Navodaya Vidyalaya Samiti

(An Autonomous Body Under MHRD) Government of India

Participant ID	
Participant Name	
Test Center Name	Fringe Institute of Advanced Studies
Test Date	18/09/2019
Test Time	9:00 AM - 12:00 PM
Subject	TGT Math Hindi

Section : **Reasoning Ability**

Q.1 **Introducing Kannan, Swathi said, "His mother is the only daughter of my mother". How is Kannan related to Swathi?**

Ans

✗ 1. Uncle

✗ 2. Father

✓ 3. Son

✗ 4. Brother

Question ID : **96623116231**
Status : **Answered**
Chosen Option : **3**

Q.2 **Find the wrong term from the following series:**

1, 6, 16, 31, 51, 76, 106, 140, 181, 226

Ans

✗ 1. 226

✗ 2. 51

✗ 3. 76

✓ 4. 140

Question ID : **96623116232**
Status : **Answered**
Chosen Option : **4**

Q.3 **Which number will replace the question mark (?) in the following series?**

14, 15, 19, 46, 62, ?

Ans

✗ 1. 185

✓ 2. 187

✗ 3. 183

✗ 4. 181

Question ID : **96623116230**
Status : **Answered**
Chosen Option : **2**

Q.4 **Choose the similar pair for the following:**

343 : 6 : : _____ : _____

Ans
- ✗ 1. 256 : 4
- ✗ 2. 196 : 17
- ✗ 3. 225 : 15
- ✓ 4. 512 : 7

Question ID : **96623116223**
Status : **Answered**
Chosen Option : **4**

Q.5 **Choose the correct alternative for the following:**

$\frac{3}{8} : 73 : : \frac{7}{9} : \_\_\_\_\_$

Ans
- ✗ 1. 165
- ✗ 2. 265
- ✓ 3. 130
- ✗ 4. 256

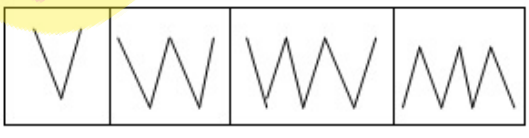
Question ID : **96623116224**
Status : **Marked For Review**
Chosen Option : **1**

Q.6 **Three of the given four numbers are similar in a certain manner while one is different. Choose the odd one out.**

Ans
- ✗ 1. 233
- ✗ 2. 277
- ✗ 3. 271
- ✓ 4. 261

Question ID : **96623116229**
Status : **Answered**
Chosen Option : **4**

Q.7 **From the following figures choose that figure which is different from the other:**



Ans
- ✗ 1. 1
- ✓ 2. 4
- ✗ 3. 3
- ✗ 4. 2

Question ID : **96623116226**
Status : **Answered**

Chosen Option : **2**

Q.8 **In the following question, a statement is given followed by four conclusions. Without resolving anything yourself, choose the conclusion which logically follows from the given statement:**

Statement:
All beggars are poor.

Conclusions:
I. If X is a beggar, then X is not rich.
II. If X is not rich, then X is not a beggar.
III. All those who are poor are beggars.
IV. If X is rich, then X is not a beggar.

Ans
✗ 1. Only conclusion II follows.
✗ 2. Either conclusion III or IV follow.
✓ 3. Only conclusion I follows.
✗ 4. All conclusion follows.

Question ID : **96623116228**
Status : **Answered**
Chosen Option : **2**

Q.9 **Choose the number which is different from others:**

Ans
✗ 1. 13
✗ 2. 11
✓ 3. 9
✗ 4. 7

Question ID : **96623116225**
Status : **Answered**
Chosen Option : **3**

Q.10 **Two statements and two conclusions are given. Choose the comment about conclusion from the given options below:**

Statements:
All hill stations have a sun-set point.
A is a hill station.

Conclusions:
I. A has a sun-set point.
II. Places other than hill stations do not have sun-set point.

Ans
✓ 1. Only conclusion I follows
✗ 2. Either conclusion I or II follows
✗ 3. Only conclusion II follows
✗ 4. Neither conclusion I nor II follows

Question ID : **96623116227**
Status : **Answered**
Chosen Option : **1**

Section : **General Awareness**

Q.1 **In economic terms, a _____ is a system or scheme which buys and stores stocks at times of good harvests to prevent prices falling below a target range (or price level), and releases stocks during bad harvests to prevent prices rising above a target range (or price level).**

Ans
1. preserve stock
2. reserve stock
3. shield stock
4. buffer stock

Question ID : **96623116242**
Status : **Answered**
Chosen Option : **4**

Q.2 There are _____ schools of Indian Philosophy known as 'Shad Darshanas'.

Ans
1. Six
2. Eight
3. Four
4. Five

Question ID : **96623116239**
Status : **Answered**
Chosen Option : **2**

Q.3 Which ancient city is named after Romulus?

Ans
1. Reno
2. Ramona
3. Rosemont
4. Rome

Question ID : **96623116235**
Status : **Answered**
Chosen Option : **4**

Q.4 Inter-State Council was constituted in which year?

Ans
1. 2006
2. 1999
3. 2004
4. 1990

Question ID : **96623116236**
Status : **Answered**
Chosen Option : **4**

Q.5 The 11th Fundamental Duty was added by which Constitutional Amendment Act?

Ans
1. 98th Constitutional Amendment Act, 2012
2. 42nd Constitutional Amendment Act, 1976
3. 86th Constitutional Amendment Act, 2002
4. 84th Constitutional Amendment Act, 2001

Question ID : **96623116237**
Status : **Answered**
Chosen Option : **1**

Q.6 Indian archaeologists recently unearthed a rare life-sized stucco sculpture from a Buddhist site at _____.

Ans
✔ 1. Telangana
✘ 2. Assam
✘ 3. Chhattisgarh
✘ 4. Bihar

Question ID : **96623116240**
Status : **Answered**
Chosen Option : **1**

Q.7 India has set a world record by launching _____ number of satellites in a single mission.

Ans
✘ 1. 82
✘ 2. 115
✔ 3. 104
✘ 4. 67

Question ID : **96623116234**
Status : **Answered**
Chosen Option : **3**

Q.8 The last captive White tiger named 'Bajirao' who recently died belonged to which of the following National Parks?

Ans
✘ 1. Ranthambore National Park
✘ 2. Panna National Park
✘ 3. Corbett National Park
✔ 4. Sanjay Gandhi National Park

Question ID : **96623116233**
Status : **Answered**
Chosen Option : **2**

Q.9 Bohag Bihu is the _____ New year celebrated by performing the folk dance Bihu and a grand buffet.

Ans
✔ 1. Assamese
✘ 2. Manipuri
✘ 3. Odia
✘ 4. Bengali

Question ID : **96623116241**
Status : **Answered**
Chosen Option : **1**

Q.10 Who won India's First Gold medal in Men's 10 m Air Pistol shooting at the Asian Games 2018?

Ans
✘ 1. Apurvi Chandela
✘ 2. Jeetu Rai
✘ 3. Deepak Kumar
✔ 4. Saurabh Chaudhary

Question ID : **96623116238**
Status : **Answered**
Chosen Option : **3**

Section : **Teaching Aptitude**

Q.1 Which area of social science teaches the concepts of 'plurality' and 'change'?

Ans

✗ 1. Geography

✓ 2. History

✗ 3. Economics

✗ 4. Politics

Question ID : **96623116253**
Status : **Marked For Review**
Chosen Option : **2**

Q.2 Which statement is correct with respect to the relationship between intelligence and creativity?

Ans

✗ 1. Intelligence is not required for creative expression.

✗ 2. Intelligence and creativity are only acquired from environment.

✗ 3. There is no difference between intelligence and creativity.

