## Head Constable AWO TPO in Delhi Police Examination 2022

| Roll Number |  |
| :--- | :--- |
| Candidate |  |
| Name |  |

## Section : Part-A-General Awareness

Q. 1 Which organization has developed and engineered Induct UV-C disinfectant system for HVAC ducts which has wide applications for disinfecting mechanically ventilated indoor spaces with a view to prevent the spread of Covid-19 like viruses, fungi, mold, bacteria etc?

Ans
X 1. CSIR-IGIB
X 2. CSIR-CCMB
X 3. CSIR-IMTECH

- 4. CSIR-CSIO
Q. 2 Self-respect movement which was started by EV Ramaswamy Naicker is related to which of the following states?

Ans
$X 1$. Bihar
2. Karnataka
3. Tamil Nadu
4. Bengal
Q. 3 The tableau of which of the following states showcased its accomplishments in sports during the Republic Day Parade of 2022?
Ans1. Punjab
2. Haryana
3. Gujarat
4. Meghalaya
Q. 4 According to Koeppen's climatic scheme of India, which type of climate is denoted by Aw?

Ans $\times 1$ 1. Polar type
2. Hot desert
3. Tropical savanna

X 4. Monsoon with dry summer
Q. 5 In which of the following years was the Brahmo Samaj established by Raja Ram Mohan Roy?
Ans
X 1.1825
2. 1828

X 3.1820
$\times 4.1818$
Q. 6 Which of the following Sun temples is built by Raja Bhimdev I of the Solanki dynasty?

Ans 1. Modhera Sun Temple
X 2. Martand Sun temple
3. Shri Surya Narayana Swami Temple
4. Surya Narayana Temple
Q. 7 As of September 2022, which of the following states has more than 1 Rajya Sabha seat?

Ans
X 1. Nagaland
2. Meghalaya
3. Mizoram
4. Uttarakhand
Q. 8 When did Government of India launch National Youth Policy (NYP) to cater the needs of youth in India?
Ans $\times 1.2015$
2. 2014
$\times 3.2016$
X4. 2017
Q. 9 Which of the state is associated with the Kudumbashree,the largest women empowering project in the country?
Ans

1. Kerala
2. Andhra Pradesh
3. Tamil Nadu
4. Maharashtra
Q. 10 The Power of Judicial Review was taken from the Constitution of which of the following countries?
Ans
X 1. Ireland
X 2. United Kingdom
5. United States of America

4 4. South Africa
Q. 11 Which of the following developed a small electric vehicle in 2021 that can change its width on the go?
Ans
X 1. LUCID motors
X 2. TESLA
X 3. RIVIAN
4. City Transformer
Q. 12 Choose the correct pair among the following related to temple architecture.

Ans
X 1. Garbhagriha: Tower
X 2. Shikhara: Huge Gateways
3. Mandapa : Place in temple where people could assemble

X 4. Gopuram : Place where the image of the deity is installed
Q. 13 Who succeeded Alivardi Khan as Nawab of Bengal in $\mathbf{1 7 5 6}$ ?

Ans
X 1. Mir Qasim
2. Shuja-ud-daula
3. Siraj-ud-daula

X 4. Mir Jafar
Q. 14 Which of the following policies has revenue and expenditure aspects?

Ans
X 1. Monetary Policy
X 2. Trade Policy
3. Fiscal Policy

X 4. Welfare Policy
Q. 15 वर्ष 2011 की जनगणना के अनुसार भारत का कौन-सा राज्य जनसंख्या प्रतिशत के आधार पर पहले स्थान पर है?
Ans
Х1. कर्नाटक
X 2. बिहार
X3. महाराष्ट्र
4. उत्तर प्रदेश
Q. 16 Kuchipudi dance form is named after a village, which exists in which of the following district of Andhra Pradesh?

Ans
< 1. Kurnool
2. Tirupati
3. Krishna

X4. Guntur
Q. 17 Which of the following is NOT considered an industrial concession?

Ans
$\times 1$. Tax concession
X 2. Tax holiday
-
3. Subsidy to purchase goods and services
4. Subsidised power supply
Q. 18 Who was the first woman to head a democratic government in Pakistan?

Ans
X 1. Khaleda Zia
2. Sheikh Hasina
3. Halimah Yacob
4. Benazir Bhutto
Q. 19 Which Bill does the Major Ports Authorities Bill, 2020 repeal with an aim to provide greater autonomy and flexibility to the major ports and to professionalise their governance?
Ans

1. Major Port Trusts Act, 1963
2. Major Port Trusts Act, 1947

X 3. Major Port Trusts Act, 1952
X 4. Major Port Trusts Act, 1969
Q. 20 Where is the headquarters of the National Remote Sensing Centre (NRSC) situated?

Ans
$X 1$. Bengaluru
X 2. Mumbai
X 3. Kolkata
4. Hyderabad

Section : Part-B-General Science
Q. 1 Which of the following are fundamental quantities?

Ans

1. Length \& Time

X 2. Length \& Area
X 3. Time \& Speed
X 4. Mass \& Volume
Q. 2 Which of the following is left in the sodium hydroxide solution after removing the soap?

Ans
X 1. Alcohol
2. Glycerol

X 3. Esters
X4. Phenol
Q. 3 In which year was Newton's masterpiece, Philosophiae Naturalis Principia Mathematica, often simply called the Principia, first published?

Ans
X 1.1689
2. 1680
3. 1685
4. 1687
Q. 4 Universal law of gravitation is relevant for

Ans
X 1. None
X 2. Large bodies with infinite mass
3. Point masses

X 4. Both $A$ and $B$
Q. 5 What is the melting point of gallium?

Ans
X 1. Approximately 304K
X 2. Approximately 301K
3. Approximately 303K

X 4. Approximately 302K
Q. 6 A large force acting for short time period to produce finite change in momentum is called
Ans
X 1. Inertia
2. Impulse
$\times 3$. Force
X 4. Pressure
Q. 7 What is the density of lead in $\mathrm{kg} \mathrm{m}^{\mathbf{- 3}}$ if its relative density is $\mathbf{1 1 . 3}$ ?

Ans
X1. 113000
X2. 1130

- 3.11300
$\times 4.113$
Q. 8 The SI unit of resistivity is?

Ans

1. Ohm m

X 2 . Ohm
3. Ohm cm
4. Ohm m ${ }^{2}$
Q. 9 Identify the incorrect statement from the options given below.

Ans 1. Faraday published his results during 1833-34 in the form of the Faraday's three laws of electrolysis.

X 2. Faraday's second law states that the amounts of different substances liberated by the same quantity of electricity passing through the electrolytic solution are proportional to their chemical equivalent weights

X 3. Michael Faraday was the first scientist who described the quantitative aspects of electrolysis.
X 4. Faraday's first law states that the amount of chemical reaction which occurs at any electrode during electrolysis by a current is proportional to the quantity of electricity passed through the electrolyte (solution or melt)

## Q. 10 Cetyltrimethylammonium bromide is

Ans $\times 1$. anionic detergent
2. cationic detergent
3. Insoluble soap
4. Soluble soap
Q. 11 What is the conductivity of Copper in $\mathrm{S} \mathrm{m}^{-1}$ at 298.15 K?

Ans
$\times 1.4 .5 \times 10^{3}$
2. $6.2 \times 10^{3}$
3. $5.9 \times 10^{3}$
4. $2.1 \times 10^{3}$
Q. 12 Which of the following substances are Diamagnetic?
(a)Bismuth
(b)Lithium
(c)Diamond
(d)Calcium
(e)Mercury

Ans
X 1. (b), (c)and (d).
2. (a), (c)and (e).

X 3. (a), (c)and (d).
Х 4. (e), (c)and (b).
Q. 13 How the conductivity relates with resistivity?

Ans 1. Conductivity and resistivity are inverse in relation
X 2. Resistivity is always greater than conductivity
X 3. Resistivity is same as conductivity
4. Product of conductivity and resistivity is always 0
Q. 14 Three quantities are needed to specify the magnetic field of the earth on its surface.

Which of these is Not among those three quantities?
Ans

1. the Vertical component

X 2. the magnetic declination
3. the horizontal component
4. the magnetic dip
Q. 15 Core of electromagnets is made up of $\qquad$ material which have high permeability and low retentivity.

Ans
X 1. Copper
2. Iron

X 3. Lead
$\times 4$. Aluminum
Q. 16 Name the measurable quantity which is the product of force and time.

Ans

1. Impulse
2. Angular momentum

X 3. Relative motion
4. Inertia
Q. 17 There are four statements about elements of oxygen family. Identify the correct statement (s).
(I)The elements of oxygen family have five electrons in the outermost shell and have ns 2 np 3 general electronic configuration.
(II)Due to decrease in the number of shells, atomic and ionic radii decrease from top to bottom in the group.
(III)Selenium and tellurium are also found as metal selenides and tellurides in sulphide ores.
(IV)Polonium occurs in nature as a decay product of thorium and uranium minerals.

Ans
X 1. I, II and IV
2. II, III and IV

X 3 . I and II
4. III and IV
Q. 18 What is the value of resistivity of carbon (graphite) at $0^{\circ} \mathrm{C}$ ?

Ans $1.3 .5 \times 10^{-5} \mathrm{ohm} \mathrm{m}$
$\times 2.3 .5$ ohm m
X $3.3 .5 \times 10^{2}$ ohm m
<4. $-3.5 \times 10^{5}$ ohm m
Q. 19 Fill in the blanks with suitable answers from the options given below: 'In long form of Periodic Table, $\qquad$ elements of both $\qquad$ and $\qquad$ periods (lanthanoids and actinoids, respectively) are placed in separate panels at the bottom.'
Ans

1. $14,6^{\text {th }}, 7^{\text {th }}$
$\times 2.14,5^{\text {th }}, 6^{\text {th }}$
$\times 3.15,5^{\text {th }}, 7^{\text {th }}$
$\times 4.15,6^{\text {th }}, 7^{\text {th }}$
Q. 20 Ortho-sulphobenzimide is also known as?

Ans
$\times 1$. alitame
2. saccharin

X 3. aspartame
X 4. sucralose
Q. 21 Which of the following statements is INCORRECT?

Ans $\quad \times 1$. Transparent soaps are made by dissolving the soap in ethanol and then evaporating the excess solvent.
2. Generally sodium soaps are soft to the skin than potassium soaps.
$X$ 3. Synthetic detergents are mainly classified into three categories.
$X$ 4. Cetyltrimethylammonium bromide is a popular cationic detergent and is used in hair conditioners.
Q. 22 If $\mathrm{V}=(100 \pm 3) \mathrm{V}$ and $\mathrm{I}=(10 \pm 0.2) \mathrm{A}$. Find the percentage error in R ?
( $\mathrm{R}=\mathrm{V} / \mathrm{I}$ )
Ans $\times 1.3 .2 \%$
$\times 2.3 \%$

- $3.5 \%$

X $4.10 .2 \%$
Q. 23 $\qquad$ is zero for a cyclic process.
Ans
X 1. W
$\times 2 . \Delta T$
$X$ 3. Q
4. $\Delta \mathrm{U}$
Q. 24 Which of the following is incorrect about Newton's second law of motion?

Ans $\times 1$. The second law of motion $\mathrm{F}=\mathrm{ma}$ is applicable to a single point particle.
2. The second law of motion is a scalar law.

X 3. The second law of motion is a local relation which means that force ' $F$ ' at a point in
space at a certain instant of time is related to 'a' at that point at that instant.
$\times 4$. In the second law, $F=0$ implies $a=0$
Q. 25 Zeroth Law leads to the concept of

Ans
X 1. Volume
2. Temperature

X 3. Pressure
X 4. Work done

[^0]Q. 1 The following bar graph shows the sales (in thousand numbers) of novels from six different branches of a publishing company in 2020 and 2021.


Answer the following question based on the bar graph:
What is the ratio of the total sales of branch A3 for both years to the total sales of branch A4 for both years?
Ans
$\times 1.43: 40$
2. $40: 43$

X $3.23: 20$
X4.20:23
Q. 2 Simplify the following expression.
$8\left(\frac{0.2 \times 0.2 \times 0.2+0.04 \times 0.04 \times 0.04}{0.4 \times 0.4 \times 0.4+0.08 \times 0.08 \times 0.08}\right)+9$
Ans
$\times 1.8$
X .17
$\times 2.17$

- 3.10
$\times 4.1$
Q. 3 If $\mathrm{S}=\frac{3}{2}+\frac{5}{4}+\frac{7}{8}+\cdots+\frac{2 n+1}{2^{n}}+\ldots$, where $\mathrm{n}=1,2,3, \ldots$, then the value of S is

Ans
-1. 5
$\times 2.4$
$\times 3.8$
X4. 6
Q. 4 Rohan sells an umbrella to Bhima at a profit of $25 \%$. Bhima sells the same to Sambhu at a profit of $20 \%$.Sambhu sells it to Dharmendra at ₹ 5,400 , thereby earning a profit of 20\%. Find the cost price to Rohan.
Ans

1. ₹ 3,000

X 2. ₹ 3,100
X 3 . ₹ 3,500
人4. ₹3,600
Q. 5 Simplify: $(0 . \overline{39}+0 . \overline{53}-0 . \overline{27})$

Ans
$\times 1.0 . \overline{64}$
2. $0 . \overline{62}$
3. $0 . \overline{63}$
4. $0 . \overline{65}$
Q. 6

If $\sin \theta=\frac{3}{5}, \cos \theta=\frac{4}{5}$, then find the value of $\sqrt{\frac{1-\tan ^{2} \theta}{\cot ^{2} \theta-1}}$.
Ans

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

Q. 7 The present population of a city is 17,500 . The population decreases by $12 \%$ in the first year and increases by $8 \%$ in the second year. Find the population after 2 years.
Ans
5. 16,632
$\times 2.28,500$
X 3.15,350
6. 21,320
Q. 8 Find the ratio between the fourth proportional of $8,9,15$ and the fourth proportional of 12, 18, 20.

Ans 1.9:16
$\times 2.3: 4$
$\times 3.4: 3$
X4.5:7
Q. 9 A can complete a work in 15 days, and $B$ can complete the same work in 25 days. In how many days will $A$ and $B$ together complete this work?

Ans

1. $6 \frac{3}{8}$
$\times 2.7 \frac{3}{8}$
2. $3 \frac{3}{8}$
3. $9 \frac{3}{8}$
Q. 10 In the given figure, the chords AB and CD are parallel and are of 36 cm and 48 cm , respectively. The distance between them is 42 cm . The diameter of the circle is $\qquad$ .


Ans
X 1.82 cm
2. 60 cm
$\times 3.72 \mathrm{~cm}$
4.90 cm
Q. 11 In the given figure, $O$ is the centre of the circle. If the angles $\angle A O B, \angle O A C$ are, respectively, $140^{\circ}$ and $50^{\circ}$, then the value of angle $\angle \mathrm{BAC}$ is $\qquad$ -


Ans
$\times 1.60^{\circ}$
$\times 2.50^{\circ}$
3. $30^{\circ}$
$\times 4.80^{\circ}$
Q. 12 मनीषा ने छह अंकों की एक संख्या टाइप की लेकिन उसके द्वारा टाइप किए गए दो 4 नहीं दिख रहे। दिखाई देने वाली संख्या 5005 है। छह अंकों की कितनी भिन्न संख्याएँ हो सकती हैं?

Ans
$\times 1.9$
$\times 2.10$

- 3. 15
$\times 4.12$
Q. 13 How many different pairs ( $x, y$ ) can be formed using the numbers $\{1,2,3, \ldots, 43\}$ such that $x<y$ and the sum of $x$ and $y$ is even?

Ans $\times 1.420$
$\times 2.451$
-3. 441
$\times 4.460$
Q. 14 The capacity of a cylindrical tank is 495 litres. If the height is 7 metres, what is the diameter of the base?

