2k)$
3. $\frac{1}{3}(4i+3j+3k)$
4. $\frac{1}{3}(2i-j-2k)$

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 54 Question Id : 3922661814 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

$$\int (3x^5 + 4x) dx \text{ on } R =$$

1. $\frac{1}{2}(x^6 + 2x^2) + C$
2. $\frac{1}{2}(x^6 + 4x^2) + C$
3. $\frac{1}{2}(x^4 + 2x^2) + C$
4. $\frac{1}{2}(x^4 + 4x^2) + C$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 55 Question Id : 3922661815 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

$$\frac{d}{dx}(e^x x^2) =$$

1. $2x(1 + xe^x)$
2. $e^x(2 + x)$
3. $e^x(2x + x^2)$
4. $2x(x + xe^x)$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3

4. ✖ 4

Question Number : 56 Question Id : 3922661816 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

$$\lim_{x \rightarrow \infty} \frac{5x - x^2 + 2}{2x^2 - 5x + 1}$$

1. $\frac{5}{2}$

2. $-\frac{5}{2}$

3. $\frac{1}{5}$

4. $-\frac{1}{2}$

Options :

1. ✖ 1

2. ✖ 2

3. ✖ 3

4. ✔ 4

Question Number : 57 Question Id : 3922661817 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

$$\int_1^2 x^3 dx$$

1. $\frac{15}{4}$
2. $\frac{17}{4}$
3. $\frac{1}{4}$
4. 7

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 58 Question Id : 3922661818 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

‘A’ can do a work in 25 days and ‘B’ can finish the same work in 20 days. They worked together for 5 days and ‘A’ left. Then the days required to ‘B’ to finish the remaining work

1. 10
2. 11
3. 12
4. 13

Options :

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 59 Question Id : 3922661819 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

A financier lends money at simple interest, but includes the interest every 6 months for calculating the principal. If he is charging an interest of 8% p.a. then the effective rate of interest per annum becomes.

1. 8.36%
2. 8.26%
3. 8.16%
4. 8.6%

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 60 Question Id : 3922661820 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Which of the following is NOT TRUE

- i. If x and y are in direct proportion then $x-1$ and $y-1$ are also in direct proportion
 - ii. If ' a ' varies directly as t^2 then $at^2 = K$
 - iii. If x and y are in direct proportion then $\frac{1}{x}$ and $\frac{1}{y}$ are in inverse proportion
1. Only (i)
 2. Only (i) and (ii)
 3. Only (ii) and (iii)
 4. (i), (ii), (iii)

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 61 Question Id : 3922661821 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Simple interest on a certain sum of money for 3 years at 8% per annum is half of the compound interest on ₹ 4000 for 2 years at 10% p.a, compounded annually. The sum of money on which simple interest is calculated is.

1. ₹1750
2. ₹1650
3. ₹550
4. ₹450

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 62 Question Id : 3922661822 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If $A = x\%$ of y and $B = y\%$ of x then

1. A is smaller than B
2. $A=B$
3. If x is smaller than y then A is smaller than B
4. If x is greater than y then A is smaller than B

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 63 Question Id : 3922661823 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

A man gets a loss of 5% by selling an article for ₹2090. What would be the price he must sell the article to get 5% profit

1. ₹ 2310
2. ₹ 2194.5
3. ₹ 2190
4. ₹ 2200

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 64 Question Id : 3922661824 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Two numbers are in a ratio 8:3. If 5 is added to the greater number and 1 is subtracted from smaller number then the ratio becomes 3:1. Then the original numbers are

1. 32, 12
2. 64, 24
3. 72, 27
4. 48, 18

Options :

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 65 Question Id : 3922661825 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Which of the following is **NOT TRUE**

1. Sum of two irrational numbers is always an irrational
2. Product of a rational and an irrational number need not be an irrational
3. Product of two irrational numbers need not be irrational
4. Sum of two rational numbers is always a rational number

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 66 Question Id : 3922661826 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

If $\log_2 3 = x$, $\log_2 5 = y$ then $\log_2 2025$

1. $4x + 3y$
2. $3x + 4y$
3. $4x + 2y$
4. $3x + 2y$

Options :

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 67 Question Id : 3922661827 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

A car covers a distance of 96.6 km in 2.4 hours. The average distance covered by it in one hour is (in km).