✓ 4. Intelligence and creativity are two independent functions of a human personality.

Question ID : **96623116243**
Status : **Answered**
Chosen Option : **4**

Q.3 According to the guidelines by NCERT, how much time should be allocated for art education in schools?

Ans

✓ 1. One-fourth of the total time

✗ 2. One-fifth of the total time

✗ 3. One-third of the total time

✗ 4. One-sixth of the total time

Question ID : **96623116257**
Status : **Answered**
Chosen Option : **1**

Q.4 According to the National Sample Survey conducted in 1986-87, _____ could never enroll as students since their priority is attending to household chores.

Ans

✗ 1. males and females from urban areas only

✗ 2. rural females only

✓ 3. males and females from urban and rural areas

✗ 4. urban males only

Question ID : **96623116248**
Status : **Answered**
Chosen Option : **2**

Q.5 Which mathematical topic that is best seen as a compact language and a means of succinct expression is introduced at upper primary stage?

Ans
✗ 1. Mensuration
✗ 2. Differential equations
✗ 3. Number notation
✓ 4. Algebra

Question ID : **96623116252**
Status : **Answered**
Chosen Option : **1**

Q.6 Who said the following statement?

"It is more useful to know how to mathematise than to know a lot of mathematics."

Ans
✓ 1. David Wheeler
✗ 2. Zakir Husain
✗ 3. George Polya
✗ 4. Mahatma Gandhi

Question ID : **96623116255**
Status : **Answered**
Chosen Option : **1**

Q.7 What was the earliest mode of distance education?

Ans
✗ 1. Face-to-face sessions combined with online learning
✗ 2. Teleconferencing
✓ 3. Education through correspondence
✗ 4. Video conferencing

Question ID : **96623116250**
Status : **Answered**
Chosen Option : **3**

Q.8 A teacher conducted a practical activity with the children of Class 4 by giving them activity kits. All the children participated in the activity and were involved throughout. What is the best way for the teacher to ensure that the students have achieved the intended learning from the activity?

Ans
✗ 1. Give them a worksheet to solve
✗ 2. Ask them questions
✗ 3. Ask the children to talk about their experience one by one in front of the class
✓ 4. Allow individual student reflections through discussion with peers or with the teacher

Question ID : **96623116249**
Status : **Answered**
Chosen Option : **3**

Q.9 What is the focus of self-learning online courses for teachers in the draft of the New Education Policy, 2016?

Ans
✓ 1. Child rights
✗ 2. Equity and equality
✗ 3. Gender sensitivity

✗ 4. Education of girls

Question ID : **96623116246**
Status : **Answered**
Chosen Option : **4**

Q.10 How can we avoid gender bias while using language for teaching social studies in a classroom?

Ans

✗ 1. By giving equal weightage to all genders

✗ 2. By avoiding technical terms

✓ 3. By carefully choosing the adjectives to be used for different genders

✗ 4. By showing only pictures without using any language

Question ID : **96623116251**
Status : **Answered**
Chosen Option : **2**

Q.11 Which of the following is NOT an objective of the National Adult Education Programme (NAEP) launched in 1978?

Ans

✗ 1. Promotion of literacy

✗ 2. Creation of awareness

✓ 3. Creation of employment

✗ 4. Raising functional capabilities

Question ID : **96623116247**
Status : **Answered**
Chosen Option : **2**

Q.12 A teacher asks her students to read the news about recent events in the state. Then the students are asked to classify the events into different 'ruling systems'. The purpose of this learning activity is to _____ the topic.

Ans

✓ 1. understand

✗ 2. recall

✗ 3. research

✗ 4. revise

Question ID : **96623116256**
Status : **Answered**
Chosen Option : **1**

Q.13 Compared to a child growing up in one place, a child growing up in a migrating family is typically able to:

Ans

✓ 1. connect with people

✗ 2. develop critical thinking

✗ 3. maintain calm

✗ 4. develop creative thinking

Question ID : **96623116244**
Status : **Answered**
Chosen Option : **2**

Q.14 **What was the specific measure suggested by a teenage girl during the course of deliberations over the National Curriculum Framework review by NCERT?**

Ans
✗ 1. To explain different concepts with clarity and give examples from the children's lived realities.

✗ 2. To identify reasons for lack of participation of girls at secondary stage.

✓ 3. To inculcate greater self-awareness among boys regarding their behaviour towards girls.

✗ 4. To build separate toilets for girls.

Question ID : **96623116254**
Status : **Answered**
Chosen Option : **1**

Q.15 **_____ is a school of philosophy that praises and rewards group performance.**

Ans
✗ 1. Particularism

✗ 2. Universalism

✗ 3. Individualism

✓ 4. Communitarianism

Question ID : **96623116245**
Status : **Answered**
Chosen Option : **4**

Section : **Subject Knowledge**

Q.1 The maximum sum of the series $20 + 19\frac{1}{3} + 18\frac{2}{3} + 18 + \cdots$ is:

Ans
✗ 1. 320

✓ 2. 310

✗ 3. 300

✗ 4. 290

Question ID : **96623116292**
Status : **Marked For Review**
Chosen Option : **4**

Q.2 If p time the p^{th} term of an AP be equal to q times the q^{th} term, then $(p+q)^{th}$ term is:

Ans
✗ 1. $p+q$

✗ 2. $2p+3q$

✓ 3. 0

✗ 4. $p-q$

Question ID : **96623116291**
Status : **Answered**
Chosen Option : **3**

Q.3

For the two frequency distributions given in the following table, the mean calculated from the first was 25.4 and that from the second term was 32.5. Find the values of x and y :

Class	Distribution I frequency	Distribution II frequency
10-20	20	4
20-30	15	8
30-40	10	4
40-50	x	$2x$
50-60	y	y

Ans

1. $x = 2,\ y = 3$
2. $x = 3,\ y = 2$
3. $x = 5,\ y = 2$
4. $x = 3,\ y = 4$

Question ID : **96623116303**
Status : **Marked For Review**
Chosen Option : **1**

Q.4 If x and y are positive real numbers such that $x^2y^3 = 32$, then the least value of $2x + 3y$ is:

Ans

1. 20
2. 15
3. 5
4. 10

Question ID : **96623116318**
Status : **Answered**
Chosen Option : **4**

Q.5 The minimum value of the sum of real numbers $a^{-5}, a^{-4}, 3a^{-3}, 1,\ a^8$ and a^{10} with $a > 0$ is:

Ans

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

Question ID : **96623116317**
Status : **Answered**
Chosen Option : **4**

Q.6 If α, β are zeros of $x^2 - 6x + k$. What is the value of k if $3\alpha + 2\beta = 20$:

Ans

1. 8
2. –8
3. –2
4. –16

Question ID : **96623116308**

Status : **Answered**
Chosen Option : **4**

Q.7 Three cubes of sides 1 cm, 6 cm and 8 cm are melted to form a new cube. Find half of the surface area of the new cube?