Ans

1. 30 cm
$\times 2.40 \mathrm{~cm}$
$\times 3.35 \mathrm{~cm}$
4.33 cm
Q. 15 A sum of money invested at simple interest in a bank amounts to Rs. 944 in a period of 3 years, while it amounts to Rs.1,136 in a period of 7 years. What is the rate of interest?
Ans
X $1.7 \%$
2. $6 \%$

X $3.8 \%$
$\times 4.9 \%$
Q. 16 Simplify the following:
$2.31 \times 2.31+2 \times 2.31 \times 1.69+1.69 \times 1.69$
$2.31+1.69$
Ans

1. 4.00
$\times 2.2 .00$
$\times 3.3 .00$
$\times 4.5 .00$
Q. 17 In an office, $76 \%$ of the number of females is equal to the one-third of the number of males. What is the ratio of number of males to that of the females in the office?

Ans

1. $57: 25$
2. $25: 57$
3. $43: 19$
4. $19: 43$
Q. 18

If $x+\frac{1}{x}=\sqrt{7}$, then the value of $x^{3}+\frac{1}{x^{3}}$ is:
Ans

1. $4 \sqrt{7}$
2. $3 \sqrt{7}$
3. $5 \sqrt{7}$
4. $2 \sqrt{7}$
Q. 19 A 300 -m-long train is running at a speed of $108 \mathrm{~km} / \mathrm{h}$. How long will it take to clear a $600-\mathrm{m}$-long platform?
Ans
$\times 1.20 \mathrm{sec}$
5. 18 sec
6. 10 sec
7. 30 sec
Q. 2010 litres of petrol costing ₹105/litre is mixed with 15 litres of kerosene costing ₹25/litre. Find the price of the mixture.
Ans
8. ₹57/litre
9. ₹43/litre
10. ₹55/litre
11. ₹35/litre
Q. 21 P and Q can complete a work in 20 days and 30 days, respectively. P started the work and $Q$ joined him after 5 days. In how many days will the entire work be completed?
Ans
-1. 13
< 2.11
12. 14
<4.9
Q. 22 Two circles touch each other externally at $P$. AB is a direct common tangent to the two circles, $A$ and $B$ are the respective points of contact, and $\angle P A B=55^{\circ}$. The measure of $\angle A B P$ is:
Ans
$\times 1.55^{\circ}$
$\times 2.110^{\circ}$

- $3.35^{\circ}$
(4. $75^{\circ}$
Q. 23 A solid wooden toy is in the shape of a right circular cone mounted on a hemisphere. If the radius of the hemisphere is 5.6 cm and the total height of the toy is 11.6 cm , then what is the volume of the wooden toy (in $\mathrm{cm}^{3}$ ) (rounded off to the closest integral value)?
Ans
$\times 1.461$

2. 565
$\times 3.368$
$\times 4.197$
Q. 24 A sewing machine with a marked price of Rs. 400 was being sold at a $10 \%$ discount for cash payment, and during the stock clearance, a further discount was offered such that the machine is sold at Rs.342. What was the second discount offered?
Ans
X $1.8 \%$
3. $5 \%$

X $3.2 .5 \%$
X4.7.5\%
Q. 25 In the following figure, $\mathrm{AN}=7 \mathrm{~cm}, \mathrm{BN}=8 \mathrm{~cm}, \mathrm{AC}=18 \mathrm{~cm}$. What is the length of BC ?


C
Ans
X 1.23 cm
X 2.17 cm
$\times 3.21 \mathrm{~cm}$
4. 19 cm

Section: Part-D-Reasoning
Q. 1 In a certain code language, 'SOIL' is written as ' 220 ', and 'AIR' is written as ' 84 '. How will 'WATER' be written in that language?

Ans

- 1.335
$\times 2.330$
$\times 3.340$
$\times 4.345$
Q. 2 Select the figure that will come in place of the question mark (?) in the following figure series.


Ans

$\times 2$

$\times 3$

$\checkmark 4$.

Q. 3 Which of the following numbers will replace the question mark (?) in the given series? $16,19,24,27,32$, ?
Ans $\times 1.44$

- 2.35
$\times 3.32$
$\times 4.22$
Q. 4 If A, B, C, D and E denote,,$+- \times, \div$ and $=$, respectively, then which of the following options is correct?
Ans
1.4A8C6D12E12B4

X 2. 4A8E6D12C12B4
X 3.4A8C6D12E12A4
X4.4A8C6D12E12C4
Q. 5 Five friends $L, M, N, O, P$, each has a different height. $L$ is shorter than $M$ but taller than N . O is shorter than $\mathrm{N} . \mathrm{P}$ is taller than $\mathrm{O} . \mathrm{M}$ is taller than P . Who among them is the tallest?

Ans
X1.L
2. M

X 3 . N
$\times 4 . \mathrm{P}$
Q. 6 In a certain code language, 'COW' is written as '123' and 'BEAR' is written as '104'. How will 'TIGER' be written in that language?

Ans

1. 177
2. 295
3. 236
4. 118
Q. 7 Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation. 31*6*19*81*24*3*52

Ans
X 1.,,$-+=, \times,-,+$
2. $\times,+,-,=, \times,+$
3.,$+=, \times,-,+,-$
4. $=,-, \times,+,-, \div$
Q. 8 Select the option that represents the correct order of the given words as they would appear in an English dictionary.

1. Cerebral
2. Certificate
3. Certainty
4. Ceramicists
5. Cervicitis
6. Ceremonial

Ans
X $1.4,3,1,5,6,2$
(2. 4, 1, 6, 5, 3, 2
3. $4,1,6,3,2,5$
$4.4,3,1,6,2,5$
Q. 9 Which letter-cluster will replace the question mark (?) to complete the given series? AFRW, EJUZ, ?, MRAF, QVDI
Ans $\times 1 . I M X C$
X 2. IMXD
3. INXC

X4. IMYD
Q. 10 1, 2, 3, 4, 5 and 6 are written on different faces of a dice. Three different positions of the same dice are shown below. Find the number on the face opposite to the one showing ' 1 '.

figure 1

figure 2

fizure 3

Ans
$\times 1.3$
$\times 2.6$
3. 5
4. 4
Q. 11 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
All bottles are chairs.
Some chairs are glasses.
Some cups are glasses.
Conclusions:
I. Some cups are chairs.
II. Some glasses are bottles.
III. Some bottles are cups.

Ans $\quad$ 1. Only conclusion III follows
X 2. Only conclusion II follows
3. Only conclusion I follows
4. None of the conclusions follow
Q. 12 Study the given diagram carefully and answer the question. The numbers in different sections indicate the number of persons.
Dentist


How many actors are bakers but NOT dentists?
Ans
$\times 1.5$
2. 10
$\times 3.7$
$\times 4.2$
Q. $131,2,3,4,5$ and 6 are written on different faces of a dice. Three different positions of the same dice are shown below. Find the number on the face opposite to the one showing ' 2 '.

figure 3

Ans
$\times 1.3$
$\times 2.4$
$\times 3.1$

- 4.5
Q. 14 A \& B का आशय है ' $A, B$ की पत्री है'।
$A$ \# $B$ का आशय है ' $A, B$ का पिता है'।
$A @ B$ का आशय है ' $A, B$ का पुत्र है'।
$A \% B$ का आशय है ' $A, B$ का पति है'।
$A+B$ का आशय है ' $A, B$ की माता है'।
यदि $A \& B \# C \& D @ E \% F+G$ है, तो $C$ का $G$ से क्या संबंध है?
X1. बहन

2. भाभी
$\times 3$. माता
$\times 4$. दादी
Q. 15 Six students are sitting around a circular table facing the centre. Ajay is sitting second to the left of Nikhil. Nikhil is an immediate neighbour of both Sahil and Mahesh. Daksh is sitting second to the right of Mahesh. Mahesh is an immediate neighbour of both Indu and Nikhil. Who is sitting between Indu and Ajay?
Ans
X 1 . Sahil
X 2. Nikhil
3. Daksh

X 4. Mahesh
Q. 16 एक आदमी की ओर इशारा करते हुए गौरव ने कहा, "वह मेरी माँ के पिता की बेटी का भाई है।" वह व्यक्ति गौरव से किस प्रकार संबंधित है?

Ans

1. बहन
2. मामा

Х 3. दामाद
X4. बेटा
Q. 17 Select the figure that will come next in the following figure series.


Ans

Q. 18 Six students are sitting around a circular table facing the centre. Gyan is sitting second to the left of Tej. Sita is sitting second to the left of Prem. Akshay is an immediate neighbour of both Radha and Tej. Gyan is an immediate neighbour of both Prem and Sita. Who is sitting between Akshay and Sita?
Ans
X 1. Tej
X 2. Gyan
X 3. Prem
4. Radha
Q. 19 Select the set in which the numbers are related in the same way as are the numbers of the given sets.
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)
(18, 235, 29)
(7, 185, 30)
Ans
$\times 1 .(32,96,16)$
X 2. $(19,576,31)$
X 3. $(23,420,10)$
4. $(15,210,27)$
Q. 20 Which letter-cluster will replace the question mark (?) to complete the given series? BMAO, FOBR, ?, NSDX, RUEA

Ans
X 1. JRCU
2. JQCU

X 3. JQCV
X4.JRCV

Section : Part-E- Computer Fundamentals
Q. 1 The keyboard shortcut in MS-Excel 2010 to preview the worksheet before you print is $\qquad$ .
Ans

1. Shift + F3
2. $\mathrm{Ctrl}+\mathrm{F} 2$

X 3. Alt + F2
X4. Alt + F3
Q. 2 Which of the following option in MS-Word 2010 is used to remove all the formatting from the selection leaving only unformatted text?

1. Clear All Formatting
$X$ 2. Delete All Formatting
$X$ 3. Clear Selection
X4. Remove Selection
Q. 3 Which of the following is available under the data tab of MS-Excel 2010?

Ans

1. Filter

X 2 . Save
$\times$ 3. Table
4. Paste
Q. 4 Choose the wrong statement about a valid email address.

Ans ${ }^{1}$. The domain appears to the left of the @ symbol.
$\times$ 2. The prefix appears to the left of the @ symbol.
x 3. The domain appears to the right of the @ symbol.
$\times 4$.
A valid email address consists of an email prefix and an email domain, both in acceptable formats.
Q. 5 Which of the following is a small customizable toolbar at the top left comer of the worksheet window that contains a set of frequently used commands in MS-Excel 2010?

Ans

1. Scroll bar
2. Taskbar
3. Status bar
4. Quick Access toolbar
Q. 6 Which of the following function of MS-Excel 2010 is used to sort the contents of a range or an array?

Ans

1. Sort
2. Find
$X$ 3. Add
3. Filter
Q. 7 $\qquad$ is a general domain used worldwide.

Ans

1. .in
2. .com
3. .co.in
4. .ac.in
Q. 8 Which of the following icon refers to undo operation in MS-Excel 2010?

Ans
$\times 1$ $\theta$
$\checkmark 2$.
$\times 3$.

$\times 4 . \circlearrowright$
Q. 9 The $\qquad$ function in MS-Excel 2010 is used to join several text items into one text item cell.

Ans
X 1. STRING
2. CONCATENATE

X 3. ADD
X4. CON
Q. 10 A $\qquad$ is a regularly updated website or webpage, typically one run by an individual or small group that is written in an informal or conversational style.
Ans

1. blog

X 2. WWW
$X$ 3. website
X4. magzine

Head Constable AWO TPO in Delhi Police Examination 2022

| Roll Number |  |
| :--- | :--- |
| Candidate <br> Name |  |
| Venue Name | iON Digital Zone IDZ Greater Noida |
| Exam Date | 27/10/2022 |
| Exam Time | 9:00 AM - 10:30 AM |
| Subject | Head Constable AWO TPO in Delhi Police <br> Examination 2022 |

## Section : Part-A-General Awareness

Q. 1 In the month of September 2022, the Prime Minister Narendra Modi renamed Rajpath as $\qquad$
Ans

1. Kartavya Path

X 2. Amar Jawan Path
$\times$ 3. Shahid Path
X 4. Subhash Path
Q. 2 Which of the following is a global coalition launched in July 2020, created to make meaningful climate action faster and easier by independently tracking greenhouse gas (GHG) emissions with unprecedented detail and speed?
Ans
X 1. Climate and Clean Air Coalition

- 2. Climate Trace

X 3. Coalition for Climate Action
X 4. Global Climate Coalition
Q. 3 Which of the following dances is performed by the Korku tribe?

Ans $\times 1$. Binaki
X 2. Dadra
3. Ragini
4. Chatkora
Q. 4 Who was named as the Chairperson of the Telecom Disputes Settlement and Appellate Tribunal (TDSAT) in March 2022?

Ans $\times 1$. Justice Vipin Sanghi
2. Chief Justice Dhirubhai

Naranbhai Patel
X 3. Justice Siddharth Mridul
X 4. Justice Manmohan
Q. 5 How was the structure of the Great Bath of Mohenjo-daro?

Ans
$X 1$. Square
X 2. Triangle
3. Rectangle
4. Circle
Q. 6 सरकार द्वारा भौतिक या वित्तीय संपत्ति के निर्माण के लिए किए गए व्यय को $\qquad$ के रूप में जाना जाता है।
Ans
X1. राजस्व व्यय
2. पूंजीगत व्यय
3. रक्षा व्यय
4. सब्सिडी व्यय
Q. 7 Which of the following temples is NOT a 'Shakti Peeth'?

Ans
X 1. Kamakhya temple
X 2. Kalighat temple
3. Kalmadhav temple
4. Omkareshwar temple
Q. 8 Mool Shanker was the early name of whom among the following social reformers?

Ans
X 1. Shiv Dayal Saheb
2. Dayanand Saraswati

X 3. Narayana Guru
4. Swami Vivekananda
Q. 9 The Fundamental Duties are encapsulated under which Article of the Constitution?

Ans

1. Article 51 A

X 2. Article 51 C
X 3. Article 51
X 4. Article 51 B
Q. 10 Which of the following portals was launched by the Ministry of Labour and Employment to bring transparency and accountability to the enforcement of labour laws and ease compliance?
Ans 1. Shram Suvidha Portal
X 2. PRAAPTI
X 3. Saubhagya
X 4. E - NAM Portal
Q. 11 Which state has the highest sex ratio in India as per the 2011 Census?

Ans
X 1. Himachal Pradesh
2. Tamil Nadu
3. Meghalaya
4. Kerala
Q. 12 Select the correct pair of festival and its corresponding state from among the following.
Ans
X 1. Pinjore Heritage Festival : Uttar Pradesh
X 2. Kolayat Fair: Bihar
3. Desert Festival : Rajasthan

X 4. Kurukshetra Festival : Punjab
Q. 13 Researchers of which country first discovered the "Plastic eating Bacteria" in 2016?

Ans 1. Japan
2. United States of America
3. Germany
4. China
Q. 14 In which of the Five-Year Plans was 'The Twenty Point Programme' launched?

Ans

1. Seventh Five-Year Plan
2. Fifth Five-Year Plan
3. Sixth Five-Year Plan
4. Eighth Five-Year Plan
Q. 15 In 1911, air transport in India began between which two places?

Ans $\times 1$. Delhi and Patna
2. Allahabad and Naini
3. Delhi and Mumbai

X 4. Allahabad and Kanpur
Q. 16 Which of the following newspapers in British India was founded by Bal Gangadhar Tilak?

Ans
X 1. Swadesamitran
$X$ 2. The Hindu
3. Kesari

X 4. Indian Mirror
Q. 17 Tattvabodhini Sabha was founded in $\qquad$ .

Ans $\times 1.1866$
2. 1839
3. 1875
4. 1822
Q. 18 Zainul Abidin was one of most famous rulers of which kingdom in India?

Ans
X 1. Hyderabad
2. Kashmir
3. Sindh
4. Odisha
Q. 19 Which hill is NOT a part of the Meghalaya Plateau from the following?

Ans
X 1. Garo Hills
2. Nilgiri Hills

X 3. Jaintia Hills
X 4. Khasi Hills
Q. 20 Which of the following incomes is NOT included in the factor income?