1. 40.725
2. 40.25
3. 40.125
4. 40.275

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 68 Question Id : 3922661828 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Identify the correct descending order

1. $\frac{5}{6}, \frac{7}{8}, \frac{3}{4}, \frac{1}{2}, \frac{5}{12}$
2. $\frac{7}{8}, \frac{3}{4}, \frac{5}{6}, \frac{1}{2}, \frac{5}{12}$
3. $\frac{5}{6}, \frac{7}{8}, \frac{1}{2}, \frac{3}{4}, \frac{5}{12}$
4. $\frac{7}{8}, \frac{5}{6}, \frac{3}{4}, \frac{1}{2}, \frac{5}{12}$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 69 Question Id : 3922661829 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If the nine digit number $325p60q8r$ is divisible by 9, then $p + q + r$ may be

A) $\frac{\sqrt[3]{729}}{\sqrt[5]{243}}$ B) $\sqrt[3]{1331} + 1$ C) $\sqrt[3]{343} \times \sqrt[4]{81}$ D) 9

1. only A is correct
2. only A & B are correct
3. only A, B & C are correct
4. All are correct

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 70 Question Id : 3922661830 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Which of the following are correct?

- i. $0.000000647 \text{ m} = 6.47 \times 10^{-7} \text{ m}$
 - ii. $60100000000 \text{ l} = 6.01 \times 10^{10} \text{ l}$
 - iii. $0.00001275 \text{ mm} = 1.275 \times 10^{-5} \text{ mm}$
1. (i) and (ii) are correct
 2. (i) and (iii) are correct
 3. (i), (ii) and (iii) are correct
 4. (ii) and (iii) are correct

Options :

1. ✖ 1
2. ✖ 2

3. ✓ 3

4. ✗ 4

Question Number : 71 Question Id : 3922661831 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

$$(2+3\sqrt{2})^2 + (2-3\sqrt{2})^2 + (3+2\sqrt{3})^2 + (3-2\sqrt{3})^2$$

1. 48
2. 58
3. 112
4. 86

Options :

1. ✗ 1

2. ✗ 2

3. ✗ 3

4. ✓ 4

Question Number : 72 Question Id : 3922661832 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

If $P = \{x : x \text{ is a vowel in English Alphabet}\}$ and

$Q = \{x : x \text{ is a letter of the word "AEROPLANE"}\}$, then identify the TRUE statement

1. $n(P \cup Q) - n(P \cap Q) = 6$
2. $n(P - Q) + n(Q \cap P) = 6$
3. $n(P - Q) = n(P \cup Q) - n(P \cap Q)$
4. $n(P \cup Q) = n(P) + n(Q)$

Options :

1. ✓ 1

2. ✗ 2

3. ✗ 3

4. ✗ 4

Question Number : 73 Question Id : 3922661833 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

In $\triangle ABC$, $DE \parallel BC$ which intersects AB and AC at D and E respectively and

if $AD = x$, $DB = x-2$, $AE = x+2$, $EC = x-1$ then value of x is

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

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 74 Question Id : 3922661834 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

In trapezium $ABCD$, if $AB \parallel CD$, $\angle A : \angle D = 3:2$ and $\angle B : \angle C = 2:1$, then $\angle B - \angle A =$

1. 10°
2. 12°
3. 14°
4. 16°

Options :

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 75 Question Id : 3922661835 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Arrange the following in descending order based on the number of independent measurements required to construct

- A) Square
 - B) Parallelogram
 - C) Quadrilateral
 - D) Rectangle
- 1. C, A, B, D
 - 2. C, B, D, A
 - 3. A, D, B, A
 - 4. A, C, B, D

Options :

- 1. ✖ 1
- 2. ✔ 2
- 3. ✖ 3
- 4. ✖ 4

Question Number : 76 Question Id : 3922661836 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Which of the following is **NOT TRUE** for rhombus?

- 1. All sides are equal
- 2. Opposite angles are equal and adjacent angles are supplementary
- 3. Opposite angles are complementary
- 4. Diagonals are perpendicular bisectors

Options :

- 1. ✖ 1
- 2. ✖ 2
- 3. ✔ 3
- 4. ✖ 4

Question Number : 77 Question Id : 3922661837 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Which of the following regular polygon exists?