Ans

✗ 1. $293\ cm^2$

✗ 2. $463\ cm^2$

✗ 3. $486\ cm^2$

✓ 4. $243\ cm^2$

Question ID : **96623116277**
Status : **Answered**
Chosen Option : **4**

Q.8 The left hand limit of the function $f(x) = \begin{cases} \frac{|x-4|}{(x-4)}; & x \neq 4 \\ 0\ ; & x = 4 \end{cases}$ at $x = 4$, is:

Ans

✗ 1. 1

✓ 2. -1

✗ 3. 0

✗ 4. None

Question ID : **96623116279**
Status : **Answered**
Chosen Option : **4**

Q.9 If A and B are two events such that P(A)>0 and P(B)≠1, then $P(\frac{\bar{A}}{B})$ is equal to:

Ans

✗ 1. $1 - P(\bar{A}/_B)$

✗ 2. $\frac{1 - P(A \cap B)}{P(\bar{B})}$

✗ 3. $\frac{P(\bar{A})}{P(\bar{B})}$

✓ 4. $1 - P(A/_{\bar{B}})$

Question ID : **96623116262**
Status : **Marked For Review**
Chosen Option : **1**

Q.10 Find the zeros of the quadratic polynomial $\sqrt{3}x^2 - 8x + 4\sqrt{3}$:

Ans

✗ 1. $-2\sqrt{3}, \frac{2}{\sqrt{3}}$

✗ 2. $-2\sqrt{3}, \frac{-2}{\sqrt{3}}$

✔ 3. $2\sqrt{3}, \frac{2}{\sqrt{3}}$

✘ 4. $2\sqrt{3}, \frac{-2}{\sqrt{3}}$

Question ID : **96623116311**
Status : **Answered**
Chosen Option : **3**

Q.11 The range of the function $f(x) = \log_e \sqrt{4-x^2}$, is:

Ans

✘ 1. $(\ln 2, \infty)$

✘ 2. $(-\infty, \infty)$

✔ 3. $(-\infty, \ln 2)$

✘ 4. $(0, \infty)$

Question ID : **96623116281**
Status : **Answered**
Chosen Option : **4**

Q.12 If $3^{(x+y)} = 81$ and $81^{(x-y)} = 3$, then what is the value of x ?

Ans

✘ 1. $\frac{17}{16}$

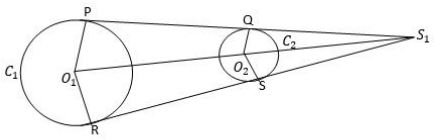
✔ 2. $\frac{17}{8}$

✘ 3. $\frac{17}{4}$

✘ 4. $\frac{15}{4}$

Question ID : **96623116328**
Status : **Answered**
Chosen Option : **2**

Q.13 The two circles C_1 and C_2 do not intersect and are placed as shown in the figure.



The radius of the circles C_1 and C_2 are 3 cm and 2 cm respectively and the distance between their centres is 6 cm. The direct common tangents meet at S_1. Find O_2S_1.

Ans

✘ 1. 13 cm

✘ 2. 10 cm

✗ 3. 11 cm

✓ 4. 12 cm

Question ID : **96623116353**
Status : **Answered**
Chosen Option : **4**

Q.14 Find the co-ordinates of the points of trisection of the straight line joining the points $A(1,-2)$ and $B(-3,4)$?

Ans

✗ 1. $\left(\frac{5}{3},-2\right)$ & $\left(\frac{1}{3},0\right)$

✗ 2. $\left(\frac{-5}{3},2\right)$ & $\left(\frac{1}{3},0\right)$

✗ 3. $\left(\frac{5}{3},2\right)$ & $\left(\frac{1}{3},0\right)$

✓ 4. $\left(\frac{-5}{3},2\right)$ & $\left(\frac{-1}{3},0\right)$

Question ID : **96623116272**
Status : **Answered**
Chosen Option : **4**

Q.15 The range of ab if $|a| \leq 1$ and $a+b=1$, $(a,b \in R)$ is:

Ans

✗ 1. $\left[\frac{1}{4}, 2\right]$

✓ 2. $\left[-2, \frac{1}{4}\right]$

✗ 3. $\left[0, \frac{1}{4}\right]$

✗ 4. $[0, 2]$

Question ID : **96623116319**
Status : **Answered**
Chosen Option : **3**

Q.16 If the 4^{th} term in the expansion of $(ax+\frac{1}{x})^n$ is $\frac{5}{2}$, for all $x \in R$ then the values of a and n are:

Ans

✓ 1. $\frac{1}{2}$, 6

✗ 2. $\frac{1}{2}$, 3

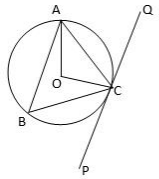
✗ 3. 1 , 3

✗ 4. cannot be found

Question ID : **96623116299**
Status : **Answered**
Chosen Option : **4**

Q.17

In the given figure, O is the centre of the circle and if $\angle OAC = 30^\circ$, the acute angle between AC and the tangent PQ at C is:



Ans

✔ 1. 60°

✗ 2. 45°

✗ 3. 90°

✗ 4. 30°

Question ID : **96623116351**
Status : **Answered**
Chosen Option : **1**

Q.18 If the roots of the quadratic equation $x^2 + px + q = 0$ are $\tan 30^\circ$ and $\tan 15^\circ$ respectively, then the value of $2 + q - p$ is:

Ans

✗ 1. 1

✔ 2. 3

✗ 3. 0

✗ 4. 2

Question ID : **96623116286**
Status : **Answered**
Chosen Option : **2**

Q.19 Determine the ratio and the value of m in which the point $p(m,6)$ divides the join of $A(-4,3)$ and $B(2,8)$.

Ans

✗ 1. $3:4 \text{ and } m = \frac{-2}{5}$

✗ 2. $3:4 \text{ and } m = \frac{2}{5}$

✔ 3. $3:2 \text{ and } m = \frac{-2}{5}$

✗ 4. $3:2 \text{ and } m = \frac{2}{5}$

Question ID : **96623116271**
Status : **Answered**
Chosen Option : **3**

Q.20 If $A + B = \frac{\pi}{4}$, then $(\tan A + 1)(\tan B + 1)$ is equal to:

Ans

✔ 1. 2

✗ 2. -1

✗ 3. 1

✗ 4. $\sqrt{3}$

Question ID : **96623116267**
Status : **Answered**
Chosen Option : **1**

Q.21 If the number 11^6 is divided by 7, the remainder is:

Ans
✓ 1. 1
✗ 2. 3
✗ 3. 4
✗ 4. 2

Question ID : **96623116347**
Status : **Answered**
Chosen Option : **4**

Q.22 If the standard deviation of the observation $-5,-4,-3,-2,-1,0,1,2,3,4,\ 5$ *is* $\sqrt{10}$, then the standard deviation of the observation $15,16,17,18,19,20,21,22,23,24,25$ will be:

Ans
✓ 1. $\sqrt{10}$
✗ 2. $\sqrt{10}+10$
✗ 3. $\sqrt{10}+20$
✗ 4. None of the options

Question ID : **96623116258**
Status : **Answered**
Chosen Option : **1**

Q.23 If the distance between the points (4, p) and (1, 0) is 5, then the value of p is:

Ans
✗ 1. 4
✗ 2. 0
✓ 3. ± 4
✗ 4. -4

Question ID : **96623116269**
Status : **Answered**
Chosen Option : **3**

Q.24 Divide the polynomial $6x^3+13x^2+x-2$ by $2x+1$, and find the quotient and remainder:

Ans
✗ 1. $Q=3x^2+5x-2,\ R=1$
✗ 2. $Q=3x^2-5x+2,\ R=0$
✗ 3. $Q=3x^2-5x-2,\ R=0$
✓ 4. $Q=3x^2+5x-2,\ R=0$

Question ID : **96623116310**
Status : **Answered**

Chosen Option : **4**

Q.25 The pair of linear equations $kx + 2y = 5$ and $3x + y = 1$ has a unique solution if:

Ans

✗ 1. $k = 0$

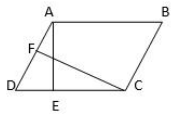
✗ 2. $k = 6$

✓ 3. $k \neq 6$

✗ 4. k has any value

Question ID : **96623116326**
Status : **Answered**
Chosen Option : **3**

Q.26 In the following figure, $ABCD$ is a parallelogram. $AE \perp DC$ and $CF \perp AD$. If $AB = 16\ cm$, $AE = 8\ cm$ and $CF = 10\ cm$, then AD is:



Ans

✓ 1. 12.8 cm

✗ 2. 8 cm

✗ 3. 10 cm

✗ 4. 16 cm

Question ID : **96623116354**
Status : **Answered**
Chosen Option : **1**

Q.27 If the mean of the first n odd natural numbers is $\frac{n^2}{81}$, then n =?