Ans
X 1. Rent received on property
2. Scholarship of a student
3. Interest payment
4. Wages of labour

## Section : Part-B-General Science

Q. 1 Which of the following Kepler's laws comes from the observations that planets appear to move slower when they are farther from the sun than when they are nearer?
Ans

1. Law of areas
2. Law of orbits
3. Law of Gravitation
4. Law of Periods
Q. 2 What is impulse?

Ans
X1. I= ma
2. $1=m v$
3. I = pressure $\times$ area
4. I $=$ force $\times$ time
Q. 3 What is the conductivity of Gold in $\mathrm{S} \mathrm{m}^{-1}$ at 298.15 K?

Ans
, $1.4 .5 \times 10^{3}$
$\times 2.2 .1 \times 10^{3}$
3. $6.2 \times 10^{3}$
$4.5 .9 \times 10^{3}$
Q. 4 Two resistors of resistances R1 = 50 $\pm 3$ ohm and R2 $\mathbf{= 1 0 0} \pm 4$ ohm are connected in series. Find the equivalent resistance in series?

Ans

1. $150+ \pm 7$ ohm
2. $150+ \pm 1$ ohm
3. $150 \pm 4 / 3$ ohm
4. $150+ \pm 4$ ohm
Q. 5 Law of octaves was propounded by

Ans

1. John Newlands
2. Johann Dobereiner
3. Ivanovich Mendeleev
4. Henry Moseley
Q. 6 Rate of reaction for the equation $2 \mathrm{HI}-\mathrm{I}_{2}+\mathrm{H}_{2}$ can be expressed as

Ans
X 1. $-\Delta[H I] / \Delta t$
2. $-\Delta \mathrm{H} 2 / \Delta \mathrm{t}$
3. $+\Delta \mathrm{HI} / \Delta \mathrm{t}$
4. $-1 / 2 \Delta \mathrm{HI} / \Delta \mathrm{t}$
Q. 7 In which year MacDiarmid, Heeger and Shirakawa were awarded the Nobel Prize in Chemistry for the discovery of conducting polymers?
Ans
X1. 2002
2. 2000

X 3.2006
4. 2004
Q. 8 The sweetness value of alitame in comparison to cane sugar is?

Ans
$\times 1.600$
2. 100
3. 2000
4. 550
Q. 9 What is the force of attraction due to hollow spherical shell of uninform density, on a point mass placed inside it?

Ans $\times 1$. Less than gravitational constant
2. Greater than gravitational constant
3. Equal to gravitational constant
4. Zero
Q. 10 Arrange the following artificial sweeteners in descending order based on its sweetness value?
(a)Aspartame
(b)Sucralose
(c)Alitame
(d)Saccharin

Ans
X 1. (b), (d), (c) and (a).
X 2. (d), (b), (a) and (c).
X 3. (a), (d), (b) and (c).
4. (c), (b), (d) and (a).
Q. 11 The resistance $R$ of a conductor does not depend on

Ans
Х 1. potential difference
2. Pressure

X 3. material of the conductor
X 4. dimensions of the conductor

## Q. 12 Which of the following is NOT a fundamental or base units?

Ans

1. Volume
2. Time
3. Mass
4. Length
Q. 13 Identify the INCORRECT statement from the options given below.

Ans
Х 1. Metals and their alloys have very large conductivity and are known as conductors.
2. Substances like glass, ceramics, etc., having very low conductivity are known as insulators.
3. Electrical conductance through metals is called metallic or electronic conductance and is due to the movement of electrons.
4. Certain materials called semiconductors by definition have zero resistivity or infinite
conductivity.
Q. 14 Which of the following sweetening agent excreted from body in urine unchanged?

Ans
X 1. sucralose
X 2. alitame
X 3. aspartame
4. saccharin

## Q. 15 Rate of reaction DOES NOT depend on

Ans
X 1. Concentration
2. Temperature
3. Catalyst
4. Pressure
Q. 16 Number of significant figures in 3.700 are

Ans
$\times 1.1$

- 2.4
$\times 3.2$
$\times 4.3$
Q. 17 In second law of motion $F=m a, F$ stands for

Ans
X 1. Internal force on body
X 2. External force on body
3. Net external force on body

X 4. Net internal force on body
Q. 18 Which of the following colour code represents number zero on a resistor?

Ans

1. Black
2. Red
3. Brown
4. Orange
Q. 19 Which of the following statements is INCORRECT?

Ans $\times 1$. There is a repulsive force when north poles (or south poles) of two magnets are brought close together.
2. If a bar magnet is broken into two halves, we get two similar bar magnets with
stronger properties.
3 . The earth behaves as a magnet with the magnetic field pointing approximately from the geographic south to the north.
$X 4$. When a bar magnet is freely suspended, it points in the north-south direction.
Q. $20 \Delta \mathbf{Q}=\Delta \mathbf{U}+\Delta \mathbf{W}$ is equation for $\qquad$
Ans $\times 1$. Zeroth Law of Thermodynamics
2. Third Law of Thermodynamics
3. Second Law of Thermodynamics
4. First Law of Thermodynamics
Q. 21 The dimensions of $\qquad$ is $\left[M L T^{-2}\right]$.
Ans

1. Force, Kinetic friction and Static friction.
2. Kinetic friction, impulse and Momentum

X 3. Force, impulse and Momentum
X 4. Force, impulse and Static friction
Q. 22 Which of the following statements are CORRECT about soap? (I)Transparent soaps are made by dissolving the soap in ethanol and then evaporating the excess solvent.
(II)Shaving soaps contain sodium rosinate to prevent rapid drying.
(III)Dye does not absorb evenly on cloth washed with soap using hard water, because
of insoluble gummy precipitate.
Ans
X 1 . I and II
2. I and III

X 3 . II and III
X4.I, II and III
Q. 23 Substances which have tendency to move from stronger to the weaker part of the external magnetic field are called $\qquad$ _,

Ans

1. Diamagnetic
2. Monomagnetic
3. Ferromagnetic
4. Paramagnetic
Q. 24 Arrange the following elements in ascending order according to its molar specific heat?
(a)Carbon
(b)Silver
(c)Lead
(d)Aluminium

Ans
X 1. (c), (b), (d) \& (a)
X 2. (d), (a), (b) \& (c)
3. (a), (d), (b) \& (c)

X 4. (b), (d), (c) \& (a)
Q. 25 The strength of the earth's magnetic field varies from place to place on the earth's surface; its value being of the order of $\qquad$ —.
Ans
$\times 1.10^{-2} \mathrm{~T}$
$\times 2.10^{-3} \mathrm{~T}$
$\times 3.10^{-4} \mathrm{~T}$.
-4. $10^{-5} \mathrm{~T}$

## Section: Part-C-Mathematics

Q. 1 If $\sin (x)=\frac{2}{5}$ and $x$ is an acute angle, find the exact values of $\cos (4 x)-\cos (2 x)$.

Ans
$\times 1 . \frac{625}{32}$
2. $-\frac{472}{625}$
$\times 3 .-\frac{427}{625}$
$\times 4 .-\frac{472}{25}$

## Q. 2 A company offers the following:

I. Successive discounts of $25 \%$ and $5 \%$

II Successive discounts of $20 \%$ and $10 \%$
III Successive discounts of $22 \%$ and $8 \%$
Which offer is the best for a customer?
Ans
X 1 . III
$\times 2$. All are equally good
X 3 . II
4.1
Q. 3 If the radii of two circles be 8 cm and 6 cm and the length of the transverse common tangent be 14 cm , then the distance between the two centres is:
Ans
$\times 1.8 \sqrt{ } 3 \mathrm{~cm}$
2. $16 \sqrt{ } 3 \mathrm{~cm}$
3. $28 \sqrt{ } 2 \mathrm{~cm}$
4. $14 \sqrt{ } 2 \mathrm{~cm}$
Q. 4 If $(10)^{-x}=\frac{1}{3}$, what is the value of $(10)^{2 x}$ ?

Ans

1. 81
2. 9
3. $\frac{1}{81}$
4. $\frac{1}{9}$
Q. 5 A policeman follows a thief 1800 metres ahead of him. If the policeman and the thief run at a speed of $12 \mathrm{~km} / \mathrm{h}$ and $9 \mathrm{~km} / \mathrm{h}$, respectively, how much distance thief will cover from spotting point ( 1800 meters ahead to policeman) before catch by policeman?
Ans
X 1.5600 metres
5. 6000 metres
6. 4200 metres
7. 5400 metres
Q. 6 For a certain sum, the amount received after 2 years at $18 \%$ p.a. simple interest is Rs.1,100 less than the simple interest on the same sum for 10 years at the same rate. The sum (in Rs.) is:
Ans
X 1. Rs.2,400
8. Rs. 2,300
9. Rs.2,500
10. Rs.2,200
Q. 7 Simplify the following:
$2.05 \times 2.05-3.23 \times 3.23$
$2.05+3.23$
Ans
X 1. -3.18
11. -1.18
$\times 3.5 .28$
X4. 1.18
Q. 8 When the price of an article was reduced by $20 \%$, its sale increased by $80 \%$. What was the net effect on the revenue?

Ans
X 1. Decreased by $21 \%$
X 2. Increased by 21\%
3. Increased by 44\%

X4. Decreased by $44 \%$
Q. 9 Two years ago, population of a city was $15,62,500$. The population increased by $4 \%$ in the first year and decreased by $4 \%$ in the second year. Find the present population

Ans

1. $15,60,000$
2. $15,61,000$
3. 15,63,000
4. $15,62,000$
Q. 10 Find the value of $z$ in $(z \times 21 \%$ of 210$) \div(17 \%$ of 170$)=3050 \div z$

Ans
$\times 1.18 .4$
2. 44.7
$\times 3.22 .1$
$\times 4.33 .1$
Q. 11 What is mean proportion between 361 and 144 ?

Ans
$\times 1.121$
$\times 2.264$
$\times 3.288$
4. 228
Q. 12 The sum of the first six terms of an arithmetic progression is 54 and the ratio of its $10^{\text {th }}$ term to its $30^{\text {th }}$ term is $11: 31$.

What is the sum of its first 15 terms?
Ans
$\times 1.260$
X2. 278
X 3. 268
4. 270
Q. 13 P and Q together can finish a piece of work in 4 days. If $P$ alone can finish the work in 12 days, then what are the number of days required for $Q$ alone to finish the work?
Ans
X 1.4 days
2. 6 days

X 3.5 days
X 4.8 days
Q. 14 A shopkeeper professes to sell his goods at the cost price, but he uses false weights with which he cheats by $10 \%$ while buying and by $15 \%$ while selling. His overall percentage of profit or loss is:
Ans $\times 1.5 \%$
2. $27.7 \%$
× 3. $22.72 \%$
4. $25 \%$
Q. 15 The average runs made by a batsman in 10 innings of cricket was 43 . How many runs does he have to make in the next inning so that the average of his runs increases by 3 ?

Ans $\times 1.83$
2. 76
$\times 3.78$
$\times 4.91$
Q. 16 The length (in cm ) of the transverse common tangent to two circles of radii $\mathbf{2 c m}$ and 5 cm , the centre of the circles being 8 cm apart, is:

Ans
$\times 1 . \sqrt{7}$
2. $\sqrt{15}$
3. 15
4. 1
Q. $17 A, B$ \& C can all together do a piece of work in 20 days, in which $B$ takes 4 times as long as A \& C to do the work and C takes 3 times as long as A \& B together take to do the work. In how many days $B$ can alone do the work?

Ans

1. 120 days
2. 80 days
3. 90 days
4. 100 days
Q. 18

Simplify: $15 \frac{3}{4}-6 \frac{4}{5}+4 \frac{25}{3}$
Ans
$\times 1 \cdot \frac{1177}{60}$
2. $\frac{1077}{60}$
(3. $\frac{1377}{60}$
4. $\frac{1277}{60}$
Q. 19 If the base of an equilateral triangle is $\mathbf{8 ~ c m}$, then find its area.

Ans
$X 1.8 \sqrt{2} \mathrm{~cm}^{2}$
2. $16 \sqrt{3} \mathrm{~cm}^{2}$
3. $16 \sqrt{2} \mathrm{~cm}^{2}$

X4. $8 \sqrt{3} \mathrm{~cm}^{2}$
Q. 20 Find the value of x in the following diagram, where both the lines represent chords of the circle, and the point denotes the centre of circle. Also given that $\mathrm{a}=\mathrm{b}=\mathrm{x}$ and $\mathrm{c}=36$ and $\mathrm{d}=14$.


Ans

1. 30
2. 36
3. 50
4. 14
Q. 21 What is the area (in square units) of the triangle formed by the graphs of the equations: $2 x-y+8=0$ and
$8 x+3 y-24=0$, and $y=0$ ?
Ans
5. 28
6. 24
7. 36
8. 32
Q. 22 The point of intersection of the graphs of the equations $147 x-231 y=525$ and $77 x-49 y=203$, lies on the graph on the equation:

Ans

1. $9 x-5 y=23$

Х2. $4 x+5 y=13$
×3. $5 x-4 y=6$
X4. $5 x-9 y=17$
Q. 23 A vessel is in the form of a hollow hemisphere mounted by a hollow cylinder. The diameter of the hemisphere is 14 cm and the total height of the vessel is 13 cm . What is the inner surface area of the vessel?
Ans
$\times 1.172 \mathrm{~cm}^{2}$
2. $572 \mathrm{~cm}^{2}$
$\times 3.372 \mathrm{~cm}^{2}$
$\times 4.772 \mathrm{~cm}^{2}$
Q. 24 From the given figure, what is the average marks scored by the students?


Ans
X1. 85
$\times 2.78$
$\times 3.89$
-4. 80
Q. 25 What is the total surface area of a cone with diameter of 42 cm and height of 20 cm ?

Ans
$\times 1.3600 \mathrm{~cm}^{2}$
X $2.3900 \mathrm{~cm}^{2}$
$\times 3.3000 \mathrm{~cm}^{2}$

- $4.3300 \mathrm{~cm}^{2}$


## Section : Part-D-Reasoning

Q. 1 Study the given diagram carefully and answer the question. The numbers in different sections indicate the number of persons.

Chet


How many people who are Chefs and Waiters are NOT from Australia?
Ans
$\times 1.70$

- 2.60
$\times 3.150$
$\times 4.115$
Q. 2 In a certain code language, 'SWING' is written as ' 68 ' and 'SWITCH' is written as ' 86 '. How will 'BOARD' be written in that language?
Ans

1. 100
2. 106
3. 69
4.95
Q. 3 तस्वीर में दिख रहे एक व्यक्ति की ओर इशारा करते हुए गोपी ने कहा, "वह मेरी माँ के पिता का

इकलौता पुत्र है।" तस्वीर में दिख रहा व्यक्ति गोपी से किस प्रकार संबंधित है?
Ans
$X 1$. भाई
2. पुत्र
3. पिता
4. मामा
Q. 4 Select the figure that will come in place of the question mark (?) in the following figure series.

| $100_{0}^{0}$ | $0_{0}^{0}$ | $10^{0}$ | $\cdots \mathrm{N}^{0}$ |  |
| :---: | :---: | :---: | :---: | :---: |

Ans

$\times 3$.

$\times 4$.

Q. 5 A paper is folded and cut as shown below. How will it appear when unfolded?


Ans
Q. 6 F, G, H, I, J, and K are six people of different heights. F is the Tallest one. G is taller than H , who is shorter than $\mathrm{I}, \mathrm{J}$ is shorter than H but taller than K . Who is the shortest one?
Ans
X1.J
$\times 2.1$
3. K
$\times 4$. G

## Q. 7 A \# B means ' $A$ is the brother of $B$ '.

$A @ B$ means ' $A$ is the daughter of $B$ '.
$A$ \& $B$ means ' $A$ is the wife of $B$ '.
If $L \& M$ \# $N$ @ $A \& B$ \# $C$, then how is $L$ related to $C$ ?
Ans
X1. Daughter
X 2. Sister
X 3. Mother
4. Daughter-in-law
Q. 8 Which of the following numbers will replace the question mark (?) in the given series?

2, 3, 6, 18, ?, 1944
Ans $\times 1.90$
$\times 2.200$
$\times 3.100$
4. 108
Q. 9 A paper is folded and cut as shown below. How will it appear when unfolded?