1. Regular polygon with interior angle 110°
2. Regular polygon with exterior angle 50°
3. Regular polygon with interior angle 130°
4. Regular polygon with exterior angle 45°

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 78 Question Id : 3922661838 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If the ratio of $\angle A$, complement of the $\angle A$ and supplement of the $\angle A$ is $1 : 2 : 5$, then the supplement of the $\angle A$ is

1. 30°
2. 60°
3. 120°
4. 150°

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 79 Question Id : 3922661839 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Two tangents are drawn from an external point to a circle of radius 5cm and the tangents are inclined at an angle of 90° . Then the distance between center of the circle and the external point is (in cms)

1. 10
2. $5\sqrt{2}$
3. $10\sqrt{2}$
4. 5

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 80 Question Id : 3922661840 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

ABCD is a cyclic quadrilateral. Then $\angle A - \angle B + \angle C - \angle D$ is

1. 0°
2. 90°
3. 180°
4. 360°

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 81 Question Id : 3922661841 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

A metallic hemisphere is melted and re-cast in the shape of a cone with the same base radius (r) as that of the hemisphere. If h , l are height and slant height of the cone respectively, then

a) $h = 2r$

b) $l = \sqrt{5}r$

Which of the above is **TRUE**

1. (a) only
2. (b) only
3. both (a) and (b)
4. neither (a) nor (b)

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 82 Question Id : 3922661842 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The diameter of metallic sphere is 6 cm. It is melted and drawn into a wire having diameter of the cross-section as 0.2 cm. The ratio of length to diameter of the wire is

1. 18000 : 1
2. 1800 : 1
3. 180 : 1
4. 18 : 1

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 83 Question Id : 3922661843 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The difference between the areas of two squares drawn on two line segments of different length is 32 cm^2 . If greater line segment is 2 cm more than the shorter, then the length of the side of the bigger square is (in cm.)

1. 7
2. 7.5
3. 9
4. 9.5

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 84 Question Id : 3922661844 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

If the height (h) of the first cylinder is equal to the diameter of the second cylinder and diameter (d) of the first cylinder is equal the height of the second cylinder than the ratio of volumes of cylinders is

1. $d : h$
2. $3d : h$
3. $5d : h$
4. $d : \sqrt{h}$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 85 Question Id : 3922661845 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Which of the following statement is **FALSE**

1. Every square has an axes of symmetry
2. The letter 'z' has no line of symmetry
3. The letter 'E' has no rotational symmetry
4. Every figure has rotational symmetry of order more than 1

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 86 Question Id : 3922661846 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The height, base radius and slant height of cone are ***h***, ***r*** and ***l*** respectively. If the total surface area of a cone is equal to 3 times its base area. Then the which of the following statements are **TRUE**

(i) $l = 3r$

(ii) $h = \sqrt{3} r$

(iii) $l = 2r$

(iv) $h = 2\sqrt{2} r$

1. (i) and (ii) only
2. (ii) and (iii) only
3. (iii) and (iv) only
4. (i) and (iv) only

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3

4. ✖ 4

Question Number : 87 Question Id : 3922661847 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

D, E and F are the mid points of sides of $\triangle ABC$. If perimeter of a $\triangle ABC$ is 36cm, then half of the perimeter of $\triangle DEF$ is (in cm)

1. 4.5
2. 9
3. 18
4. 72

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 88 Question Id : 3922661848 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

An error 2% in excess is made while measuring the side of a square. The percentage of error in the calculated area of the square is

1. 2%
2. 2.02%
3. 4 %
4. 4.04%

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 89 Question Id : 3922661849 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

How many times a wheel of radius 28cm must rotate to go 352m? $\left(take \pi = \frac{22}{7} \right)$

1. 300
2. 200
3. 400
4. 100

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 90 Question Id : 3922661850 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

$P(x) = 4x^2 - 5x + 3$ then match the following

A) $P\left(\frac{1}{2}\right)$

i) $4\frac{1}{2}$

B) $P\left(\frac{-1}{2}\right)$

ii) $1\frac{1}{2}$

C) $P\left(\frac{3}{2}\right)$

iii) $6\frac{1}{2}$

	A	B	C
1.	ii	i	iii
2.	i	ii	iii
3.	ii	iii	i
4.	i	iii	ii

Options :