Ans

✗ 1. 40

✗ 2. 27

✗ 3. 9

✓ 4. 81

Question ID : **96623116307**
Status : **Answered**
Chosen Option : **4**

Q.28 If $= \sqrt[4]{6} - \sqrt[4]{5}$, $B = \sqrt[4]{6} + \sqrt[4]{5}$, $C = \sqrt{6} - \sqrt{5}$, $D = \sqrt{6} + \sqrt{5}$, $E = \sqrt{6} + \sqrt{5}$, then which of the following is a rational number?

Ans

✓ 1. ABDE

✗ 2. AB

✗ 3. CD

✗ 4. ABCDE

Question ID : **96623116342**
Status : **Answered**
Chosen Option : **1**

Q.29 If a variable takes discrete values $x+4,\ x-\frac{7}{2},\ x-\frac{5}{2},\ x-3,\ x-2,\ x+\frac{1}{2},\ x-\frac{1}{2},\ x+5,\ (x>0)$ then the median is:

Ans

✗ 1. $x-\frac{1}{2}$

✗ 2. $x-2$

✓ 3. $x-\frac{5}{4}$

✗ 4. $x+\frac{5}{4}$

Question ID : **96623116306**
Status : **Answered**
Chosen Option : **3**

Q.30 If the lines given by $3x+2ky=2$ and $2x+5y+1=0$ are parallel, then the value of k is:

Ans

✗ 1. $\frac{-5}{4}$

✗ 2. $\frac{3}{2}$

✓ 3. $\frac{15}{4}$

✗ 4. $\frac{2}{5}$

Question ID : **96623116327**
Status : **Answered**
Chosen Option : **3**

Q.31 If the ratio of the mode and the median of a distribution is 6 : 5, then the ratio of its mean and median is:

Ans

✗ 1. 8 : 9

✗ 2. 8 : 11

✓ 3. 9 : 10

✗ 4. 9 : 7

Question ID : **96623116305**
Status : **Answered**
Chosen Option : **3**

Q.32 Let T_r be the r^{th} term of an AP, where the first term is a and common difference is d. If for some positive integers $m \neq n$, $T_m=\frac{1}{n}$ and $T_n=\frac{1}{m}$, then $a-d$ equals:

Ans

✓ 1. 0

✗ 2. $\frac{1}{mn}$

✗ 3. $\frac{1}{m}+\frac{1}{n}$

✗ 4. 1

Question ID : **96623116294**
Status : **Answered**
Chosen Option : **1**

Q.33 The value of a for which the sum of the squares of the roots of the equation $x^2-(a-2)x-a-1=0$ assumes the least value is:

Ans

✗ 1. 2

✗ 2. 3

✗ 3. 0

✓ 4. 1

Question ID : **96623116290**
Status : **Answered**
Chosen Option : **4**

Q.34 The frustum of a right circular cone has the diameter of a base 10 cm, of top 6 cm and a height of 5 cm. Find the start height of the frustum:

Ans

✓ 1. $\sqrt{29}$

✗ 2. $4\sqrt{3}$

✗ 3. $3\sqrt{3}$

✗ 4. $\sqrt{13}$

Question ID : **96623116297**
Status : **Answered**
Chosen Option : **1**

Q.35 If the difference between the corresponding roots of $x^2+ax+b=0$ and $x^2+bx+a=0$ is same and $a\neq b$, then:

Ans

✓ 1. $a+b+4=0$

✗ 2. $a+b-4=0$

✗ 3. $a-b+4=0$

✗ 4. $a-b-4=0$

Question ID : **96623116287**
Status : **Marked For Review**
Chosen Option : **2**

Q.36 The volume of a cube is numerically equal to some of its edges. What is the total surface area in square units?

Ans

✓ 1. 72

✗ 2. 12

✗ 3. 36

✗ 4. 144

Question ID : **96623116355**
Status : **Answered**
Chosen Option : **2**

Q.37 If $u=a_1x+b_1y+c_1=0$, $v=a_2x+b_2y+c_2=0$ and $\frac{a_1}{a_2}=\frac{b_1}{b_2}=\frac{c_1}{c_2}$, then $u+kv=0$ represents:

Ans

1. a family of concurrent lines
2. $u = 0$
3. none of these
4. a family of parallel lines

Question ID : **96623116332**
Status : **Answered**
Chosen Option : **1**

Q.38 If the characteristic roots of $\begin{bmatrix} 3 & 7 \\ 2 & 5 \end{bmatrix}$ are λ_1, and λ_2, the characteristic root of $\begin{bmatrix} 5 & -7 \\ -2 & 3 \end{bmatrix}$ are:

Ans

1. $\frac{1}{\lambda_1}, \frac{1}{\lambda_2}$
2. $\lambda_1 + \lambda_2,\ \lambda_1 - \lambda_2$
3. $\lambda_1 + \lambda_2,\ |\lambda_1 - \lambda_2|$
4. $2\lambda_1,\ 2\lambda_2$

Question ID : **96623116325**
Status : **Answered**
Chosen Option : **1**

Q.39 The points $(-4,0),(4,0),(0,3)$ are the vertices of a:

Ans

1. right triangle
2. scalene triangle
3. isosceles triangle
4. equilateral triangle

Question ID : **96623116270**
Status : **Answered**
Chosen Option : **3**

Q.40 Which of the following rational numbers are terminating decimals?

Ans

1. $\frac{17}{2^4 \times 5^2}$
2. $\frac{125}{3^3 \times 7^2}$
3. $\frac{68}{2^2 \times 5^2 \times 7^2}$
4. $\frac{25}{3^2 \times 2^3}$

Question ID : **96623116340**
Status : **Answered**
Chosen Option : **1**

Q.41 The number $(4312)_5$ when expressed in base 10 is:

Ans
1. 562
2. 592
3. 612
4. 582

Question ID : **96623116346**
Status : **Answered**
Chosen Option : **4**

Q.42 The equation of a straight line passing through the point of intersection of $x - y + 1 = 0$ and $3x + y - 5 = 0$ are perpendicular to one of them, is:

Ans
1. $x - y + 3 = 0$
2. $x - 3y + 5 = 0$
3. $x - 3y - 5 = 0$
4. $x + y + 3 = 0$

Question ID : **96623116333**
Status : **Answered**
Chosen Option : **2**

Q.43 If X is a Poisson random variable with mean 3, then P(|X-3|<1) will be:

Ans
1. $\frac{9e^{-3}}{2}$
2. $\frac{e^{-3}}{2}$
3. $3e^{-3}$
4. $\frac{99e^{-3}}{8}$

Question ID : **96623116260**
Status : **Answered**
Chosen Option : **1**

Q.44 Let $R = (5\sqrt{5} + 11)^{2n+1}$ and f be the fractional part of R, then Rf is equal to:

Ans
1. 4^{2n+1}
2. 5^{2n+1}
3. 3^{2n+1}
4. 2^{2n+1}

Question ID : **96623116345**
Status : **Answered**
Chosen Option : **1**

Q.45

The value of p for which the polynomial $x^3 + 4x^2 - px + 8$ is exactly divisible by $(x - 2)$ is:

Ans
1. 3
2. 16
3. 0
4. 12

Question ID : **96623116309**
Status : **Answered**
Chosen Option : **2**

Q.46 The angular elevation of the tower OP at a point A due south of it is $60°$ and at a point B due west of A, the elevation is $30°$. If $AB = 3m$, then the height of the tower is:

Ans
1. $2\sqrt{6}$ m
2. $2\sqrt{3}$ m
3. $\frac{3\sqrt{3}}{2}$ m
4. $\frac{3\sqrt{6}}{4}$ m

Question ID : **96623116268**
Status : **Answered**
Chosen Option : **3**

Q.47 Let $s = \{(-1,0,1),(2,1,4)\}$. The value of k for which the vectors $(3k + 2, 3, 10)$ belong to the linear span of s is:

Ans
1. 8
2. -2
3. 2
4. 3

Question ID : **96623116324**
Status : **Answered**
Chosen Option : **3**

Q.48 A sector of circle of radius 15 cm has the angle $120°$. It is rolled up so that two bounding radii are joined together to form a cone. Find the height of the cone.