Ans

Q. 10 Select the set in which the numbers are related in the same way as are the numbers of the given sets.
(NOTE : Operations should be performed on the whole numbers, without breaking
down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as
adding /deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and
3 and then performing mathematical operations on 1 and 3 is NOT allowed)
(428, 377, 51)
(679, 458, 221)
Ans $\quad \times 1 .(321,270,45)$
X 2. $(728,569,160)$
X $3 .(237,86,194)$
4. $(1236,788,448)$
Q. 11 Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.
87 * $(27$ * 3$)$ * 91 * 22 * ( 378 * 6)
Ans
$\times 1 . \div,-,+,-,=, \times$
X2.,,,$+-+ \div, \times,=$
3.,$- \times,=,-,-, \div$

Х4. $\times,+,-,=,-, \div$
Q. 12 Six students are sitting around a circular table facing the centre. Haider is sitting second to the left of Amit. Pawan is sitting second to the right of Amit. Siya is sitting second to the left of Ravi. Amit is an immediate neighbour of both Siya and Ravi. Who is sitting between Zoya and Ravi?
Ans

1. Haider
2. Siya
3. Pawan
4. Amit
Q. 13 Study the given diagram carefully and answer the question. The numbers in different sections indicate the number of persons.


How many drivers are from Kashmir but are NOT Electricians?
Ans
$\times 1.6$
$\times 2.8$

- 3.5
$\times 4.9$
Q. 14 Which letter-cluster will replace the question mark (?) to complete the given series? DOAW, ALDY, ?, UFJC, RCME
Ans
< 1. XJVQ

2. XIGA

X 3. XJVR
4. XJUQ
Q. 15 Select the option that represents the correct order of the given words as they would appear in an English dictionary.

1. Fontina
2. Fondue
3. Fondled
4. Fondant
5. Fontanel
6. Fonder

Ans
X 1.6, 4, 3, 2, 5, 1
X 2, 6, 3, 4, 5, 1, 2
X $3,4,6,3,5,1,2$
4. $4,6,3,2,5,1$
Q. 16 Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.
39*12*6*18*72*8*60
Ans

1. $=, \times,+,+, \div,-$

Х 2. $\times,-,=, \div,+,-$
X $3 .+, \div,=,-, \times,+$
人4.,$+ \times,-,=,+, \times$
Q. 17 In a certain code language, 'NUMBER' is written as ' 95 ' and 'CURRENT' is written as ' 97 '. How will 'MEASURE' be written in that language?
Ans
$\times 1.121$
2. 114
$\times 3.118$
$\times 4.107$
Q. 18 Select the figure from among the given options that can replace the question mark (?) in the following series.


Ans
$\times 1$.

$\times 2$.

$\times 3$.

$\checkmark 4$.

Q. 19 Seven people, A, B, C, D, E, F and G are sitting in a straight row, facing the north. Only
two people sit to the right of $D$. Only two people sit to the left of $C$. Only two people sit
between $D$ and $G$. Only three people sit between $C$ and $E$. $A$ is not an immediate neighbour of $D$. $B$ sits to the right of $D$. Who sits at the extreme right?

Ans

1. E
$\times 2$. A
X 3.G
×4.B
Q. 20 Which letter-cluster will replace the question mark (?) to complete the given series? BFKV, FJOZ, ?, NRWH, RVAL

Ans

1. JMTD
2. JNSD
3. JMRD
4. JMSD

Section : Part-E- Computer Fundamentals
Q. 1 Which of the following option of Draw Borders group in Design tab of Table Tools is used to remove specific border in a table to create merged cells in MS-Word 2010?

Ans

1. Merge Cells
2. Delete
3. Split Cells
4. Eraser
Q. 2 Which of the following is a valid email id?

Ans $\times 1$.abc@gmail@com
2. abc@gmail.com
× 3. Abc.gmail@com
X4. abc.gmail.com
Q. 3 In MS-Excel 2010 , $\qquad$ is a tool that applies formatting to your data depending on the conditions you specify.
Ans
$X$ 1. Format
$\checkmark$ 2. Conditional formatting
$X$ 3. Find
X4. Cut
Q. 4 In MS-Word 2010, $\qquad$ is used to adjust all the printing settings correctly so the print is accurate and contains all the content you need without distortions, cuts or lost formatting.

Ans

1. Print Purview
2. Print Review
3. Print Balance
4. Print Preview
Q. 5 $\qquad$ is an example for web browser.

Ans
$X$ 1. Sheets
2. Twitter
3. Gmail
4. Chrome
Q. 6 Which of the following shows the address of the current selection or active cell in MS-Excel 2010?

Ans

1. Formula bar
$X$ 2. Column headings
$X$ 3. Row headings
2. Name box
Q. 7 Which of the following option is used to specify number of prints required in Print option in MS-Word 2010 ?

Ans
$X$ 1. Page Size
$X$ 2. Collated
$X$ 3. Orientation
4. Copies
Q. 8 WWW stands for :

Ans
$X$ 1. World Web Wide
$\checkmark$ 2. World Wide Web
X 3. World Word Web
X 4. Web Wide World
Q. 9 In MS-Excel 2010, which of the following shortcut is used to display the create table dialog box?

Ans
x 1. Alt $+\mathrm{Ctrl}+\mathrm{T}$
2. Shift + T

X3. Alt + Shift $+T$

- 4. $\mathrm{Ctrl}+\mathrm{T}$
Q. 10 In MS-Excel 2010, which of the following option in File tab is used to open a workbook which has to be created?

Ans
$X$ 1. Open
2. New

X 3. Save
X 4. Save As

Head Constable AWO TPO in Delhi Police Examination 2022

| Roll Number |  |
| :--- | :--- |
| Candidate |  |
| Name |  |

## Section : Part-A-General Awareness

Q. 1 According to Niti Aayog's Multidimensional Poverty Index (MPI) 2021, which state of India has the lowest percentage of population below poverty line?
Ans
X 1. Goa
X 2. Tamil Nadu
3. Kerala

X 4. Punjab
Q. 2 Which of the following statements is NOT true about Stupa?

Ans
⒈ It means 'mound', whether round and tall, big and small
X 2. This may contain things used by the Buddha or his followers
X 3. This may contain bodily remains of the Buddha or his followers
4. It is a holy place related with Jainism
Q. 3 Which training platform developed in 2018 by trauma surgeon Dr. Alex Young provided remote educational programmes around the world skills like the right way to wear personal protective equipment, administer treatment or ventilate a patient during COVID-19?
Ans

1. VIRTI
2. DOCEBO
3. CARM
4. 360 learning
Q. 4 भारतीय संविधान का कौन सा अनुच्छेद गिरफ्तार किए गए या हिरासत में लिए गए व्यक्तियों को संरक्षण प्रदान करता है?
Ans
$\times 1$. अनुच्छेद 21
5. अनुच्छेद 22
$X$ 3. अनुच्छेद 23
X 4. अनुच्छेद 20
Q. 5 निम्नलिखित में से किस भारतीय शास्त्रीय नृत्य को 'एकाहार्य' के रूप में जाना जाता है?

Ans
$X$ 1. कथक
X 2. कथकली
$X 3$. मणिपुरी
4. भरतनाट्यम
Q. 6 Which of the following leaders declared the creation of the People's Republic of China (PRC) in 1949?
Ans

- 1. Mao Zedong

X 2. Yang Shangkun
X 3. Liu Shaoqi
4. Xi Jinping
Q. 7 निम्नलिखित में से किसे इंडिया टुडे द्वारा जनवरी 2022 में सबसे लोकप्रिय मुख्यमंत्री के रूप में चुना गया है?
Ans

1. अरविंद केजरीवाल
2. नवीन पटनायक
3. ममता बनर्जी

X 4. योगी आदित्यनाथ
Q. 8 What is a transfer income?

Ans
X 1. Earned income
X 2. Public income
3. Disposable income
4. Unearned income
Q. 9 Which of the following two rivers make 'estuaries'?
a) Narmada
b) Krishna
c) Cauvery
d) Tapi

Ans $\times 1 . \mathrm{b}-\mathrm{c}$

- 2. $d-a$

X 3.c-d
X4.a-b
Q. 10 भूमि उपयोग अभिलेख (भारत में) $\qquad$ द्वारा तैयार किए जाते हैं।
Ans

1. भू-राजस्व विभाग
$\times$ 2. गृह मंत्रालय
2. कृषि विभाग

X 4. ग्रामीण विकास मंत्रालय
Q. 11 Which of the following is NOT a part of the Green Revolution?

Ans
X 1. Use of chemical fertilisers
2. Abolition of intermediaries

X 3. Use of multiple cropping
X 4. Mechanised means of cultivation
Q. 12 The National population register was created under the provision of $\qquad$ and
a) Citizen Act 1965
b) Citizenship Rules 2004
c) Citizenship Act 1955
d) Citizenship Rules 2003

Ans
X1.a-b
X2.a-c

- 3. c-d

X4.b-d
Q. 13 From which of the following countries the Asia Cup 2022 was shifted out to the United Arab Emirates?

Ans
< 1. India
2. Sri Lanka
3. Bangladesh
4. Pakistan
Q. 14 Which of the following is a religious festival?

Ans

1. Gangaur
2. Children's Day
3. Camel Festival
4. Teachers' Day
Q. 15 जब सरकार उत्पादन इकाइयों को सरकार द्वारा निर्धारित कम कीमतों पर अपने उत्पाद बेचने के लिए वित्तीय सहायता देती है, तो इसे क्या कहा जाता है?
Ans
$X 1$. कर में छूट
Х 2. न्यूनतम समर्थन मूल्य
5. सब्सिडी

X4. छूट
Q. 16 In the month of September 2022, the Prime Minister of which of the following countries visited the dargah of Khwaja Moinuddin Chisti at Ajmer?
Ans
X 1. Egypt
2. Bangladesh
3. Turkey
4. Pakistan
Q. 17 Which state celebrated the $44^{\text {th }}$ Kokborok Day?

Ans

- 1. Tripura

X 2. Nagaland
X 3. Mizoram
4. Assam
Q. 18 अक्टूबर 2021 में, विश्व स्वास्थ्य संगठन (WHO) ने उप-सहारा अफ्रीका में और अन्य क्षेत्रों में प्लैज्मोडियम फैल्सीपेरम के कारण होने वाले किस रोग के मध्यम से उच्च संचरण वाले जोखिम वाले बच्चों के लिए RTS,S/AS01 (RTS,S) के उपयोग की अनुशंसा की?
Ans
$X$ 1. पीतज्वर
$\times$ 2. काला अजार
3. मलेरिया

X 4. पोलियो
Q. 19 Which is the first tomb of the Mughal period to have two domes?

Ans
X 1. Akbar Tomb
X 2. Jahangir Tomb
3. Humayun Tomb

X4. Babur Tomb
Q. 20 मुगल केंद्रीय प्रशासन के तहत "बखशी" की क्या भूमिका थी?

Ans 1. वह मनसबदारों द्वारा सशस्त्र टुकड़ियों की स्वीकृत संख्या और युद्ध उपकरणों के उचित रखरखाव पर कड़ी निगरानी रखने के लिए जिम्मेदार होता था।
2. उसके पास अन्य सभी पदों और प्रशासन के अधिकारियों को भत्ते और वजीफा वितरित करने का असीमित अधिकार था।
3. वह मुख्य कार्यकारी अधिकारी होता था जो शाही घराने के लिए सभी प्रकार की वस्तुओं की खरीद और उनके भंडारण के लिए जिम्मेदार था।
4. वह राजस्व और वित्त के लिए जिम्मेदार होता था और उसका प्राथमिक कर्तव्य शाही खजाने की निगरानी करना और सभी खातों की जांच करना था।

Section: Part-B-General Science
Q. 1
is the fraction $1 / 273.16$ of the thermodynamic dynamic temperature of the triple point of water.

Ans

1. Kelvin

X 2. Celsius
X 3. Fahrenheit
4. Candela
Q. 2 Which of the following metal is in liquid state at room temperature?

Ans

- 1. Mercury

X 2. Potassium
X 3. Iron
X 4. Calcium
Q. 3 Spontaneous processes of nature are $\qquad$
Ans
× 1. Reversible
2. Irreversible

X 3. System and surrounding returns to original state.
X 4. Always slow
Q. 4 Why does group 15 elements have greater ionization enthalpy than group 16 elements?
Ans
$\times 1$. All of the above
2. They have extra stable half-filled $p$ orbital

X 3. Greater nuclear attraction
4. They are smaller in size
Q. 5 Which of the following is arranged in decreasing order of ionic mobility?

Ans
$\times 1 . \mathrm{I}^{-} \rightarrow \mathrm{Br}^{-} \rightarrow \mathrm{Cl}^{-} \rightarrow \mathrm{F}^{-}$
Х $2 . \mathrm{F}^{-} \rightarrow \mathrm{Cl}^{-} \rightarrow \mathrm{I}^{-} \rightarrow \mathrm{Br}^{-}$
3. $\mathrm{F}^{-} \rightarrow \mathrm{Cl}^{-} \rightarrow \mathrm{Br}^{-} \rightarrow \mathrm{I}^{-}$

X4. $\mathrm{F}^{-} \rightarrow \mathrm{I}^{-} \rightarrow \mathrm{Cl}^{-} \rightarrow \mathrm{Br}^{-}$
Q. 6 Which of the following ferromagnetic materials has the highest Curie Temperature?

Ans

1. Cobalt
2. Gadolinium
3. Iron
4. Nickel

## Q. 7 In which year Ohm's law was discovered?

Ans

- 1.1828

X2. 1838
X 3.1858
4. 1848
Q. 8 Which of the following electrolytes are known as 1-1, 2-1 and 2-2 electrolytes respectively?
Ans

1. $\mathrm{NaCl}, \mathrm{CaCl}_{2}$ and $\mathrm{MgSO}_{4}$
2. $\mathrm{CaCl}_{2} \mathrm{NaCl}$ and $\mathrm{MgSO}_{4}$
3. $\mathrm{MgSO}_{4} \mathrm{NaCl}$ and $\mathrm{CaCl}_{2}$
4. $\mathrm{CaCl}_{2} \mathrm{MgSO}_{4}$ and NaCl
Q. 9 Dimension of mass density is

Ans
$\times 1 .\left[M^{0} \mathrm{~L} \mathrm{~T}^{-1}\right]$
2. $\left[M^{0} L^{3} T^{0}\right]$
3. $\left[\mathrm{M} \mathrm{L}^{-3} \mathrm{~T}^{0}\right]$
4. $\left[\mathrm{M} \mathrm{L} \mathrm{T}{ }^{-2}\right]$
Q. 10 Identify the CORRECT statement about system of units.

Ans $\quad$ 1. The CGS units have well defined and internationally accepted unit symbols (such as m for metre, kg for kilogram, s for second, A for ampere, N for newton etc.).

X 2. Certain fundamental units are expressed by means of SI units with special names (such as joule, newton, watt, etc).

- 3. The MKS based on seven base units is at present internationally accepted unit
system and is widely used throughout the world.

4. Scientific notation and the prefixes are used to simplify measurement notation and
numerical computation, giving indication to the precision of the numbers.
Q. 11 Which of the following is used in controlling depression and hypertension?

Ans
X 1. Meprobamate.
2. Equanil.

X 3. Chlordiazepoxide.
X 4. Noradrenaline.
Q. 12 If net external force on a body is zero than

Ans $\times 1$. Its velocity is non zero (according to first law of motion)
X 2. Its acceleration is non zero (according to 3rd law of motion)
3. Its acceleration is zero (according to first law of motion)
4. Its velocity will be zero ( according to second law of motion)
Q. 13 The location of the north magnetic pole of earth's magnet is at a latitude of $79.74^{\circ} \mathrm{N}$ and a longitude of $71.8^{\circ} \mathrm{W}$, a place somewhere in north $\qquad$ -
Ans
X 1. Australia
X 2. Antarctica

- 3. Canada

X 4. New Zealand
Q. 14 Metals have low resistivities in the range of $\qquad$ .
Ans
X $1.10^{-5} \Omega m$ to $10^{-3} \Omega m$
2. $10^{-8} \Omega \mathrm{~m}$ to $10^{-6} \Omega \mathrm{~m}$

X 3. $10^{5} \Omega \mathrm{~m}$ to $10^{3} \Omega \mathrm{~m}$
X 4. $10^{8} \Omega \mathrm{~m}$ to $10^{6} \Omega \mathrm{~m}$
Q. 15 Which of the following statement is NOT related to Zeroth Law of Thermodynamics?