1. ✖ 1

2. ✖ 2

3. ✔ 3

4. ✖ 4

Question Number : 91 Question Id : 3922661851 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Which of the following is **NOT** a term in the A.P :

$-51, -43, -35, -27, \dots$

- 133
- 159
- 229
- 253

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 92 Question Id : 3922661852 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If two zeroes of $P(x) = 3x^3 - 5x^2 - 11x - 3$ are 3, -1 then third zero is

1. $-\frac{1}{3}$
2. $-\frac{1}{2}$
3. $\frac{1}{3}$
4. $\frac{1}{2}$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 93 Question Id : 3922661853 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Identify the quadratic equation

1. $(2x+3)(x-2) = (\sqrt{2}x + 3)^2$
2. $x^2 + 3x + 1 = (x-2)^2$
3. $(x+2)^3 = 2x(x^2-1)$
4. $x^3 - 4x^2 - x + 1 = (x-2)^3$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 94 Question Id : 3922661854 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If $(2 + \sqrt{3}, 3 - \sqrt{3})$ is the solution of an equation

$$3x - 2y - k\sqrt{3} = 0, \text{ then } k =$$

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

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 95 Question Id : 3922661855 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Minimum and Maximum number of possible real roots of a cubic polynomial

1. 2, 3
2. 0, 2
3. 0, 3
4. 1, 3

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3

4. ✓ 4

Question Number : 96 Question Id : 3922661856 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

$$8x^6 - 216y^{12} =$$

1. $(2x^2 - 6y^4)(4x^4 + 36y^8 - 12x^2y^4)$
2. $(2x^2 - 6y^6)(4x^4 + 36y^{12} - 12x^2y^6)$
3. $(2x^2 - 6y^4)(4x^4 + 36y^8 + 12x^2y^4)$
4. $(2x^2 - 6y^6)(4x^2 + 36y^{12} + 12x^2y^6)$

Options :

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 97 Question Id : 3922661857 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The ages of Lahari and Sanvi are in the ratio 5:7, four years from now the ratio of their ages will be 3:4; then the present age of Sanvi (in years)

1. 20
2. 21
3. 28
4. 35

Options :

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 98 Question Id : 3922661858 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The maximum value of the quadratic expression $2x - 7 - 5x^2$ is

1. $\frac{-34}{3}$
2. $\frac{-34}{5}$
3. $\frac{1}{5}$
4. $\frac{-1}{5}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 99 Question Id : 3922661859 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

If $\frac{5x + 1}{(x + 2)(x - 1)} = \frac{A}{x + 2} + \frac{B}{x - 1}$ then the relation between

A and B is

1. $A - B - 1 = 0$
2. $A + B + 1 = 0$
3. $A = B - 1$
4. $A = B$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3

4. ✖ 4

Question Number : 100 Question Id : 3922661860 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The determinant of $A = \begin{bmatrix} 1 & 0 & -2 \\ 3 & -1 & 2 \\ 4 & 5 & a \end{bmatrix}$ is -54 , then 'a' is

1. -3
2. 3
3. -6
4. 6

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 101 Question Id : 3922661861 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

When 10 is subtracted from all the observations, the mean is reduced to 50% of its value. If all observations are multiplied by 4, then the mean will be

1. 20
2. 40
3. 60
4. 80

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3

4. ✓ 4

Question Number : 102 Question Id : 3922661862 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

' x ' is the median of the data 8, 2, x , 11 and 14 ($x \in \mathbb{N}$) then number of possible integer value of ' x ' is

1. 4
2. 5
3. 6
4. 7

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 103 Question Id : 3922661863 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If f_0 = frequency of the class preceding the modal class

f_1 = frequency of the modal class

f_2 = frequency of class succeeding the modal class,

h = size of class = 10

l = lower boundary of modal class = 10.5 and $f_1 - f_2 = 4$,

$f_0 - f_1 = -6$ then mode is

1. 16.5
2. 15.5
3. 14.5
4. 13.5

Options :

1. ✓ 1

2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 104 Question Id : 3922661864 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The mean of 47 observations is 93. If first observation is increased by 1, second observation increased by 2 and so on, then the new mean is