Ans
1. $5\sqrt{3}$
2. $10\sqrt{2}$
3. $10\sqrt{3}$
4. $7\sqrt{2}$

Question ID : **96623116276**
Status : **Answered**
Chosen Option : **1**

Q.49 The total number of divisors of 10500 except 1 and itself is:

Ans
1. 48

2. 56

3. 46

4. 50

Question ID : **96623116344**
Status : **Answered**
Chosen Option : **1**

Q.50 If in a triangle ABC, $\cos 3A + \cos 3B + \cos 3C = 1$, then one angle must be equal to:

Ans

1. $60°$

2. $120°$

3. $30°$

4. $90°$

Question ID : **96623116265**
Status : **Answered**
Chosen Option : **1**

Q.51 If a, b, c are positive real numbers such that $a + b + c = p$, then which of the following is true?

Ans

1. $(p-a)(p-b)(p-c) \geq 8abc$

2. $(p-a)(p-b)(p-c) \geq \frac{8}{27}p^3$

3. $\frac{bc}{a} + \frac{ca}{b} + \frac{ab}{c} \geq p$

4. none of these

Question ID : **96623116316**
Status : **Answered**
Chosen Option : **3**

Q.52 The solution to the recurrence equation $T(2^k) = 3T(2^{k-1}) + 1,\ T(1) = 1$ is:

Ans

1. $2^{\log_3 k}$

2. 2^k

3. $\frac{3^{k+1}-1}{2}$

4. $3^{\log_2 k}$

Question ID : **96623116301**
Status : **Answered**
Chosen Option : **3**

Q.53 A wire is in the shape of a circle of radius 21cm. It is bent to form a square. The side of the square is ? $[\pi = \frac{22}{7}]$

Ans

1. 66 cm

2. 33 cm

3. 22 cm

✗ 4. 44 cm

Question ID : **96623116275**
Status : **Answered**
Chosen Option : **2**

Q.54 The first and the last terms of an AP are 1 and 11. If the sum of its terms is 36, then the number of terms will be:

Ans

✗ 1. 5

✗ 2. 7

✓ 3. 6

✗ 4. 8

Question ID : **96623116296**
Status : **Answered**
Chosen Option : **3**

Q.55 On dividing $x^3 - 3x^2 + x + 2$ by a polynomial $g(x)$, the quotient and remainder where $(x - 2)$ and $(-2x + 4)$ respectively. Find $g(x)$:

Ans

✗ 1. $x^2 - x - 1$

✗ 2. $x^2 - x + 2$

✗ 3. $x^2 + x - 2$

✓ 4. $x^2 - x + 1$

Question ID : **96623116313**
Status : **Answered**
Chosen Option : **4**

Q.56 If the eigenvalues of a $3x3$ real matrix of A are $1, 2$ and -3, then:

Ans

✗ 1. $A^{-1} = -\frac{1}{6}A^2$

✓ 2. $A^{-1} = \frac{1}{6}(7I - A^2)$

✗ 3. $A^{-1} = -\frac{1}{6}(7I - A^2)$

✗ 4. $A^{-1} = -\frac{1}{6}(7I + A^2)$

Question ID : **96623116322**
Status : **Answered**
Chosen Option : **1**

Q.57 The point which divides the line segment joining the points $(7, -6)$ and $(3, 4)$ in the ratio $1 : 2$ internally lies in the:

Ans

✗ 1. III quadrant

✓ 2. IV quadrant

✗ 3. II quadrant

✗ 4. I quadrant

Question ID : **96623116273**
Status : **Answered**
Chosen Option : **2**

Q.58 If a, b, c are distinct positive real numbers, then:

Ans

✓ 1. $a^2 + b^2 + c^2 > ab + bc + ca$

✗ 2. $a^2 + b^2 + c^2 \geq ab + bc + ca$

✗ 3. $a^2 + b^2 + c^2 \leq ab + bc + ca$

✗ 4. $a^2 + b^2 + c^2 < ab + bc + ca$

Question ID : **96623116315**
Status : **Answered**
Chosen Option : **2**

Q.59 The value of k for which $kx + 3y - k + 3 = 0$ and $12x + ky = k$ have infinite solution is:

Ans

✗ 1. -6

✗ 2. 0

✓ 3. 6

✗ 4. 1

Question ID : **96623116329**
Status : **Answered**
Chosen Option : **3**

Q.60 Consider the real vector space R^3. The subspace $\{(x, y, z) \in R^3 : y = x\}$ of R^3 is generated by which of the following?

Ans

✓ 1. $\{(1,1,0),\ (0,0,1)\}$

✗ 2. $\{(1,1,0),\ (1,0,0)\}$

✗ 3. $\{(1,0,1),\ (0,0,1)\}$

✗ 4. $\{(1,0,0),\ (0,1,0)\}$

Question ID : **96623116320**
Status : **Answered**
Chosen Option : **1**

Q.61 If $x + y = 7$ and $3x + y = 13$, then what is the value of $4x^2 + y^2 + 4xy$?

Ans

✗ 1. 85

✓ 2. 100

✗ 3. 75

✗ 4. 91

Question ID : **96623116330**
Status : **Answered**
Chosen Option : **2**

Q.62 Which of the statements given below is Euclid's Postulate 4?

A. A circle can be drawn with any centre and any radius.

B. All right angles are equal to one another.

C. A straight line may be drawn from any one point to any other point.

D. A terminated line (i.e. a line segment) can be produced indefinitely on either side.

Ans

✗ 1. D

✗ 2. A

✓ 3. B

✗ 4. C

Question ID : **96623116349**
Status : **Answered**
Chosen Option : **1**

Q.63 The radius of the base of a right circular cone is doubled. To keep the volume fixed, the height of the cone will be:

Ans

✗ 1. $\frac{1}{\sqrt{2}}$ times of the original height

✗ 2. one third of the original height

✓ 3. one fourth of the original height

✗ 4. half of the original height

Question ID : **96623116298**
Status : **Answered**
Chosen Option : **3**

Q.64 The value of k such that $3x^2 - 11xy + 10y^2 - 7x + 13y + k = 0$ may represent a pair of straight lines is:

Ans

✗ 1. 6

✓ 2. 4

✗ 3. 8

✗ 4. 3

Question ID : **96623116331**
Status : **Answered**
Chosen Option : **1**

Q.65 The quadratic equations $x^2 - 6x + a = 0$ and $x^2 - cx + 6 = 0$ have one root in common. The other roots of the first and second equations are integers in the ratio 4 : 3. The common root is:

Ans

✗ 1. 4

✗ 2. 1

✓ 3. 2

✗ 4. 3

Question ID : **96623116285**
Status : **Answered**
Chosen Option : **1**

Q.66 Let A be $3x3$ matrix, whose characteristic roots are $3, 2, -1$. If $B = A^2 - A$, then $|B|$ is:

Ans
✗ 1. -2
✗ 2. -12
✓ 3. 24
✗ 4. 12

Question ID : **96623116323**
Status : **Answered**
Chosen Option : **4**

Q.67 If $f(2a - x) = f(x)$ and $\int_0^a f(x)dx = \lambda$, then $\int_0^{2a} f(x)dx$ is:

Ans
✓ 1. 2λ
✗ 2. 0
✗ 3. 3λ
✗ 4. λ

Question ID : **96623116356**
Status : **Answered**
Chosen Option : **1**

Q.68 If a, b are positive real numbers such that $ab = 1$, then the least value of the expression $(1 + a)(1 + b)$ is:

Ans
✗ 1. 6
✓ 2. 4
✗ 3. 2
✗ 4. 3

Question ID : **96623116314**
Status : **Answered**
Chosen Option : **2**

Q.69 Consider the following distribution:

Marks obtained	No. of students
More than or equal to 0	63
More than or equal to 10	58
More than or equal to 20	55
More than or equal to 30	51
More than or equal to 40	48
More than or equal to 50	42

The frequency of the class $(30 - 40)$ is:

Ans
✗ 1. 4
✓ 2. 3
✗ 3. 48
✗ 4. 51

Question ID : **96623116302**
Status : **Answered**
Chosen Option : **4**

Q.70 The difference of $5.\overline{76}$ and $2.\overline{3}$ is:

Ans

✗ 1. $3.\overline{73}$

✗ 2. $2.\overline{54}$

✓ 3. $3.\overline{43}$

✗ 4. $3.\overline{46}$

Question ID : **96623116339**
Status : **Answered**
Chosen Option : **3**

Q.71 The value of $\lim\limits_{x \to 2} \frac{5}{\sqrt{2}-\sqrt{x}}$, is:

Ans

✓ 1. does not exist

✗ 2. $10\sqrt{2}$

✗ 3. ∞

✗ 4. $-\infty$

Question ID : **96623116280**
Status : **Answered**
Chosen Option : **3**

Q.72 If PM is the perpendicular from $p(2,3)$ on the line $x + y = 3$, then the co-ordinates of M, are:

Ans

✗ 1. $(-1, 4)$

✓ 2. $(1, 2)$

✗ 3. $(2, 1)$

✗ 4. $(4, -1)$

Question ID : **96623116337**
Status : **Answered**
Chosen Option : **1**

Q.73 The numerical value of $\sin\frac{\pi}{18}\ \sin\frac{5\pi}{18}\ \sin\frac{7\pi}{18}$ is equal to:

Ans

✗ 1. $\frac{1}{2}$

✗ 2. 1

✓ 3. $\frac{1}{8}$

✗ 4. $\frac{1}{4}$

Question ID : **96623116264**
Status : **Answered**
Chosen Option : **1**

Q.74 If one of the zeros of the quadratic polynomial $(k-1)x^2+kx+1$ is -3, then the value of k is:

Ans

✗ 1. $\frac{-2}{3}$

✓ 2. $\frac{4}{3}$

✗ 3. $\frac{-4}{3}$

✗ 4. $\frac{2}{3}$

Question ID : **96623116312**
Status : **Answered**
Chosen Option : **2**

Q.75 If the sum of n terms of an AP is $3n^2+5n$, then which of its terms is 164?

Ans

✗ 1. 29^{th}

✗ 2. 28^{th}

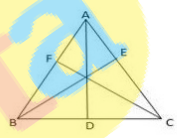
✓ 3. 27^{th}

✗ 4. 26^{th}

Question ID : **96623116295**
Status : **Answered**
Chosen Option : **3**

Q.76 Three concurrent straight lines are drawn from the angular points of A, B and C of the triangle ABC to meet the opposite sides at D, E and F respectively as shown in the figure, it is given that $AF : FB = 2 : 3$ and $BD : DC = 3 : 5$.

Find $AE : EC$.



Ans

✗ 1. $5 : 2$

✗ 2. $4 : 5$

✗ 3. $3 : 4$

✓ 4. $2 : 5$

Question ID : **96623116352**
Status : **Answered**
Chosen Option : **4**

Q.77 If $\int \frac{sin^4 x}{cos^8 x}dx = a\,tan^7 x + b\,tan^5 x + c$, then:

Ans

✔ 1. $7a = 5b$

✘ 2. $5a + 7b = 0$

✘ 3. $7a + 5b = 0$

✘ 4. $5a = 7b$

Question ID : **96623116284**
Status : **Answered**
Chosen Option : **1**

Q.78 If the system of equations

$x - 2y - 3z = 1,$
$(p + 2)z = 3$

$(2p + 1)y + z = 2$ is inconsistent, then what will the value of p be?

Ans

✔ 1. $-\frac{1}{2}$

✘ 2. 0

✘ 3. -2

✘ 4. 2

Question ID : **96623116321**
Status : **Answered**
Chosen Option : **1**

Q.79 The area of a triangle with vertices $A(3,0)$, $B(7,0)$ and $C(8,4)$ is:

Ans

✘ 1. 14

✔ 2. 8

✘ 3. 28

✘ 4. 6

Question ID : **96623116274**
Status : **Answered**
Chosen Option : **2**

Q.80 The y intercept of the line passing through $(2,2)$ and perpendicular to the lines $3x + y = 3$ is:

Ans

✔ 1. $\frac{4}{3}$

✘ 2. $\frac{2}{3}$

✘ 3. 1

✘ 4. $\frac{1}{3}$

Question ID : **96623116334**
Status : **Answered**

Chosen Option : **2**

Q.81 The value of the integral $\int a^{cx+d}.dx = ?$

Ans

✔ 1. $\frac{1}{c}\frac{a^{cx+d}}{\log_e a} + c$

✘ 2. $\frac{1}{(cx+d)}\frac{a^{cx+d}}{\log_e a} + c$

✘ 3. $\frac{a^{(cx+d+1)}}{(cx+d1)} + c$

✘ 4. $\frac{a^{cx+d}}{\log_e a} + c$

Question ID : **96623116283**
Status : **Answered**
Chosen Option : **1**

Q.82 Let X be a normal random variable with mean zero and variance 9. If a $= P(X \geq 3)$, then P(|X|≤3) equals:

Ans

✘ 1. a

✘ 2. 2a

✔ 3. 1-2a

✘ 4. 1-a

Question ID : **96623116261**
Status : **Answered**
Chosen Option : **1**

Q.83 If the foot of the perpendicular from the origin to a straight line is at the point $(3,-4)$, then the equation of the line is:

Ans

✘ 1. $4x - 3y + 25 = 0$

✘ 2. $4x + 3y - 25 = 0$

✔ 3. $3x - 4y = 25$

✘ 4. $3x - 4y + 25 = 0$

Question ID : **96623116335**
Status : **Answered**
Chosen Option : **1**

Q.84 The solution of the system of congruence, $x = 3(mod\ 5),\ x = 5(mod\ 7)$ is:

Ans

✘ 1. $x = 29(mod\ 35)$

✘ 2. $x = 27(mod\ 35)$

✘ 3. $x = 23(mod\ 35)$

✔ 4. $x = 33(mod\ 35)$

Question ID : **96623116348**

Status : **Answered**
Chosen Option : **3**

Q.85 If A and B denote the coefficient of x^n in the binomial expansion of $(1+x)^{2n}$ and $(1+x)^{2n-1}$ respectively, then:

Ans

✗ 1. $2A = B$

✓ 2. $A = 2B$

✗ 3. $A = B$

✗ 4. none of these

Question ID : **96623116300**
Status : **Answered**
Chosen Option : **2**

Q.86 Given that $\tan A$ *and* $\tan B$ are the roots of the equation $ax^2 - ax + b = 0$. The value of $sin^2(A+B)$, is:

Ans

✗ 1. $\frac{a^2}{(a+b)^2}$

✗ 2. $\frac{a^2}{b^2+(1-a)^2}$

✓ 3. $\frac{a^2}{a^2+(1-b)^2}$

✗ 4. $\frac{a^2}{a^2+b^2}$

Question ID : **96623116263**
Status : **Answered**
Chosen Option : **1**

Q.87 The radii of a cylinder and a cone are in the ratio of 3 : 4 and their heights are in the ratio of 2 : 3. The ratio of their volumes is:

Ans

✓ 1. 8 : 9

✗ 2. 4 : 3

✗ 3. 3 : 8

✗ 4. 3 : 4

Question ID : **96623116278**
Status : **Answered**
Chosen Option : **1**

Q.88 Select the correct value of $\frac{1}{\sqrt{9}+\sqrt{10}} + \frac{1}{\sqrt{10}-\sqrt{11}} + \frac{1}{\sqrt{11}+\sqrt{12}} + \cdots$ upto 91 terms from the following options:

Ans

✓ 1. 7

✗ 2. 8

✗ 3. 6

✗ 4. 9

Question ID : **96623116341**
Status : **Marked For Review**
Chosen Option : **3**

Q.89 Let α and β be the roots of the equation $px^2 + qx + r = 0,\ p \neq 0$. If (p, q, r) are in A.P. and $\frac{1}{\alpha} + \frac{1}{\beta} = 4$, then the value of $|\alpha - \beta|$ is:

Ans

1. $\frac{2\sqrt{17}}{9}$
2. $\frac{2\sqrt{13}}{9}$
3. $\frac{\sqrt{34}}{9}$
4. $\frac{\sqrt{61}}{9}$

Question ID : **96623116288**
Status : **Answered**
Chosen Option : **2**

Q.90 The first, second and last term of an AP are $a, b, 2a$ respectively, then its sum is:

Ans

1. $\frac{3ab}{2(b-a)}$
2. $\frac{3ab}{b-a}$
3. $\frac{ab}{b-a}$
4. $\frac{ab}{2(b-a)}$

Question ID : **96623116293**
Status : **Answered**
Chosen Option : **1**

Q.91 If an angle α is divided into two parts A and B such that $A - B = x$ and $\tan A : \tan B = k : 1$, then the value of $\sin x$ is:

Ans

1. $\frac{k+1}{k-1}\sin\alpha$
2. $\frac{k-1}{k+1}\sin\alpha$
3. None of these
4. $\frac{k}{k+1}\sin\alpha$

Question ID : **96623116266**
Status : **Answered**
Chosen Option : **2**

Q.92

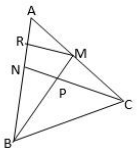
If the mode of the following frequency distribution is 22 and $10 > y > x$, then $y =$

Class interval	0-10	10-20	20-30	30-40	40-50	Total
Frequency	5	8	10	x	y	30

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

Question ID : **96623116304**
Status : **Answered**
Chosen Option : **2**

Q.93 In the given figure (not to scale) $AM:MC = 3:4$, $BP:PM = 3:2$, *and* $BN = 12cm$. MR is parallel to CN. Find AN?



Ans
1. 10
2. 13
3. 15
4. 14

Question ID : **96623116350**
Status : **Answered**
Chosen Option : **1**

Q.94 The pdf of a random variable X is given by $f(x) = \begin{cases} kx(1-x), 0 < x < 10. \\ 0, \quad otherwise \end{cases}$, where k is an appropriate positive constant. The value of $P(X < \frac{1}{k})$ is:

Ans
1. $\frac{1}{3}$
2. $\frac{1}{81}$
3. $\frac{2}{27}$
4. $\frac{1}{9}$

Question ID : **96623116259**
Status : **Answered**
Chosen Option : **1**

Q.95 If the roots of the quadratic equation $x^2 - 4x - \log_3 a = 0$ are real, then the least value of a is:

Ans
1. 81

✔ 2. $\frac{1}{81}$

✘ 3. 64

✘ 4. $\frac{1}{64}$

Question ID : **96623116289**
Status : **Answered**
Chosen Option : **1**

Q.96 Which of the following set of vectors in R^3 is linearly independent R^3 ?

Ans

✔ 1. $\{(1,2,5),(1,-2,1),(2,1,4)\}$

✘ 2. $\{(1,-2,3),(-2,4,1),(-4,8,9)\}$

✘ 3. $\{(2,-1,3),(-4,2,-6),(8,0,1)\}$

✘ 4. $\{(5,2,-3),(3,0,4),(-3,0,-4)\}$

Question ID : **96623116357**
Status : **Answered**
Chosen Option : **1**

Q.97 The value of $\frac{(1.5)^3+(4.7)^3+(3.8)^3-3\times1.5\times4.7\times3.8}{(1.5)^2+(4.7)^2+(3.8)^2-(1.5\times4.7)-(4.7\times3.8)-(1.5\times3.8)}$ is:

Ans

✘ 1. 11

✘ 2. 8

✔ 3. 10

✘ 4. 9

Question ID : **96623116338**
Status : **Answered**
Chosen Option : **3**

Q.98 If $y = x^{2x}$, then $\frac{dy}{dx} = ?$

Ans

✘ 1. $2x^{2x}\ln x$

✘ 2. $2x^{2x}$

✔ 3. $2x^{2x}(\ln x + 1)$

✘ 4. $x^{2x}(\ln x + 2)$

Question ID : **96623116282**
Status : **Answered**
Chosen Option : **3**

Q.99

Given below are the steps involved in finding the HCF of 59 and 42 by using Euclid's division algorithm. Arrange them in sequential order from first to last.

(A) $42 = 17 \times 2 + 8$

(B) $59 = 42 \times 1 + 17$

(C) $17 = 8 \times 2 + 1$

(D) $1 \times 8 + 0$

Ans
✗ 1. BCDA
✓ 2. BACD
✗ 3. CDAB
✗ 4. ABCD

Question ID : **96623116343**
Status : **Answered**
Chosen Option : **2**

Q.100 A line passes through the point of intersection of the lines $3x + y + 1 = 0$, and $2x - y + 3 = 0$ and makes equal intercepts with the axis. The equation of the line is:

Ans
✗ 1. $5x + 5y + 3 = 0$
✗ 2. $x + 5y - 3 = 0$
✗ 3. $5x - y - 3 = 0$
✓ 4. $5x + 5y - 3 = 0$

Question ID : **96623116336**
Status : **Answered**
Chosen Option : **4**

Section : **General Hindi**

Q.1 'विधेय' के अन्तर्गत आता है:

Ans
✗ 1. कर्ता
✗ 2. क्रिया
✗ 3. कर्म
✓ 4. कर्म व क्रिया

Question ID : **96623116366**
Status : **Answered**
Chosen Option : **4**

Q.2 निम्नलिखित में से सही विलोम युग्म नहीं है:

Ans
✗ 1. ममता - घृणा
✗ 2. निर्दय - सदय
✗ 3. मधुर - कटु
✓ 4. याचक - जाचक

Question ID : **96623116371**
Status : **Answered**
Chosen Option : **2**

Q.3 'केतु' का अर्थ है:

Ans
✗ 1. मशीन
✓ 2. ध्वज
✗ 3. छल
✗ 4. कृति

Question ID : **96623116358**
Status : **Answered**
Chosen Option : **2**

Q.4 'लहर' के पर्यायवाची नहीं है:

Ans
✓ 1. भँवर
✗ 2. वीचि
✗ 3. तरंग
✗ 4. हिल्लोल

Question ID : **96623116368**
Status : **Answered**
Chosen Option : **2**

Q.5 'अपना सा मुँह लेकर रह जाना' मुहावरे का अर्थ है:

Ans
✗ 1. ठगा जाना
✓ 2. लज्जित होना
✗ 3. प्रसन्न होना
✗ 4. अमर हो जाना

Question ID : **96623116361**
Status : **Answered**
Chosen Option : **1**

Q.6 'मेरी माँ खाना बना रही है।' वाक्य में कर्ता का विस्तार है।

Ans
✗ 1. खाना
✗ 2. बना रही है
✓ 3. मेरी
✗ 4. माँ

Question ID : **96623116367**
Status : **Answered**
Chosen Option : **4**

Q.7 'शर्वरी' किसका पर्याय है?