Ans $\times 1$. This Law clearly suggests that when two systems $A$ and $B$, are in thermal equilibrium, there must be a physical quantity that has the same value for both.

Х 2. This law was formulated in 1931.
X 3. R.H. Fowler formulated this law.
4. This law states that 'two systems in chemical equilibrium with a third system
separately are in thermal equilibrium with each other'.
Q. 16 Which of the following additives has nutritive value?

Ans
X 1. Flour improvers
X 2. Fat emulsifiers
3. Nutritional supplements

X 4. Food colours
Q. $17 \mathrm{~J} \mathrm{~kg}^{-1}$ is the unit of $\qquad$ _.

Ans

1. Gravitational Potential
2. Gravitational constant
3. Gravitational Potential Energy
4. Gravitational Intensity
Q. 18 Which of the following artificial sweetener's appearance and taste are like sugar?

Ans

1. Sucralose
$X$ 2. Alitame
$X$ 3. Saccharin
2. Aspartame
Q. 19 Which of the following is a potent vasodilator?

Ans
X 1. Ranitidine
2. Cimetidine
3. Histamine
4. Noradrenaline
Q. 20 निम्नलिखित में से कौन सा कथन गलत है?

Ans

1. बल सदैव गति की दिशा में नहीं होता है।
2. एक निश्चित समय पर पिंड पर लगाया गया बल उस समय पिंड के स्थान की स्थिति से निर्धारित होता है।
3. गति के द्वितीय नियम में, $F=m$ a होता है।
4. बल और समय का गुणनफल आवेग होता है जो त्वरण में परिवर्तन के बराबर होता है।
Q. 21 What is value of $G$ in $F=G m_{1} m_{2} / r_{2}$

Ans
$\times 1.6 .672 \times 10^{-11} \mathrm{~N}$
2. $6.672 \times 10^{-11} \mathrm{~N} \mathrm{~m}^{2} \mathrm{~kg}^{-2}$
3. $6.672 \times 10^{-11} \mathrm{~N} \mathrm{~kg}^{-2}$
$4.6 .672 \times 10^{-11} \mathrm{~N} \mathrm{~m}^{2}$
Q. 22 Which of the following elements is NOT present in Alnico?

Ans

1. Bismuth

X 2. Nickel
X 3. Copper
X 4. Cobalt
Q. 23 An astronaut accidentally gets separated out of his small spaceship accelerating in inter stellar space at a constant rate of $100 \mathrm{~m} \mathrm{~s}-2$. The acceleration of the astronaut the instant after he is outside the spaceship is Zero. This is in accordance with $\qquad$
Ans

1. Law of conservation of linear momentum
2. Newton's second law of motion
3. Newton's third law of motion
4. Newton's first law of motion
Q. 24 Which of the following statements is INCORRECT? The conductivity of electrolytic (ionic) solutions depends on:
Ans $\quad$ 1. concentration of the electrolyte.
5. the nature of the solute and its viscosity

X 3. The nature of the electrolyte added.
X 4. Size of the ions produced and their solvation
Q. 25 The representation of rate of reaction in terms of concentration of the reactants is known as
Ans
X 1. Stoichiometric coefficient
2. Rate expression
3. Order of reaction
4. Randomness

## Section : Part-C-Mathematics

Q. 1 A vendor mixes two types of pulses costing ₹10/kg and ₹22/kg respectively. In what ratio ₹ $10 / \mathrm{kg}$ should be mixed with ₹ $22 / \mathrm{kg}$ to get a mixture of ₹ $12 / \mathrm{kg}$.
Ans
X1.10:1
X2.1:5

- $3.5: 1$

X4.1:10
Q. 2 If 2 men or 4 women or 6 boys can finish a work in 50 days, then how many days will 1 man, 1 woman and 1 boy take to finish the same work?

Ans

1. $54 \frac{6}{11}$ days

X2. $54 \frac{5}{11}$ days
X 3. $53 \frac{6}{11}$ days
X4. $54 \frac{6}{13}$ days
Q. $3 P, Q, R$ and $S$ are four points on a circle. $P R$ and $Q S$ intersect at point $X$ such that $\angle Q X R=120^{\circ}$ and $\angle X R S=10^{\circ}$. The measure of $\angle \mathrm{QPR}$ is:
Ans $\times 1.100^{\circ}$

- $2.110^{\circ}$
$\times 3.120^{\circ}$
$\times 4.90^{\circ}$
Q. 4 A man spent $20 \%$ of his monthly income on rent and $45 \%$ of the remaining on clothes and he saves the remaining income. If his monthly savings are Rs.308, find his monthly salary.
Ans

1. Rs. 700
2. Rs. 725

X 3.Rs. 775
X4.Rs. 750
Q. 5 If the area of a square is $16 x^{2}+16 x+4$, what is the perimeter of the square?

Ans
X1.2x+4
X2. $16+8 x$
X $3.4 \mathrm{x}+2$
4. $16 x+8$
Q. 62 tables and 3 chairs together cost ₹12000. When the cost of a table is decreased by $10 \%$ and that of a chair is increased by $20 \%$, then 3 tables and 4 chairs together cost ₹ 17100 . What is the total original cost of 1 table and 2 chairs?

Ans
$X$ 1. ₹ 6500
X 2. ₹ 6300
X 3. ₹ 6800

- 4. ₹ 6600
Q. 7 A cubic metre of copper weighing $15,000 \mathrm{~kg}$ is rolled into a square bar 4 m long. An exact cube is cut off from the bar. How much does the cube weigh?
Ans
X 1.1900 kg

2. 1875 kg

X 3.1975 kg
4. 2850 kg
Q. 8 The following table shows the marks (in percentages) obtained by six students in five different subjects in an examination. The maximum marks in each subject are 100 .

| Student | SUBJECT |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CS | PHYSICS | CHEMISTRY | MATHS | HISTORY | GEOGRAPHY |
| A | 95 | 65 | 90 | 70 | 70 | 80 |
| B | 90 | 70 | 75 | 75 | 85 | 85 |
| C | 80 | 80 | 65 | 70 | 90 | 95 |
| D | 85 | 90 | 85 | 75 | 90 | 95 |
| E | 80 | 95 | 95 | 85 | 90 | 95 |
| F | 90 | 90 | 90 | 95 | 90 | 90 |

Answer the following question based on the table:
What are the average marks obtained by all the six students in CS? (up to two decimal places)
Ans $\times 1.83 .33$
X 2.81 .67
3. 84.76
4. 86.67
Q. 9 Mohan starts a business with a capital of ₹ $1,70,000$. He incurs a loss of $4 \%$ during the first year. But he makes a profit of $5 \%$ during the second year on his remaining investment. Finally, he makes a profit of $25 \%$ on his new capital during the third year. Find his total profit at the end of three years.
Ans

1. ₹ 44,200
2. ₹43,200
з. ₹ 45,200
3. ₹ 42,200
Q. 10 अरुण की वर्तमान आयु (वर्षों में) वरुण की वर्तमान आयु (वर्षों में) के दो गुना से एक वर्ष कम है। अब से 5 वर्ष बाद, वरुण की आयु अरुण की वर्तमान आयु के दो-तिहाई के बराबर होगी। अब से 2 वर्ष बाद अरुण और वरुण की आयु (वर्षों में) का योग क्या होगा?

Ans
$\times 1.58$
$\times 2.50$
X 3. 52

- 4. 54
Q. 11 राकेश फल विक्रेता है। एक ग्राहक को वह एक किलोग्राम अमरूद $20 \%$ हानि पर और एक किलोग्राम आम $40 \%$ लाभ पर बेचता है और उसे Rs. 44 का लाभ होता है। दूसरे ग्राहक को वह एक किलोग्राम आम और एक किलोग्राम अमरूद प्रत्येक $20 \%$ लाभ पर बेचता है और Rs. 40 का लाभ अर्जित करता है। यदि वह 3 किलोग्राम अमरूद और 5 किलोग्राम आम प्रत्येक को $40 \%$ लाभ पर बेचता है, तो उसका कुल लाभ क्या है?
Ans
X 1.Rs. 412
X 2. Rs. 421
X 3.Rs. 325

4. Rs. 352
Q. 12 The marked price of a water bottle is Rs.950. A man bought the same for Rs.740, after getting two successive discounts. If the first discount is $12 \%$, then what is the second discount?
Ans
X $1.12 .48 \%$
5. $11.48 \%$

X $3.13 .45 \%$
X4.14.56\%
Q. 13 Two circles of radii 13 cm and 12 cm are concentric. Calculate the length of the chord of the outer circle which touches the inner.
Ans
< 1.9 cm
<2.8 cm
3.5 cm
4. 10 cm
Q. 14 During the first two hours of a journey, a man drove at the speed of $45 \mathrm{~km} / \mathrm{h}$ and during next two hours and fifteen minutes he drove at a speed of $72 \mathrm{~km} / \mathrm{h}$. He maintained a speed of $80 \mathrm{~km} / \mathrm{h}$ for another three hours and 45 minutes. What was his average speed (in km/h) for the entire journey?
Ans

1. 69
$\times 2.70$
$\times 3.66$
2. 75
Q. 15 When $0.234343434 \ldots$ is expressed in the form of $\frac{A}{B}$ (lowest terms), then the value of $B-A$ is:

Ans $\times 1.378$
2. 376
3. 379
(4.377
Q. 16 Using all the letters $\mathrm{K}, \mathrm{N}, \mathrm{A}, \mathrm{G}$ and $\mathrm{A}, 5$ letter words are made (with or without meaning). If these words are arranged as in a dictionary, the word NAAKG will appear at what place?

Ans 1. 50
2. 49
3. 47
4. 46
Q. 17 If $\cot \theta+\operatorname{cosec} \theta=5, \theta$ being an acute angle, then the value of $13 \cos \theta$ is:

Ans
X1.156
$\times 2.25$
3. 13
4. 12
Q. 18 A sum of money at simple interest doubles itself in 8 years. What is the rate of interest?

Ans

1. $12.5 \%$
2. $8.5 \%$
3. $9.5 \%$
4. 6.5\%
Q. 19 If a chord of a circle of radius 11 cm is a tangent to another circle of radius 7 cm , both the circles being concentric, then the length of the chord is:
Ans
<1.3 $\sqrt{8} \mathrm{~cm}$
5. $8 \sqrt{ } 3 \mathrm{~cm}$
6. $6 \sqrt{ } 8 \mathrm{~cm}$
7. $12 \sqrt{ } 2 \mathrm{~cm}$
Q. 2080 men can construct a small footpath in 60 days. How many more men should be employed if the job is to be finished in 20 days?
Ans
8. 160
9. 180
$\times 3.120$
10. 240
Q. 21 The solution of the following system of equations:
$2(a x-b y)+a+4 b=0,2(b x+a y)+b-4 a=0$, is also the solution of the equation:
Ans
X1. $3 x-2 y=5$
11. $4 x+3 y=4$

X3. $2 x-3 y=6$
X4. $3 x+4 y=59$
Q. 2212 पुरुष प्रतिदिन 6 घंटे कार्य करते हुए एक कार्य को 25 दिनों में कर सकते हैं। यदि यह दिया गया है कि पुरुष, महिलाओं की तुलना में दोगुने दक्ष हैं, तो 36 महिलाएं प्रतिदिन 5 घंटे कार्य करते हुए उसी कार्य को कितने दिनों में करेंगी?

Ans
$\times 1.24$
$\times 2.25$

- 3.20
4.23
Q. 23 Simplify the following expression.
$5.4+7.3-4.8 \div 1.2 \times 2.3+3.2$
Ans

1. 6.7
2. 3.5
3. 7.6
4. 5.3
Q. 24 In the following figure, $O$ is the centre of the circle. If $O P=5 \mathrm{~cm}$ and radius of the circle is 3 cm , find the length of the tangent PT.


Ans
$\times 1.6 \mathrm{~cm}$

- 2.4 cm
$\times 3.3 \mathrm{~cm}$
$\times 4.5 \mathrm{~cm}$
Q. 25 Find the surface area of a cube whose edge is 11 cm .

Ans
$\times 1.66 \mathrm{~cm}^{2}$
2. $726 \mathrm{~cm}^{2}$
$\times 3.121 \mathrm{~cm}^{2}$
$\times 4.11 \mathrm{~cm}^{2}$

## Section : Part-D-Reasoning

Q. 1 Select the set in which the numbers are related in the same way as are the numbers of the given sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)
$(114,6,19)$
$(78,13,6)$
Ans

1. $(375,25,15)$

X 2. $(81,10,9)$
X $3 .(42,3,7)$
X4. $(343,14,7)$
Q. 2 तस्वीर में दिख रहे एक व्यक्ति की ओर इशारा करते हुए श्रीमती रजनी ने कहा, "वह मेरे पति के ससुर योगी के भाई का पुत्र है।" तस्वीर में दिख रहा व्यक्ति श्रीमती रजनी से किस प्रकार संबंधित है?
Ans
X1. भाई
2. पिता के भाई का पुत्र
$\times 3$. पुत्र
4. ससुर
Q. 3 ' $A$ \# B' का अर्थ है कि ' $A, B$ का पति है'
' $A @ B$ ' का अर्थ है कि ' $A, B$ का पुत्र है'
' $A$ \& $B$ ' का अर्थ है कि ' $A, B$ की माता है'
' $A \% B$ ' का अर्थ है कि ' $A, B$ का दादा है'
यदि ' $K \% N @ P$ \# $R$ ' है, तो $K$ का $R$ से क्या संबंध है?
Ans

1. पिता
2. माता
3. ससुर
4. सास
Q. 4 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
Some cushions are sofas.
Some purses are cushions.
All sofas are purses.
Conclusions:
I. Some cushions are purses.
II. Some purses are sofas.
III. Some sofas are cushions.

Ans $\quad \times 1$. Only conclusion II follows
2. All conclusions follow

X 3. Only conclusion III follows
X 4. Only conclusion I follows
Q. 5 Which two signs should be interchanged to make the given equation correct?
$306 \div 17+4-50 \times 8=30$
Ans
$\times 1 \times$ and -
2. $\div$ and $\times$
3. + and $\times$
4. + and -
Q. 6 Study the given diagram carefully and answer the question. The numbers in different sections indicate the number of persons who like to watch different types of TV channels.


How many persons are there who like to watch both sports and cartoon channels?

Ans
$\times 1.9$
2. 20
$\times 3.11$
X4. 19
Q. 7 Which letter-cluster will replace the question mark (?) to complete the given series? FCBZ, KGEB, ?, UOKF, ZSNH
Ans
X 1. PLHD
X 2. PKGD
X 3. PLGD
4. PKHD
Q. 8 Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation. $(31$ * 3 ) * 64 * 124 * ( 492 * 78 ) * 6
Ans
$\times 1 .-, \times,=,-,-, \div$
Х2.,$+ \div,-,=,-, \times$
Х3.+,-, +, $\div, \times,=$
4. $\times,-,=,-,+, \div$
Q. 9 Select the option that represents the correct order of the given words as they would appear in an English dictionary.

1. Meconium
2. Medication
3. Mediocrity
4. Mechanical
5. Meclizine
6. Mecamylamine

Ans
X 1.4, 6, 5, 1, 2, 3
2. $6,4,2,3,5,1$
3. $6,5,1,4,3,2$
4. $6,4,5,1,2,3$
Q. 10 Select the figure that will come in place of the question mark (?) in the following figure series.


Ans

$\times 4$

Q. 11 There are five friends, Ankita, Parul, Ashna, Bhanu, Ritika. Ashna is the tallest. Ankita is shorter than Parul but taller than Ritika. Bhanu is shorter than Parul but taller than Ankita. Who is taller than Ritika but shorter than Bhanu?
Ans
< 1. Ritika
X 2. Parul
3. Ankita

X 4. Bhanu
Q. 12 In a certain code language, 'POSITIVE' is written as '109' and 'NEGATIVE' is written as '141'. How will 'INTEGER' be written in that language?