1. 117
2. 140
3. 100
4. 116.5

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 105 Question Id : 3922661865 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

List – I : $2x + 1, 2x, 2x - 1, x$ (Where $x > 0$)

List – II : 15, 3, 5, 6, 7, 9

If the range of data in List–I and List –II are same then value of x is

1. 18
2. 13
3. 12
4. 11

Options :

1. ✖ 1

2. ✖ 2

3. ✖ 3

4. ✔ 4

Question Number : 106 Question Id : 3922661866 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Mean and Standard Deviation of data are 54 and 32.55 respectively then coefficient of Variation is (approximately)

1. 60.28

2. 86.55

3. 60.99

4. 86.79

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 107 Question Id : 3922661867 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

A coin is tossed 3 times. Then the probability of getting at least two heads is

1. $\frac{1}{2}$

2. $\frac{3}{8}$

3. $\frac{1}{4}$

4. $\frac{5}{8}$

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 108 Question Id : 3922661868 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

A card is selected randomly from 40 cards, numbered 1 to 40 then the probability of getting a card which is multiple of 2 or multiple of 5 is

1. $\frac{1}{2}$
2. $\frac{7}{10}$
3. $\frac{3}{5}$
4. $\frac{13}{20}$

Options :

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 109 Question Id : 3922661869 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

A bag contains 4 red balls and 5 blue balls. Two balls are drawn at random without replacement. If the first ball drawn is blue, then the probability of the second ball is also blue is

1. $\frac{1}{9}$
2. $\frac{2}{9}$
3. $\frac{1}{2}$
4. $\frac{5}{9}$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 110 Question Id : 3922661870 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Out of two dice one is numbered 1, 2, 3, 4, 5, 6 and other with $-1, -2, -3, -4, -5, -6$ two dice are thrown at a time and sum of the two faces is noted. The probability of getting sum less than or equal to zero is

1. $\frac{5}{12}$
2. $\frac{7}{12}$
3. $\frac{19}{36}$
4. $\frac{5}{6}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 111 Question Id : 3922661871 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

A bag contains 4 red, 5 black and 6 blue balls.

The probability of getting one red ball and one black ball when two balls are drawn simultaneously is

1. $\frac{3}{5}$
2. $\frac{4}{21}$
3. $\frac{2}{21}$
4. $\frac{3}{35}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 112 Question Id : 3922661872 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Which of the following points are non-collinear

1. $(3, -2), (-2, 8), (0, 4)$
2. $(7, -2), (5, 1), (3, 4)$
3. $(1, -1), (-4, 6), (-3, -5)$
4. $(8, 1), (3, -4), (2, -5)$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 113 Question Id : 3922661873 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The Center of a circle is on Y-axis, The circle is passing through the points $(0, 6)$ and $(0, 2)$, then center and radius of the circle are

1. $(0, 3), 2$
2. $(0, 2), 3$
3. $(0, 4), 2$
4. $(0, 3), 3$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 114 Question Id : 3922661874 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

A $(2, 3)$, B $(-1, 0)$ and C $(2, -4)$ are vertices of triangle ABC. If G is the centroid of $\triangle ABC$, then the area of $\triangle BGC$ is (in sq. units)

1. 10.5
2. 7
3. 3.5
4. 1.75

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 115 Question Id : 3922661875 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The point on the Y-axis which is equidistant from $(-1, 7)$ and $(3, 3)$ is

1. $(0, -4)$
2. $(0, -3)$
3. $(0, 3)$
4. $(0, 4)$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 116 Question Id : 3922661876 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Points of trisection of the line segment joining $(2, -2)$ and $(-7, 4)$

1. $\left(\frac{-16}{3}, \frac{10}{3}\right), \left(\frac{-11}{3}, \frac{10}{3}\right)$
2. $(-4, 2), (-1, 0)$
3. $\left(\frac{16}{3}, \frac{-10}{3}\right), \left(\frac{11}{3}, \frac{-8}{3}\right)$
4. $(4, -2), (1, 0)$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 117 Question Id : 3922661877 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Length of the major axis of the ellipse

$$3x^2 + y^2 - 6x - 2y - 5 = 0$$

1. 3
2. 6
3. 9
4. 12

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 118 Question Id : 3922661878 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Equation of a plane that makes intercepts 1,3,4 on the X-,Y-, Z- axes respectively