Ans
✓ 1. रात्रि
✗ 2. शबरी
✗ 3. दिवस
✗ 4. नदी

Question ID : **96623116369**

Status : **Answered**
Chosen Option : **4**

Q.8 'तबेले की बला बन्दर के सिर' लोकोक्ति का सही अर्थ है:

Ans

✗ 1. केवल बाहरी दिखावा

✗ 2. जैसा चाहा, वैसा हो गया

✗ 3. अवसर चूकने पर पछताना व्यर्थ

✓ 4. अपराध करे कोई, पकड़ा जाए कोई और

Question ID : **96623116362**
Status : **Answered**
Chosen Option : **4**

Q.9 तद्धित प्रत्यय का उदाहरण नहीं हैं:

Ans

✗ 1. अच्छाई

✗ 2. बुराई

✗ 3. भलाई

✓ 4. सिलाई

Question ID : **96623116364**
Status : **Answered**
Chosen Option : **2**

Q.10 कौनसा शब्द 'अन्' उपसर्ग से बना हुआ नहीं है?

Ans

✗ 1. अनादर

✗ 2. अनभ्यस्त

✓ 3. अनपढ़

✗ 4. अनादि

Question ID : **96623116363**
Status : **Answered**
Chosen Option : **2**

Q.11 'घन' का अर्थ नहीं है:

Ans

✓ 1. घर

✗ 2. बदल

✗ 3. घना

✗ 4. बड़ा हथौड़ा

Question ID : **96623116360**
Status : **Answered**
Chosen Option : **1**

Q.12 कौनसा विलोम युग्म सही है:

Ans

✗ 1. कवि - कवयीत्री

✗ 2. योगी - रोगी

✗ 3. विद्वान - विदूषी

✓ 4. अथ - इति

Question ID : **96623116372**
Status : **Answered**
Chosen Option : **3**

Q.13 वृद्धि संधि का उदाहरण नहीं हैं:

Ans
✗ 1. मतैक्य
✗ 2. विश्वैक्य
✗ 3. एकैक
✓ 4. शिश्वैक्य

Question ID : **96623116365**
Status : **Answered**
Chosen Option : **4**

Q.14 'खग' का अर्थ नहीं है:

Ans
✗ 1. बाण
✓ 2. आकाश
✗ 3. पक्षी
✗ 4. तारा

Question ID : **96623116359**
Status : **Answered**
Chosen Option : **4**

Q.15 'तालाब' का पर्यायवाची नहीं है:

Ans
✗ 1. सर
✗ 2. तडाग
✓ 3. तडाक
✗ 4. पुष्कर

Question ID : **96623116370**
Status : **Answered**
Chosen Option : **1**

Section : **General English**

Q.1 Select the alternative that will improve the underlined part of the sentence. In case there is no improvement, select 'No improvement'

I told the porter to carry the <u>baggages in my room</u>.

Ans
✗ 1. No Improvement
✓ 2. baggage to my room.
✗ 3. baggage in my room.
✗ 4. baggages to my room.

Question ID : **96623116377**
Status : **Answered**
Chosen Option : **3**

Q.2 Select the most appropriate option to fill in the blank:

It is his _____ to drink water first thing in the morning.

Ans
1. tendency
2. ritual
3. habit
4. custom

Question ID : **96623116375**
Status : **Answered**
Chosen Option : **3**

Q.3 Select the wrongly spelt word:

Ans
1. receive
2. believe
3. perceive
4. acheive

Question ID : **96623116374**
Status : **Answered**
Chosen Option : **1**

Q.4 Select the correct sentence structure:

Ans
1. The elder man at the shopping mall you met who is my brother.
2. The man is my elder brother who at the shopping mall met you.
3. The man who met you at the shopping mall is my elder brother.
4. My elder brother who met you at the shopping mall is a man.

Question ID : **96623116381**
Status : **Answered**
Chosen Option : **3**

Q.5 Select the most appropriate indirect speech of the given sentence:

Mother says, "Good deeds always pay off."

Ans
1. Mother said that good deeds always paid off.
2. Mother is saying good deeds always paying off.
3. Mother says that good deeds always pay off.
4. Mother said that good deeds always pay off.

Question ID : **96623116378**
Status : **Answered**
Chosen Option : **1**

Q.6 Select the most appropriate synonym of the given word:

ERADICATE

Ans
1. emulate
2. uproot
3. imitate
4. fabricate

Question ID : **96623116385**
Status : **Answered**
Chosen Option : **1**

Q.7 Select the correct sentence structure:

Ans

✗ 1. No sooner does the light turn red but the traffic stops.

✓ 2. No sooner did the light turn red than the traffic stopped.

✗ 3. No sooner had the light turned red when the traffic stopped.

✗ 4. No sooner was the light turning red when the traffic stopped.

Question ID : **96623116383**
Status : **Answered**
Chosen Option : **3**

Q.8 Fill in the blank with the most appropriate antonym of the underlined word in the sentence:

Her rosy cheeks turned _____ during the illness.

Ans

✗ 1. radiant

✓ 2. pallid

✗ 3. flushed

✗ 4. sanguine

Question ID : **96623116387**
Status : **Answered**
Chosen Option : **2**

Q.9 Identify the segment in the sentence which contains the grammatical error:

He is one of those men who is always criticizing others.

Ans

✗ 1. He is one

✓ 2. who is always

✗ 3. criticizing others.

✗ 4. of those men

Question ID : **96623116376**
Status : **Answered**
Chosen Option : **2**

Q.10 Select the correct sentence structure:

Ans

✗ 1. The liaison between the government and the people acts as a newspaper.

✗ 2. The government between the newspaper and the people acts as a liaison.

✗ 3. The people as a liaison act between the government and the newspaper.

✓ 4. The newspaper acts as a liaison between the government and the people.

Question ID : **96623116382**
Status : **Answered**
Chosen Option : **4**

Q.11 Fill in the blank with the most appropriate antonym of the underlined word in the sentence:

The twin sisters are so different when it comes to conversation. One is loquacious while the other is _____.

Ans
1. effusive
2. taciturn
3. garrulous
4. vivacious

Question ID : **96623116386**
Status : **Answered**
Chosen Option : **3**

Q.12 Select the most appropriate meaning of the given idiom:

to go bananas

Ans
1. to go on a picnic
2. to go shopping
3. to go places
4. to go crazy

Question ID : **96623116373**
Status : **Answered**
Chosen Option : **3**

Q.13 Select the most appropriate synonym of the given word:

AMIABLE

Ans
1. laughable
2. suitable
3. tolerable
4. lovable

Question ID : **96623116384**
Status : **Answered**
Chosen Option : **2**

Q.14 Select the correct active form of the given sentence:

Several trees were uprooted by the fierce storm.

Ans
1. The fierce storm was uprooting several trees.
2. The fierce storm has been uprooting several trees.
3. The fierce storm uprooted several trees.
4. Several trees uproot the fierce storm.

Question ID : **96623116379**
Status : **Answered**
Chosen Option : **3**

Q.15 Select the most appropriate option to fill in the blank:

You weren't there at the party yesterday, _____?

Ans
1. were you
2. is it