Ans

1. 118
$\times 2.107$
$\times 3.111$
$\times 4.114$
Q. 13 Six friends L, M, N, O, P and Q are sitting around a circular table facing the centre. L is sitting third to the left of $O . M$ is sitting second to the right of $O . N$ is sitting second to the right of $P$. $P$ is the only one sitting between $Q$ and $O$. Who is sitting between $M$ and Q?
Ans
1.L
$\times 2.0$
X 3.P
$\times 4 . N$
Q. 14 Select the figure from among the given options that can replace the question mark (?) in the following series.


Ans

2.

$\times 3$

$\times 4$.

Q. $151,2,3,4,5$ and 6 are written on different faces of a dice. Three different positions of the same dice are shown below. Find the number on the face opposite to the one showing ' 6 '.

figure 1

figure 2

figure 3

Ans

- 1.5
$\times 2.4$
$\times 3.3$
$\times 4.2$
Q. 16 Which of the following numbers will replace the question mark (?) in the given series? 90, 89, 85, 76, ?, 35
Ans $\times 1.65$
$\times 2.51$
- 3.60
$\times 4.72$
Q. 17 1, 2, 3, 4, 5 and 6 are written on different faces of a dice. Three different positions of the same dice are shown below. Find the number on the face opposite to the one showing ' 5 '?


Ans
$\times 1.3$
< 2.1

- 3.2
$\times 4.4$
Q. 18 Seven people, A, B, C, D, E, F and G, are sitting in a straight row, facing the north. Only two people sit to the right of $D$. Only two people sit to the left of C. Only two people sit between $D$ and G. Only three people sit between $C$ and $E$. A is not an immediate neighbour of $D$. $B$ sits to the right of $D$. Who sits at the centre?
Ans
X1. D
2.F
$\times 3$. C
$\times 4$. B

Q. 19 In a certain code language, 'RAID' is written as 'DIARS' and 'SPOT' is written as 'TOPST'. How will 'MOOT' be written in that language?
Ans
X 1. MOOTT

2. MOOTN
3. TOOMM
4. TOOMN
Q. 20 Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.
$\mathrm{m}_{-} \mathrm{r}_{-} \mathrm{t}_{-} \mathrm{c}_{-} \mathrm{mero} \mathrm{m}_{-} \mathrm{sc} \mathrm{u}_{-} \mathrm{ero} \mathrm{C}_{-} \mathrm{s} u$
Ans
$\times 1$. eostumtc
X 2. esotmtco
X 3. emtsotcc
5. eosutmtc

Section : Part-E- Computer Fundamentals
Q. 1 Typically $\qquad$ is used to send the email carbon copy to multiple recipients, except each recipient can't see who is on the list of other recipients.

Ans $\times 1 . \mathrm{Cc}$
2. Subject
3. Add text
4. Bcc
Q. 2 $\qquad$ keyboard shortcut is used to cut the selected data in MS-Word 2010.

Ans
X 1. $\mathrm{Ctrl}+\mathrm{V}$
2. $\mathrm{Ctrl}+\mathrm{X}$

X 3. $\mathrm{Ctrl}+\mathrm{O}$
X 4. $\mathrm{Ctrl}+\mathrm{Z}$
Q. 3 The $\qquad$ function in MS-Excel 2010 is used to find average or mean of numbers.
Ans

1. AVERAGE
$\times 2$ MEAN
X 3. AVRG
X 4. AVG
Q. 4 $\qquad$ एमएस-एक्सेल 2010 (MS-Excel 2010) की वर्कशीट में डेटा का एक विजुअल रिप्रजेंटेशन है।

Ans
$x$ 1. शीट (Sheet)
$X$ 2. सेल्ल (Cell)
3. ग्राफ (Graph)
4. टेबल (Table)
Q. 5 Which of the following ISP provides access to Internet through telephone line, cable Wi-Fi or fiber optics?

Ans $\times 1$. Hosting ISPs
2. Access providers
3. Mailbox provider
4. Virtual ISPs
Q. 6 एमएस-एक्सेल 2010 (MS-Excel 2010) फॉर्मूला में, कॉलम H से J तक सभी सेल्स को रेफर करने के लिए निम्न में से किस रेफरेंस का उपयोग किया जाता है?

Ans
X 1. H-J
2. H:J
$\times$ 3. $\mathrm{H}:: \mathrm{J}$
X 4. H, J
Q. 7 The keyboard shortcut to paste special values in a worksheet in MS-Excel 2010, is $\qquad$ .

Ans

1. $\mathrm{Ctrl}+\mathrm{Alt}+\mathrm{V}$ then press V
$\times$ 2. Alt +V then press V
$X$ 3. Ctrl + Shift $+V$ then press V
$X$ 4. Shift $+V$ then press V
Q. 8 निम्नलिखित में से कौन सा एक कंप्यूटर है, जो इंटरनेट पर वेबसाइट को होस्ट करता है?

Ans
$\times 1$ वेब ब्राउज़र (Web browser)
$\times$ 2. वेबपेज (Webpage)
$\times$ 3. सर्च इंजन (Search engine)
4. वेब सर्वर (Web server)
Q. 9 एमएस-एक्सेल 2010 में, परिवर्तनों को पूर्ववत करने के लिए $\qquad$ कीबोर्ड शॉर्टकट का उपयोग किया जाता है।

Ans
X 1. Ctrl +C
X 2. $\mathrm{Ctrl}+\mathrm{V}$
X 3. Ctrl + X
(4. Ctrl + Z
Q. 10 The dollar sign (\$) is used to make references $\qquad$ in MS-Excel 2010.

Ans
$X^{1}$. mixed column
$X$ 2. mixed row
) 3. absolute
$\times 4$. relative

Head Constable AWO TPO in Delhi Police Examination 2022

| Roll Number |  |
| :--- | :--- |
| Candidate |  |
| Name |  |$\quad$| Venue Name |
| :--- |
| iON Digital Zone iDZ Village Adampur Raisen Road |
| Exam Date | 28/10/2022 | xxam Time $\quad 4: 00$ PM - 5:30 PM

## Section : Part-A-General Awareness

Q. 1 Which committee is also known as Village and Small Scale Industries Committee?

Ans $\times 1$. Chakravarty Committee
2. Karve Committee
3. PK Mohanty Committee
4. KV Kamath Committee
Q. 2 Which stretch of the Ganga-Bhagirathi-Hooghly river system was declared as the National Waterway No. 1 as per an Act in 1982?

Ans

1. Allahabad to Kolkata
2. Patna to Haldia
3. Allahabad to Patna
4. Allahabad to Haldia
Q. 3 Shahi Atala Masjid is located in which of the following district of Uttar Pradesh?

Ans
X 1. Varanasi
2. Jaunpur
3. Sultanpur
4. Kaushambi
Q. 4 The tableau of which of the following states showcased its contributions in the Indian National Movement during the Republic Day Parade of 2022?
Ans $\quad$ 1. Maharashtra
2. Karnataka
3. Goa
4. Punjab
Q. 5 The first complete census of India was taken in the year of $\qquad$ .
Ans
<1. 1890
X 2. 1872

- 3.1881
$\times 4.1886$
Q. 6 Which of the following is inversely related to the rate of interest?

Ans
X 1. Classical demand for money
Х 2. Transaction demand for money
3. Speculative demand for money

X 4. Precautionary demand for money
Q. 7 The Sanatan Sangeet Sanskriti Award is given by the:

Ans

1. Ram Krishan and Sons Charitable Trust
2. Government of Madhya Pradesh
3. Sangeet Natak Akademy
4. Ministry of Culture and Sport
Q. 8
___, Chief Minister of Nagaland, hoisted the National Flag at the state level celebration of 76th Independence Day at Naga Civil Secretariat Plaza Kohima, on August 15, 2022.
Ans $\times 1$. Pu Zoramthanga
5. Neiphiu Rio

X 3. Prem Singh Tamang (Golay)

4. Conrad K Sangma
Q. 9 Under Stand-Up India Scheme what is the maximum amount a bank can land as a loan?
Ans
X 1 . ₹ 10 lakh
X 2. ₹ 75 lakh
3. ₹50 lakh
4. ₹1 Crore
Q. 10 Scientists from which institute have developed a portable, user-friendly, and noninvasive device for detecting oral cancer in resource-constrained clinical settings in January 2022?
Ans
X 1. IIT, Kanpur
2. IIT, Kharagpur
3. IIT, Roorkee
4. IIT, Guwahati
Q. 11 Which one of the following was the last dynasty of Vijayanagar Empire?

Ans
X 1. Sangama dynasty
2. Aravidu dynasty

X 3. Tuluva dynasty
X 4. Saluva dynasty
Q. 12 The famous "Sundarbans Forests" are found in which of the following states of India?

Ans $\times 1$. Kerala
X 2. Bihar
3. Madhya Pradesh
4. West Bengal
Q. 13 Who among the following was one of the prominent figures of the Justice Party movement?
Ans
X 1. K Ramakrishna Pillai
X 2. Narayan Guru
X 3. Periyar
4. P Theagaraya Chetty
Q. 14 Which of the following states of India does not share the border with Nepal?

Ans
X 1. Uttrakhand
2. Bihar
3. Sikkim
4. Himachal Pradesh
Q. 15 When was the master direction of RBI on microfinance loans implemented?

Ans $\times 1$. January 01, 2022
2. April 01, 2022

X 3. December 01, 2021
X 4. March 01, 2022
Q. 16 In the year 1947, what was the literacy rate in India?

Ans
$\times 1.14 \%$
2. $12 \%$
×3. $15 \%$
×4.18\%
Q. 17 In which of the following months India-Maldives Joint Statement was released during the Official Visit of the President of the Maldives to India?
Ans

1. September 2022
2. June 2022
3. August 2022
4. July 2022
Q. 18 The story of the monkey king is shown on a piece of sculpture found from a stupa at
$\qquad$ in Central India.
Ans
X1. Amravati
5. Nagarjunakonda
6. Lumbini
7. Bharhut
Q. 19 In the national movement of India, which of the following Committees/Commissions had demanded a bill of rights for Indians?

Ans
X 1. Cripps Committee
2. Jinnah Committee
3. Simon Commission
4. Motilal Nehru Committee
Q. 20 Which gadget developed by the Indian Institute of Technology, Ropar, resembles a USB flash drive, continuously records the temperature of its immediate surroundings "from -40 to +80 degrees in any time zone for a complete 90 days on a single charge
Ans

1. AmbiTag
2. TempTag
3. EnviTab
4. TempCount

## Section : Part-B-General Science

Q. 1 In which of two groups of elements have highly negative electron gain enthalpies and readily add one or two electrons respectively to attain the stable noble gas configuration?

Ans
X 1 . Group 17 and Group 18
2. Group 16 and Group 17
3. Group 14 and Group 15
4. Group 15 and Group 16

## Q. 2 Kepler's law of areas, relates to

Ans $\times 1$. Conservation of linear momentum
2. None
3. Conservation of angular momentum
4. Constant angular speed
Q. 3 Which of the following is NOT a Dobereiner's triad?

Ans
X 1. Li, Na and K
2. $\mathrm{Cl}, \mathrm{Br}$ and I
3. $\mathrm{Ca}, \mathrm{Sr}$ and Ba
4. $\mathrm{Be}, \mathrm{Al}$ and Ca
Q. 4 Rounding off 3.435 to 3 significant figures will give $\qquad$
Ans
$\times 1.3 .45$
< 2.3 .55
3. 3.56
4. 3.44
Q. 5 ' $P$ ' of a body is defined as product of mass and velocity. What is $P$ here?

Ans $\times 1$. Pressure (scalar quantity)
X 2. None
3. Momentum (vector quantity)

X 4. Pressure (vector quantity)
Q. 6 Which of the following is INCORRECT statement about magnetic dipole moment?

Ans $\quad$ 1. The individual atoms of oxygen possess a permanent magnetic dipole moment of its own.
Х 2. The individual atoms of Gadolinium possess permanent magnetic dipole moment of its own.

X 3. The individual atoms of copper does not possess magnetic dipole moment of its own..
4. The individual atoms of bismuth possess permanent magnetic dipole moment of its own.
Q. 7 The pressure-volume curve for a fixed temperature is called

Ans
X 1. Isobar
2. Isotherm
$\times 3$. Isochors
X 4. Isotope
Q. 8 The smallest value that can be measured by the measuring instrument is called

Ans
X 1. Relative count
$X$ 2. Minimum count
3. Least count


X4. Absolute count
Q. 9 Arrange the following materials in ascending order based on its conductivity at 298.15 K
(a) Copper
(b) Sodium
(c) Iron
(d) Gold

Ans

1. (c ), (b ), (d )and (a ).

X 2. (a ), (b ), (d )and (c ).
X 3. (d), (a ), (c )and (b ).
X 4. (b ), (c ), (a )and (d ).
Q. 10 Which law states that 'Every body in the universe attracts every other body with a force which is directly proportional to the product of their masses and inversely proportional to the square of the distance between them.'?
Ans
X 1. Kepler's law of planetary motion
2. Newton's law of gravitation

X 3. Law of terrestrial gravitation
X 4. Law of universal attraction
Q. 11 In an adiabatic process of an ideal gas

PVY= constant
where
Ans

1. $y=\mathrm{Cp} / \mathrm{Cv}$

X 2. $y=C p$ * Cv
X 3. $\mathrm{y}=\mathrm{Cv} / \mathrm{Cp}$
4. $y=C p-C v$
Q.12 What is the number of elements of the earth's magnetic field?

Ans
$\times 1$. Four
X 2. Two
X 3. Five
4. Three
Q. 13 In Newton's third law of motion the force acting on two bodies is

Ans
Х 1 . Not equal in magnitude but direction is same
X 2. Not equal in magnitude but opposite in direction
3. Equal in magnitude but opposite in direction
4. Equal in magnitude but same in direction
Q. 14 Which of the following is broad spectrum antibiotic?

Ans
X 1. Erythromycin
X 2. Penicillin G
3. Chloramphenicol

X 4. Gentamycin
Q. 15 $\qquad$ are a class of chemical compounds used for the treatment of stress, and mild or even severe mental diseases.

Ans

1. Tranquilizers
2. Antibiotics
3. Antiseptics
4. Analgesics
Q. 16 Oxidation state of oxygen is positive in which compound?

Ans
$\times 1 . \mathrm{H}_{2} \mathrm{O}$
2. $\mathrm{OF}_{2}$
3. $\mathrm{H}_{2} \mathrm{O}_{2}$
4. $\mathrm{SO}_{2}$
Q. 17 The dimension of resistance is $\qquad$ _.
Ans
X 1. $\left[\mathrm{M} \mathrm{L}^{-2} \mathrm{~T}^{3} \mathrm{~A}^{-2}\right]$
2. $\left[M L^{2} T^{-3} A^{-2}\right]$
3. $\left[M L^{2} T^{-3} A^{2}\right]$
4. $\left[M L^{3} \mathrm{~T}^{-2} \mathrm{~A}^{-2}\right]$
Q. 18 Which of these contracts the smooth muscles in the bronchi and gut and relaxes other muscles, such as those in the walls of fine blood vessels?
Ans
X 1. Terfenadine
2. Histamine

X 3. Brompheniramine
4. Chlordiazepoxide
Q. 19 arise from the errors due to imperfect design or calibration of the measuring instrument, zero error in the instrument, etc.

Ans $\quad$ 1. Relative Error
2. Least count error
3. Instrumental errors
4. Random errors
Q. 20 In ferromagnetic material what is the size of typical domain and how many numbers of atoms individual domain contain?

Ans
X1. 1.2 mm , about $10^{11}$ atoms
2. 1 mm , about $10^{11}$ atoms
3.1 .1 mm , about $10^{12}$ atoms
4.1 mm , about $10^{13}$ atoms
Q. 21 Which of the following gas can be polymerised to produce a polymer when exposed to vapours of iodine?