1. $12x + 4y + 3z - 12 = 0$
2. $x + 3y + 4z - 12 = 0$
3. $x + 3y + 4z = 0$
4. $12x + 4y + 3z + 12 = 0$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 119 Question Id : 3922661879 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The two circles represented by the equations

$$x^2 + y^2 - 4x - 6y - 12 = 0 \text{ and } x^2 + y^2 + 6x + 18y + 26 = 0$$

1. Intersects each other in two points
2. Touches externally
3. Touches internally
4. Do not contact each other

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 120 Question Id : 3922661880 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The incentre of the triangle formed by the points
(0, 0, 0), (3, 0, 0) and (0, 4, 0) is

1. (1, 1, 0)
2. (0, 1, 1)
3. (1, 0, 1)
4. (1, 1, 1)

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Section 5

Section Id :	39226669
Section Number :	5
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	40

Number of Questions to be attempted : 40
 Section Marks : 20
 Maximum Instruction Time : 0
 Sub-Section Number : 1
 Sub-Section Id : 39226669
 Question Shuffling Allowed : Yes

Question Number : 121 Question Id : 3922661881 Question Type : MCQ Option Shuffling : No
 Display Question Number : Yes
 Correct Marks : 0.5 Wrong Marks : 0

“Where the logic ends there the Mathematics starts” stated by

1. Russel and White Head
2. Benjamin Pierce
3. Felix Klein
4. Rene Descarte

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 122 Question Id : 3922661882 Question Type : MCQ Option Shuffling : No
 Display Question Number : Yes
 Correct Marks : 0.5 Wrong Marks : 0

Who introduced “School of Formalism”?

1. A.N. Whitehead
2. Kronecker
3. Henri Poincare
4. David Hilbert

Options :

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 123 Question Id : 3922661883 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Who considered odd numbers as male numbers and even numbers as female numbers?

1. Hypatia
2. Euclid
3. Pythagoras
4. Aristotle

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 124 Question Id : 3922661884 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Name the Indian Mathematician who explained about the coefficients in Binomial Expression

1. Aryabhatta
2. Bhaskaracharya
3. Brahmagupta
4. Varaha Mihira

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 125 Question Id : 3922661885 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Name the Indian Mathamatician, who proposed the Value of π as $\sqrt{10}$ for calculation purposes.

1. Aryabhatta
2. Parameswara
3. Brahmagupta
4. Bhaskaracharya

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 126 Question Id : 3922661886 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Which one of the following does not belong to the classification values of mathematics given by “Munnik”?

1. Utilitarian
2. Mathematics as mode of thought
3. Cultural
4. Preparation

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 127 Question Id : 3922661887 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

“Raju’s fathers age is 5 years more than the three times of Raju’s age. Raju’s fathers age is 44 years. Find the age of Raju”. In solving this, problem, the student framed the equation of $3x + 5 = 44$. With this step, the following objective is achieved

1. Application
2. Knowledge
3. Understanding
4. Skill

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 128 Question Id : 3922661888 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Identify the correct statements

- I. Objectives are general and long term goals.
 - II. Aims originate in the aspirations of a society and the policies of its Government.
1. I is correct and II is incorrect
 2. I is incorrect and II is correct
 3. Both I and II are incorrect
 4. Both I and II are correct

Options :

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 129 Question Id : 3922661889 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Which one of the following pointed out that qualitatively good mathematics education is indispensable today

1. NEP - 2020
2. NPE - 1986
3. NCF - 2005
4. Kothari Commission 1964 - 66

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 130 Question Id : 3922661890 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Objectives and action verbs are given hereunder. Match them properly.

- | | |
|------------------|--------------|
| A. Evaluation | i. Interpret |
| B. Knowledge | ii. Predict |
| C. Comprehension | iii. Defend |
| D. Application | iv. Define |

1. A - iii, B - iv, C - i, D - ii
2. A - i, B - iii, C - ii, D - iv
3. A - ii, B - i, C - iii, D - iv
4. A - i, B - ii, C - iv, D - iii

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3

4. ✖ 4

Question Number : 131 Question Id : 3922661891 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

‘An individual exhibits accuracy in his work and in expressions of his thoughts’. This can be categorized as this Value.