Ans
X 1. Methane
2. Ethylene
3. Chlorine
4. Acetylene
Q. 22 Who extrapolated simple observations on motion of bodies on inclined planes?

Ans
X 1. Aristotle
2. Newton
3. Thomson
4. Galileo
Q. 23 Which of the following statement does not apply to saccharin?

Ans

- 1. Saccharin is about 100 times as sweet as cane sugar.

X 2. Saccharin is the first popular artificial sweetening agent.
X 3. Saccharin was discovered in 1879.
4 4. Saccharin is excreted from the body in urine unchanged.
Q. 24 Given are the statements about primary and secondary batteries. Identify the correct statement (s).
(I)Mercury cell is suitable for low current devices like hearing aids, watches, etc.
(II)Leclanche cell is used commonly in our transistors and clocks.
(III)Lead storage battery is commonly used in automobiles and invertors.

Ans
X 1 . Only II

- 2. I, II and III

X 3. Only III
X4. Only I
Q. 25 Current per unit area (taken normal to the current), I/A, is called $\qquad$
Ans
X 1. Conductivity
X 2. Relative density
X 3. Resistivity
4. Current density

## Section: Part-C-Mathematics

Q. 1 If the volume of a sphere is 8 times that of another sphere, then what is the ratio of their surface areas?

Ans

- 1.4:1
$\times 2.2: 3$
X 3.4 :3
X4.8:1
Q. 2 If $\sqrt{x}-\frac{1}{\sqrt{x}}=\sqrt{2}$, then the value of $x^{3}+\frac{1}{x^{3}}$ is:

Ans

1. 52
$\times 2.44$
$\times 3.50$
$\times 4.56$
Q. 3 Study the given figure.


What is the distance between the centres of the given circles?
Ans
$\times 1.5 \sqrt{3} \mathrm{~cm}$
2. $5 \sqrt{5} \mathrm{~cm}$
×3. $5 \sqrt{4} \mathrm{~cm}$
x4. $5 \sqrt{2} \mathrm{~cm}$
Q. 4 What is the value of the given expression?

$$
\frac{99}{6 \text { of } 3}+\frac{58}{116}+4(11-2 \times 2.25)
$$

Ans
$\times 1.31$
$\times 2.57 .5$

- 3.32
$\times 4.33 .5$
Q. $5 \frac{1}{3}$ of $40 \%$ of a number is equal to $\frac{1}{5}$ of $30 \%$ of another number. What is the respective ratio of the first number to the second number?
Ans $\times 1.4: 9$
X2.4:15
2.9:20
4.3:5
Q. 6 If the area of the base of a right circular cone is $157 \mathrm{~cm}^{2}$ and its slant height is $\sqrt{491} \mathrm{~cm}$, then the volume of the cone is $\qquad$ _.
(Use $\pi=3.14$.)
Ans
$\times 1.997 \mathrm{~cm}^{3}$

2. $1172 \mathrm{~cm}^{3}$
3. $1099 \mathrm{~cm}^{3}$
$4.986 \mathrm{~cm}^{3}$
Q. 7 Find the area of a sector having the arc length 22 cm that subtends an angle $60^{\circ}$ at the centre of the circle?
(Use $\pi=\frac{22}{7}$ )
Ans $\times 1.234 \mathrm{~cm}^{2}$
4. $324 \mathrm{~cm}^{2}$
5. $231 \mathrm{~cm}^{2}$
$4.321 \mathrm{~cm}^{2}$
Q. 8 In the given figure, all measurements are in centimetres. What are the values of a and b (both in cm ), respectively?


Ans
X 1. 26,10
$\times 2.31 .2,28.8$
X 3.10, 26
4. 28.8, 31.2
Q. 9 Express $0.34 \overline{6}$ as a vulgar fraction.

Ans
$\times 1 . \frac{315}{900}$
×2. $\frac{313}{900}$

- 3. $\frac{312}{900}$
$\times 4 . \frac{314}{900}$
Q. 10 What is the number of integral solutions for the equation lal $+\mathbf{l b l}+\mathbf{I c |}=\mathbf{2 7}$ ?

Ans
X 1.2727
2. 2918
$\times 3.2048$
X4. 2024
Q. 11 Aman buys a refrigerator priced at Rs. 68,500 . He pays Rs. 18,500 at once and the rest after 22 months on which he is charged simple interest at the rate of $15 \%$ per annum. The total amount he pays for the refrigerator is:
Ans
X 1.Rs.82,200
2. Rs. 82,250

X 3.Rs.82,550
4. Rs.63,750
Q. 12 The equation of a circle $C 1$ is $x^{2}+y^{2}=4$. The equation of a circle $C 2$ is $x^{2}+y^{2}+6 x+8 y+16=0$. What is the number of common tangents between the two circles?

Ans
$\times 1.4$
2. 3
(3.1
4. 2
Q. 13 In a Maths quiz 10 students scored 20 marks, six students scored 19 marks, five students scored 18 marks, four students scored 17 marks, and two students scored 12 marks. The average marks scored by the class (correct to 2 decimal places) is:
Ans
$\times 1.17 .34$
2. 18.37
$\times 3.15 .23$
X4. 16.25
Q. 14 One boy and one girl together can complete a piece of work in 4 days. One boy alone can complete the work in 5 days. In how many days can one girl alone complete the work?

Ans
X 1.22 days
X 2. 10 days

- 3.20 days

X4.15days
Q. 15 Ten chairs are placed in a row which have to be occupied by 8 students and two teachers. The two teachers decide not to sit together. If there are $n$ such arrangements of occupying the seats, then what is the sum of digits of $n$ ?

Ans

1. 18
$\times 2.19$
$\times 3.17$
$\times 4.16$
Q. 16 The fourth proportional of $x y^{2}, x^{2} y, x y$ is:

Ans
$X 1 . y^{2}$
X2. x
X3.y
4. $x^{2}$
Q. 17 Find the compound interest on Rs.15,625 in 2 years at 8\% per annum, the interest being compounded half-yearly.
Ans
X 1.Rs.8,279.04
2. Rs.8,654.04
3. Rs.18,279.04
4. Rs.2,654.04
Q. 18 Let $a_{1}, a_{2}, a_{3}, \ldots, a_{11}, a_{i}>0$ for $1,2,3, \ldots$ be a geometric progression and let $S_{n}$ be the sum of first $n$ terms. If $a_{2} a_{4}$
$=1$ and $\mathrm{S}_{3}=7$, then $\mathrm{S}_{5}$ is equal to
Ans
$\times 1 . \frac{47}{4}$
X2. $\frac{19}{2}$$\frac{31}{4}$
X4. $\frac{63}{8}$
Q. 19 If $4 \tan A=9$, then $\frac{4 \sin A-\cos A}{4 \sin A+\cos A}+3=$ ?

Ans

1. $\frac{11}{15}$
2. $\frac{19}{5}$
3. $\frac{13}{5}$

X4. $\frac{16}{5}$
Q. 20 Two stations, A and B, are 1570 km apart. One train starts from A at 7:00 am and travels towards $B$ at $80 \mathrm{~km} / \mathrm{h}$. Another train starts from $B$ at 9:00 am and travels towards A at a speed of $108 \mathrm{~km} / \mathrm{h}$. At what time (in 24-hour clock time) will the two trains meet?

Ans

1. $16: 30$
$\times 2.14: 45$
X 3. 16:45
$\times 4.14: 20$
Q. 21 The percentage profit earned by selling an article for $₹ 1,960$ is equal to the percentage loss incurred by selling the same article for ₹1,640. At what price should the article be sold to make a $\mathbf{2 0 \%}$ profit?
Ans
X 1 . ₹ 1,800
2. ₹2,160
× 3. ₹3,600
X4. ₹1,820
Q. 22 There are four numbers written in descending order. The first three of them form an arithmetic progression and the last three form a geometric progression. The sum of the first and last numbers is 16 and the sum of the other two numbers is 12. The sum of the squares of the given four numbers is

Ans

1. 316
2. 336
$\times 3.306$
-4. 308
Q.23 An electric fan lists at Rs. 265.80 and is sold at a discount of $10 \%$. The shopkeeper gives a further discount of $8 \%$ for cash payment. The selling price of the fan, when payment is made in cash, is:
Ans
X 1.Rs.210.07
X 2. Rs.239.22
3. Rs.220.08
4. Rs. 250.00
Q. 24 Pabitra takes twice as long as Kader or three times as long as Rahim to complete a task. If they work together, they can complete the task in 2 days. How long will it take Kader to complete the task on his own?
Ans
5. 6 days

X 2.5 days
X 3.12 days
X 4.8 days
Q. 25 Study the given table and answer the question(s) that follow(s).

The marks obtained by four students A, B, C and D in Mathematics, Statistics and Computers are given in the following
table.

| Students $\rightarrow$ /Subjects $\downarrow$ | A | B | C | D |
| :--- | :---: | :---: | :---: | :---: |
| Mathematics | 60 | 50 | 70 | 75 |
| Statistics | 70 | 45 | 60 | 80 |
| Computers | 80 | 55 | 55 | 75 |

Which student scored the highest average marks as per the given data?
Ans
X1.c
X2.A
$\times 3$. B

- 4.D
Q. 1 Select the figure that will come in place of the question mark (?) in the following figure series.


Ans
$\times 1$.

$\times 2$.

$\times 3$.


- 4. 


Q. 2 Six students are sitting around a circular table facing the centre. Kapil is sitting second to the left of Tia. Bhanu is sitting third to the right of Piya. Ritu is an immediate neighbour of both Tia and Bhanu. Kapil is an immediate neighbour of Arjun and Piya. Who is sitting between Bhanu and Kapil?

Ans
X 1 . Tia
2. Arjun

X 3. Ritu
X 4. Piya
Q. 3 Select the option that represents the correct order of the given words as they would appear in an English dictionary.

1. Arteriolar
2. Artificial
3. Artworks
4. Arthritides
5. Articulation
6. Artemisia

Ans
X 1.4,6,1,2,5,3
2. 6, 1, 4, 5, 2, 3

X 3.6,1,2,5,4, 3
4. $4,6,1,5,2,3$
Q. 4 यदि
'B \% D' का अर्थ है ‘B, D का ससुर है',
' $B \& D$ ' का अर्थ है ' $B, D$ का भाई है',
' $B$ \# D' का अर्थ है ' $B, D$ की पत्नी है', ' $B$ \$ $D$ ' का अर्थ है ' $B, D$ का पुत्र है', और ' $B$ @ $D$ ' का अर्थ है ' $B, D$ की माता है', तो निम्न व्यंजक में $N$ का $Q$ से क्या संबंध है? L \# N \$ O @ P \# Q
Ans $\times 1$. माता की बहन (मौसी)
2. पत्नी का भाई (साला)
3. भाई

X4. भाई का पुत्र (भतीजा)
Q. 5 Select the correct combination of mathematical signs to sequentially replace the *
signs and to balance the given equation.
145 * (156 * 12) * 71 * 157 * ( 35 * 2)
Ans
<1.,,,$+-+ \div, \times,=$
$\times 2$.
3.
4. $\times,+,-,=,-, \div$
Q. 6 सात मित्रों, L, M, N, O, P, Q और R में से प्रत्येक की आयु अलग-अलग है। R, L से बड़ा है। L, M से बड़ा है। $N$ सबसे बड़ा है। केवल दो व्यक्ति $Q$ से बड़े हैं। $O$ सबसे छोटा नहीं है। केवल एक व्यक्ति $M$ से छोटा है। कितने व्यक्ति $R$ से बड़े हैं?
Ans
$\times 1.6$
(2. 4
3. 3
4.5
Q. 7 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
Some books are sticks.
Some sticks are shoes.
Some shoes are mobiles.
Conclusions:
I. Some mobiles are sticks.
II. Some shoes are books.
III. Some mobiles are books.

Ans

1. None of the conclusions follow
2. Only conclusion I follows
3. Only conclusion II follows

X 4. Only conclusion III follows
Q. 8 Which of the following numbers will replace the question mark (?) in the given series?

2, 22, 12, 32, 22, ?, 32
Ans
$\times 1.12$
$\times 2.22$
$\times 3.52$
4. 42
Q. 9 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
All dogs are cats.
Some cats are rats.
All rats are bats.
Conclusions:
I. Some bats are dogs.
II. Some rats are dogs.
III. Some bats are cats.


Ans $\times 1$. Only conclusion II follows
2. Only conclusion III follows

X 3. Only conclusion I follows
X 4. All conclusions follow
Q. 10 1,2,3,4, 5 and 6 are written on different faces of a dice. Three different positions of the same dice are shown below. Find the number on the face opposite to the one showing ' 1 '.

tigure 3

Ans
$\times 1.2$
2. 3
$\times 3.5$
$\times 4.4$
Q. 11 Which two signs and numbers need to be interchanged to make the following equation correct?
$110+(92 \div 4)-70+(23 \times 2)=178$
Ans
X 1. 110 and $70,-$ and $\times$
X 2. 110 and $92, \div$ and $\times$
X 3. 70 and $23,-$ and $\times$
4. 23 and $92, \div$ and $\times$
Q. 12 A paper is folded and cut as shown below. How will it appear when unfolded?


Ans

Q. 13 Select the set in which the numbers are related in the same way as are the numbers of the given sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)
(28, 60, 22)
$(349,1630,186)$
Ans
X 1. $(28,140,13)$
X 2. $(69,54,15)$

- 3. $(77,320,45)$

X4. $(987,556,431)$
Q. 14 Pointing towards a person in the photograph, Raj said, "She is the only daughter of my grandfather's only son, Ajay." Ajay has one daughter and one son. How is the person in the photograph related to Raj?
Ans
X 1. Mother's sister
X 2. Father
X 3. Mother
4. Sister
Q. 15 Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.
fiwi. $\qquad$ f___p potsf_w_pots
Ans
X 1. wiiipoti
X 2. potiiwww
3. potiwiii

X4. ptiwiiio
Q. 16 Select the figure from among the given options that can replace the question mark (?) in the following series.


Ans

$\times 3$


Q. 17 In a certain code language, 'HINDI' is written as ' 96 ' and ' $R$ RENCH' is written as ' 114 '. How will 'ARABIC' be written in that language?
Ans
$\times 1.128$
$\times 2.40$
d. 3.134
$\times 4$.
4. 93
Q. 18 Six friends $S, T, U, V, W$ and $X$ are sitting around a circular table facing the centre. $X$ is sitting third to the left of $U . V$ is sitting second to the left of $X$. $U$ is the only one sitting between T and V . S is sitting third to the left of V . Who is sitting between S and W ?
Ans
$\times 1 . U$
$\times 2$.

- 3. $x$

X4.V
Q. 19 Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.

Ans

1. juaaaain
2. juaajaan
3. jujnaaaa
4. jujaaaan
Q. 20 In a certain code language, 'SOFTEN' is written as 'ETNOSF' and 'HEIGHT' is written as 'HGTEHI'. How will 'DINNER' be written in that language?

Ans
X 1. RNEIND
X 2. RDINNE
3. ENRIDN
4. ERNDIN
Q. 1 In MS-Excel 2010, which of the following function returns the serial number of the current date and time?

Ans
$X$ 1. NOT
2. NPER
3. NOW
4. NPV
Q. 2 Which of the following function in MS-Excel 2010 converts a text string to all lowercase letters?

Ans

1. PROPER
2. LOWER
3. UPPER
4. TEXT
Q. 3 FTP stands for:

Ans
$X$ 1. File Type Protocol
2. File Transfer Protocol
$X$ 3. File Telnet Protocol
$\times$ 4. File Transit Protocol
Q. 4 In MS-Excel 2010, click the cell that contains the data that you want to edit and then press $\qquad$ key. It starts Edit mode and positions the cursor at the end of the cell contents.

Ans 1. F2
2. F3

X 3. F4
X4. F1
Q. 5 The $\qquad$ of the email is a single line of text that the person sees when they get the email from anyone.

Ans
$X$ 1. signature
$\checkmark$ 2. subject line
$X$ 3. meta data
X4. body
Q. 6 Which of the following option is a feature that gives more control of how the content is displayed or functions when pasted from the Clipboard in MS-Word 2010 ?