1. Utilitarian
2. Disciplinary
3. Cultural
4. Preparatory

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 132 Question Id : 3922661892 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Under classification of educational work. ‘Preparatory value’ is given by

1. Young
2. Breslich
3. Munnik
4. Locke

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 133 Question Id : 3922661893 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

‘The pupil has to construct knowledge continuously basing on previously learnt items’. For this, the type of curriculum organisation method required is

1. Logical
2. Spiral
3. Psychological
4. Topical

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 134 Question Id : 3922661894 Question Type : MCQ Option Shuffling : No Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

“All efforts will be made in preparing high-quality bilingual text books and teaching learning materials for science and mathematics, so that students are enabled to think and speak about the two subjects both in their home language / mother tongue and in English”. This extract is from

1. NPE, 1986
2. NCF, 2005
3. PoA, 1992
4. NEP, 2020

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 135 Question Id : 3922661895 Question Type : MCQ Option Shuffling : No Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

“Curriculum is the sum total of students activities which the school sponsors for the purpose of achieving its objectives”. Who said it?

1. Alberty
2. Cunningham
3. Samuel. P
4. Ross

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 136 Question Id : 3922661896 Question Type : MCQ Option Shuffling : No Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

“Children learn to enjoy mathematics rather than fear it”. This is one of the statements of “Vision for school mathematics”. Which one of the pairs given below contains this?

1. NCF 2005 and RTE 2009
2. NCF 2005 and APSCF 2011
3. APSCF 2011 and RTE 2009
4. RTE 2009 and NPE 1986

Options :

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 137 Question Id : 3922661897 Question Type : MCQ Option Shuffling : No Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

The meaning of the Greek term 'ANALUSIS' in English is

1. To split
2. I find out
3. To assemble
4. I can do

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 138 Question Id : 3922661898 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

'A standard procedure is the presentation of instructional material and the content of activities". This definition about teaching method is given by

1. Bloom. B.S
2. Samuel. P
3. Good, C.V
4. Herbart

Options :

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 139 Question Id : 3922661899 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

“Process of thinking” is the chief characteristic of this method

1. Laboratory
2. Inductive
3. Synthetic
4. Analytic

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 140 Question Id : 3922661900 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

All the schools cannot bear the expenditure, if this method is to be implemented in their schools

1. Problem Solving
2. Inductive
3. Laboratory
4. Heuristic

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 141 Question Id : 3922661901 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

After selecting a topic, the teacher should

1. Conduct individual reading activity
2. Prepare the planning of the topic
3. Concentrate on student's evaluation
4. Deliver information to the students

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 142 Question Id : 3922661902 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

When we follow the Herbartian steps for writing a lesson plan, the 1st step is preparation and the last step is recapitulation. The middle steps in an order are

- I. Generalization
 - II. Presentation
 - III. Application
 - IV. Association
1. I, II, III and IV
 2. II, III, IV and I
 3. II, IV, I and III
 4. IV, III, II and I

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 143 Question Id : 3922661903 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

From which academic year the lesson plan with components “I do, We do and You do” was implemented?

1. 2022 - 23
2. 2023 - 24
3. 2019 - 20
4. 2020 - 21

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 144 Question Id : 3922661904 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Identify the statement that does not reflect the significance of A.V. Aids

1. They stimulate interest in learning
2. They increase verbalism in the teaching process
3. They enhance understanding
4. Learning is made permanent

Options :

1. ✗ 1
2. ✓ 2
3. ✗ 3
4. ✗ 4

Question Number : 145 Question Id : 3922661905 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

If we proceed from the base to the top of the cone of experience, we observe that

- I. Abstractness decreases
 - II. Abstractness increases
 - III. There is no change in the abstractness
- 1. I
 - 2. II
 - 3. III
 - 4. I or III

Options :

- 1. ✖ 1
- 2. ✔ 2
- 3. ✖ 3
- 4. ✖ 4

Question Number : 146 Question Id : 3922661906 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

An object or device used by a teacher to enhance the enliven classroom instruction is known as

- 1. Teaching dairy
- 2. Question paper
- 3. Teaching Aid
- 4. Reference books

Options :

- 1. ✖ 1
- 2. ✖ 2
- 3. ✔ 3
- 4. ✖ 4

Question Number : 147 Question Id : 3922661907 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Institutional arrangements made for slow learners does not include

1. Arrangement of special schools
2. Arrangement of special teachers
3. Arrangement of special classes
4. Arrangement of special hostels

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 148 Question Id : 3922661908 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Institutional arrangements for gifted students are

- I. Summer camps
 - II. Making as teaching Assistants
 - III. Preparing supplementary reading material
1. I, II
 2. I, II, III
 3. I, III
 4. II, III

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 149 Question Id : 3922661909 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Identify the correct statements

- I. Oral work is an easy way of testing previous knowledge.
 - II. Drill leads to habit formation
1. I is correct and II is not correct
 2. II is correct and I is not correct
 3. Both I and II are not correct
 4. Both I and II are correct

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 150 Question Id : 3922661910 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Identify the correct statements

- I. Drill may provide students the diagnostic information and self-checkup
 - II. Written work should be corrected to make the pupils free from misapprehension of the question
1. I and II are both incorrect
 2. I and II are both correct
 3. I is correct and II is not correct
 4. II is correct and I is not correct

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 151 Question Id : 3922661911 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

“An organized group of individuals, having somewhat homogeneous level of interest and ability in mathematics, who meet periodically to discuss mathematical topics”. This definition about mathematics club is given by

1. Herbert
2. Samuel. P
3. Good C.V.
4. Bloom

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 152 Question Id : 3922661912 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Observe the following

- a. $12^2 = 144, 21^2 = 441$
- b. $13^2 = 169, 31^2 = 961$
- c. $112 \times 113 = 12656$
 $211 \times 311 = 65621$ etc...

These are the examples for

1. Order
2. Pattern
3. Sequence
4. Symmetry

Options :

1. ✔ 1

2. ✖ 2

3. ✖ 3

4. ✖ 4

Question Number : 153 Question Id : 3922661913 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

One of the following does not belong to the purposes of unit tests. Identify it.

1. They help in diagnosing the strengths and weaknesses of pupils in a particular subject area.
2. They enable the pupils for estimating their attainments
3. There is no need to modify the instructional strategy already used.
4. It is possible to undertake the remedial measures.

Options :

1. ✖ 1

2. ✖ 2

3. ✔ 3

4. ✖ 4

Question Number : 154 Question Id : 3922661914 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

‘Ability to organize ideas’ can be best measured through this type items.

1. Matching
2. Essay
3. Multiple choice
4. Completion

Options :

1. ✖ 1

2. ✔ 2

3. ✖ 3

4. ✖ 4

Question Number : 155 Question Id : 3922661915 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

A test is valued by an examiner. Another examiner also valued the same scripts. It is observed that in the 2nd valuation, each student's score is raised by 3 scores. Even then, the test has

1. Reliability
2. Scorability
3. Objectivity
4. Administrability

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 156 Question Id : 3922661916 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

Which one of the following does not belong to 'self-reporting techniques' of evaluation?

1. Interview
2. Questionnaire
3. Interest Inventory
4. Anecdotal record

Options :

1. ✗ 1
2. ✗ 2
3. ✗ 3
4. ✓ 4

Question Number : 157 Question Id : 3922661917 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes
Correct Marks : 0.5 Wrong Marks : 0

The process of evaluation is

1. Continuous
2. Teacher centered
3. Changeable
4. Constant

Options :

1. ✓ 1
2. ✗ 2
3. ✗ 3
4. ✗ 4

Question Number : 158 Question Id : 3922661918 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Curriculum reflects the culture of the

1. Class
2. School
3. Society
4. Home

Options :

1. ✗ 1
2. ✗ 2
3. ✓ 3
4. ✗ 4

Question Number : 159 Question Id : 3922661919 Question Type : MCQ Option Shuffling : No
Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

Four examiners valued the same test scripts. It was found that much variation is found in the scores. Then, the test do not possess this characteristic

1. Administrability
2. Objectivity
3. Discriminating power
4. Economy

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 160 Question Id : 3922661920 Question Type : MCQ Option Shuffling : No

Display Question Number : Yes

Correct Marks : 0.5 Wrong Marks : 0

“It is better to call it as a learning approach or heuristic approach than to call it as teaching”. Who opined like that?

1. Armstrong
2. Thorndike
3. Cooney
4. Young

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4