Ans
$X$ 1. Paste Control
$X$ 2. Paste Design
$\checkmark$ 3. Paste Special
X 4. Paste Details
Q. 7 In MS-Excel 2010, the $\qquad$ displays the name of the spreadsheet.

Ans
$X$ 1. Task bar
$\times$ 2. Status bar
X 3. Tool bar
4. Title bar
Q. 8 function in MS-Excel 2010 enables a user to save the changes that have been made in the primary file in a new
file.
Ans

1. Save As
$\times$ 2. Save
$X$ 3. Open
X4. New
Q. 9 Which of the following is not a method of Internet access?

Ans

1. Hotspots
$X$ 2. Wireless connection
$X$ 3. Broadband
$\checkmark$ 4. Coolspots
Q. 10 To bold the text in MS-Excel 2010 the following shortcut key is used:

Ans $\quad \times 1 . \mathrm{Ctrl}+\mathrm{I}$
X 2. $\mathrm{Ctrl}+\mathrm{X}$

- 3. $\mathrm{Ctrl}+\mathrm{B}$

X 4. $\mathrm{Ctrl}+\mathrm{U}$

Head Constable AWO TPO in Delhi Police Examination 2022

| Roll Number |  |
| :---: | :---: |
| Candidate Name |  |
| Venue Name | iON Dizital Zone Faridabad |
| Exam Date | 28/10/2022 |
| Exam Time | 9:00 AM - 10:30 AM |
| Subject | Head Constable AWO TPO in Delhi Police Examination 2022 |

## Section : Part-A-General Awareness

Q. 1 Which of the following movements of Mahatma Gandhi was his first movement in British India against indigo planters?
Ans $\times 1$. Ahmadabad Satyagraha
2. Champaran Satyagraha

X 3. Non-Cooperation Movement
X 4. Kheda Satyagraha
Q. 2 Which of the following is the regulatory body for microfinance institutions in India?

Ans
X 1. NABARD
X 2. SIDBI
3. Reserve Bank of India
4. State Bank of India
Q. 3 The tableau of which of the following states showcased the resistance of indigenous people towards the British Imperial Policy during the Republic Day Parade of 2022?
Ans

1. Arunachal Pradesh

X 2. Punjab
X 3. Maharashtra
4. Uttar Pradesh
Q. 4 Gopi Krishna, a great personality in Kathak and famous as an Indian dancer, actor and choreographer belong to which gharana?
Ans
X 1. Jaipur
2. Banaras
3. Lucknow
4. Raigarh
Q. 5 As per 2018, what is the number of mobile subscribers per 100 people in India?

Ans $\times 1.71$
$\times 2.95$

- 3.87

X4.65
Q. 6 Who is known as the father of Indian Census?

Ans
$\times 1$. Thomas Jefferson
2. Henry Walter

X 3. Yuzo Morita
X 4. Chandra Sumsher Rana'
Q. 7 During whose reign was Devagiri renamed Daulatabad?

Ans

1. Muhammad-bin-Tughlaq
2. Akbar
3. Alauddin Khilji
4. Iltutmish
Q. 8 What is e-Sawari that was launched by Niti Ayog in December 2021 in partnership with Convergence Energy Service Limited (CESL) and World Resources Institute, India (WRI India), and supported by Transformative Urban Mobility Initiative (TUMI)?
Ans
X 1. Portal for all information on electric vehicles
X 2. Mobile app for state run buses and Indian railways
X 3. Scheme for $100 \%$ electrification of broad gauge railway routes across India
5. Electric Bus Coalition for Accelerating deployment of e-buses in India
Q. 9 Henry Vivian Derozio is related to which of the following movement?

Ans
X 1. Barelvi Movement
2. Young Bengal Movement

X 3. Wahabi Movement
X 4. Ahmadiyya Movement
Q. 10 Sir Michael O' Dwyer was the Lieutenant Governor of Punjab when the Jallianwala Bagh massacre occurred in Amritsar in 1919. Who among the following killed him after 21 years of the incident?
Ans
X 1. Khudiram Bose
2. Sardar Udham Singh

X 3. Prafulla Chaki
X4. Bhagat Singh
Q. 11 हरित क्रांति में 'हरित' शब्द $\qquad$ को संदर्भित करता है।
Ans
X1. पैसे
2. फसलें

X 3. रंग
X 4. समृद्धि
Q. 12 According to the census of India 2011, correctly match the distribution of population in percentage
along with different states. Choose the correct option.

| State |  | Distribution of population in percentage approximately |  |
| :--- | :--- | :--- | :--- |
| 1 | Andhra Pradesh | a | 7 |
| 2 | Maharashira | b | 9 |
| 3 | Uttar Pradesh | c | 16 |

Ans
X1.1-a,2-c, 3-b
2. 1-a, 2-b, 3-c
×3.1-b,2-a, 3-c
X4.1-c, 2-b, 3-a
Q. 13 Which of the following countries introduced world's first dual-mode vehicle that can run on roads and tracks?

Ans
X 1. United State of America
X 2. Germany
3. Japan
$\times 4$. China
Q. 14 The 'e-Amrit' project launched by the Government of India in November 2021 is related to:
Ans $\quad \times 1$. milk products
X 2. cereals and pulses
3. electric vehicles

X4. forestation
Q. 15 In which of the following places in India, the day temperature rises to $50^{\circ}$ Celsius and drops down to near $15^{\circ}$ Celsius the same night?
Ans
X 1. Thiruvananthapuram
X 2. Drass
3. Thar desert

X4. Chennai

## Q. 16 Which of the following does NOT include high powered money?

Ans
X 1. Cash reserves of bank
X 2. Other deposits of the RBI
3. Post office savings

X 4. Currency held by the public
Q. 17 Law of giving effect to fundamental rights can only be made by the $\qquad$ -.

Ans
$\times 1$. High Court
X 2. President
3. Parliament

X 4. Supreme Court
Q. 18 Kailasanathar Temple is located in which of the following states of India?

Ans
X 1. Karnataka
2. Tamil Nadu

X 3. Odisha
X 4. Telangana
Q. 19 Which Indian political leader was awarded with Bhutan's highest civilian honour called the Order of the Druk Gyalpo in December 2021?

Ans

1. Arvind Kejriwal
2. Rahul Gandhi
3. Narendra Modi
4. Mamata Banerjee
Q. 20 Mehtab Bagh is the part of the which of the following famous monuments of India?

Ans
X 1. Rashtrapati Bhavan
2. Humayun's Tomb
3. Taj Mahal
4. Bibi Ka Maqbara

## Section : Part-B-General Science

Q. 1 The element having second highest electro negativity

Ans
X 1. Fluorine
2. Sulphur
3. Oxygen
4. Chlorine
Q. 2 Identify the correct statement about detergents. (I)Cationic detergents have germicidal properties and are expensive.
(II)Liquid dishwashing detergents are non-ionic type.
(III)Anionic detergents are also used in toothpastes.

Ans
X1. I and III
2. I and II

X 3. II and III
4. I, II and III
Q. 3 Which of the following is CORRECT regarding Ohms law

Ans
X1. $\mathrm{R}=\mathrm{V}$
2. Val
3. $\mathrm{R} \alpha \mathrm{I}$
4. $V=1$
Q. 4 Which of the following is a soapy liquid with large molecular size of the order of $10^{-9}$
m ?
Ans $\times 1$. Palmitic acid
2. Stearic acid
3. Lauric acid
4. Oleic acid
Q.5 Which of the following elements has the highest Conductivity at 298.15 K?

Ans
X 1. Gold
X 2. Iron
3. Copper
$\times 4$. Sodium
Q. 6 A potential difference develops between the electrode and the electrolyte which is called
Ans

1. Electrode potential
2. Cell potential
3. Cell electromotive force
4. Standard electrode potential
Q. 7 Who among the following was the first to obtain reliable estimates of molecular parameters from measurable quantities?
Ans
5. James Clerk Maxwell
6. Ludwig Boltzmann
7. John Dalton
8. Amedeo Avogadro
Q. 8 Which of these models resembles the solar system in which the nucleus plays the role of sun and the electrons that of revolving planets?
Ans
9. Röentgen Model of Atom
10. Thomson Model of Atom
11. Bohr's Model of Atom
12. Rutherford's Nuclear Model of Atom
Q. 9 The acceleration of a body moving in a circle of radius $R$ with uniform speed $v$ is $v^{2} / R$ directed towards the centre. Then according to which law, the force $f_{c}$ providing this
acceleration is $f_{c}=m v^{2} / R$

Ans $\times 1$. First law of motion
$\times 2$. Third law of motion
3. Law of Gravitation
4. Second law of motion
Q. 10 Fill in the blanks with suitable words:
'The resistance R not only depends on the $\qquad$ of the conductor but also on the
$\qquad$ of the conductor.'

Ans

1. Size, quality

X 2. Material, conductivity
3. Material, dimensions

X 4. Shape, dimensions
Q. 11 Which of the following drug was designed to prevent the interaction of histamine with the receptors present in the stomach wall?

Ans
X1. Ranitidine
2. Cimetidine

X 3. Terfenadine
X 4. Histamine
Q. 12 Who among the following concluded that an object moving on a frictionless horizontal plane must neither have acceleration nor retardation, i.e., it should move with constant velocity?

Ans
$\times 1$. Thomson
2. Einstein
3. Newton
4. Galileo
Q. 13 A choice of change of different units $\qquad$ the number of significant digits or figures in a measurement.

Ans
X 1. None
2. May or May not change
3. Changes
4. Does not change
Q. 14 In which of the two places in India, a magnetic needle shows the true north quite accurately?
Ans

1. Delhi and Mumbai
2. Kolkata and Delhi
3. Mumbai and Kolkata
4. Delhi and Chennai
Q. 15 Which of the following quantity's dimension is [ MLT ${ }^{-1}$ ]

Ans
X 1. Force.
2. Static friction.
3. Momentum.
4. Kinetic friction.
Q. 16 A superconductor repels a magnet and is repelled by the magnet. The phenomenon of perfect diamagnetism in superconductor is called
Ans
X 1. Lenz's law
2. None
3. Meissner effect
4. Both A and B
Q. 17 Which of the following is NOT used in antiseptics?

Ans
$X 1$. Furacine
2. Veronal
$\times$ 3. Terpineol
4. lodine
Q. 18 Which of the following suggested that the smallest constituent of gases like hydrogen, oxygen and nitrogen are not atoms but diatomic molecules?

Ans $\times 1$. James Clerk Maxwell
2. Ludwig Boltzmann
3. John Dalton
4. Amedeo Avogadro
Q. 19 Which of the following is INCORRECT about gravitational force?

Ans
X 1. Directly proportional to product of point masses
X 2. Always attractive in nature
X 3. Inversely proportional to square of distance between point masses
4. It depends on surrounding
Q. 20 What is the Value of gravitational constant?

Ans
X $1 . G=6.67 \times 10^{12} \mathrm{~N} \mathrm{~m}^{2} / \mathrm{kg}^{2}$
2. $G=6.67 \times 10^{-12} \mathrm{~N} \mathrm{~m}^{2} / \mathrm{kg}^{2}$
3. $G=6.67 \times 10^{-11} \mathrm{~N} \mathrm{~m}^{2} / \mathrm{kg}^{2}$
$4 . G=6.67 \times 10^{11} \mathrm{~N} \mathrm{~m}^{2} / \mathrm{kg}^{2}$
Q. 21 $\qquad$ is the vertical plane which passes through the imaginary line joining the magnetic north and south poles.
Ans
X 1. Geographic meridian
X 2. Inclination
X 3. Declination
4. Magnetic meridian
Q. 22 Given are the statements about fuel cells. Identify the correct statements.
(I)Fuel cells convert the energy of combustion of fuels like hydrogen, methane,
methanol, etc. directly into electrical energy.
(II)Fuel cells produce electricity with an efficiency of about $70 \%$ compared to thermal plants whose efficiency is about $40 \%$.
(III)There has been tremendous progress in the development of new electrode
materials, better catalysts and electrolytes for increasing the efficiency of fuel cells.
(IV)Only problem with fuel cells are that these are not pollution free.

Ans
X 1.I, II, III and IV
X 2. I and III
3. I, II and III

X4. II and IV
Q. 23 Size of atom is

Ans
$X 1.1 .2 \times 10^{10} \mathrm{~m}$ in radius
2. $1.2 \times 10^{-10} \mathrm{~m}$ in radius

X $3.2 .2 \times 10^{-15} \mathrm{~m}$ in radius
$\times 4.2 .2 \times 10^{-10} \mathrm{~m}$ in radius
Q. 24 $\qquad$ are those errors that tend to be in one direction, either positive or negative.

Ans
X 1. Random error
2. Systematic error

X 3. Instrumental error
X 4. Personal error
Q. 25 Which of the following statement is NOT correct regarding drugs?

Ans
X 1. Birth control pills essentially contain a mixture of synthetic estrogen and progesterone derivatives

X 2. Disinfectants are applied to inanimate objects such as floors, drainage system, instruments, etc.
X 3. Norethindrone is an example of synthetic progesterone derivative most widely used
as antifertility drug.
4. Chlorine in the concentration of 0.2 to 0.4 ppm in aqueous solution and sulphur
dioxide in very low concentrations, are analgesics.

[^1]Q. 1 A man invested Rs.96,000 at the rate of $20 \%$ per annum, compounded half-yearly for 1 year. What would be $80 \%$ of the amount (in Rs.) which he will get on maturity?
Ans $\times 1.98,922$
2. 92,928
$\times 3.1,09,856$
4. $1,16,160$
Q. 2 If triangle ABC is congruent to triangle DEF , then $\mathrm{EF}=$ $\qquad$ .


Ans
$\times 1.9$
$\times 2.5$

- 3.6
$\times 4.4$
Q. 3 Two concentric circles are of radius 12 cm and rcm , respectively, where $r>12 \mathrm{~cm}$. A chord of the larger circle of length 32 cm touches the smaller circle. Find the radius $r$ ?
Ans
$\times 1.12 \mathrm{~cm}$

2. 20 cm

X 3.18 cm
4.16 cm
Q. 4 The average of five consecutive even numbers is 66 . Find the difference between the highest and the lowest numbers.
Ans

- 1.8
$\times 2.10$
X 3.6
4.4
Q. 5 In a manufacturing plant, Jack, Smith and Annie can do a job of manufacturing plates
in 15, 20 and 30 days, respectively. In how many days can they finish the work
together?
Ans
$x$ 1. 20 days
$\times 2.7$ days

3. $\frac{20}{3}$ days

X4. $\frac{16}{5}$ days
Q. 6 In the given figure, $A B$ is the diameter of a circle with center $O$ and $A T$ is a tangent if $\angle A O Q=68^{\circ}$, then what is $\angle A T Q$ ?


Ans
$\times 1.65^{\circ}$
$\times 2.62^{\circ}$

- $3.56^{\circ}$
$\times 4.51^{\circ}$
Q. 7 Ramesh sold his bike for ₹ 16,384 and incurred a loss of $20 \%$. At what price should he have sold the bike to gain a profit of $30 \%$ ?
Ans
X 1. ₹27,824
X 2. ₹ 26,724

2. ₹ 26,624

X4. ₹ 26,800
Q. 8
$\frac{1-\frac{5}{8} \div \frac{24}{63} \times \frac{24}{63}}{1+\frac{3}{8} \div \frac{23}{81} \times \frac{23}{81}}=?$

Ans
X1. $\frac{4}{11}$
X2. $\frac{9}{11}$
X 3. $\frac{2}{11}$
4. $\frac{3}{11}$
Q. 9 If the solution of the pair of equations :
$5 x-6 y=57$ and $7 x-4 y=49$ is also a solution of the equation $4 x+m y=19$, then what is the value of $m$ ?
Ans
X1. -2
$\times 2.1$
3. -1
$\times 4.3$
Q. 10 Among 18 members of a cricket club, there are 2 wicketkeepers and 5 bowlers. In how many ways can a team of 11 players be selected to include only one of the wicketkeeper and atleast three bowlers?
Ans
$\times 1.7524$
$\times 2.11682$
$\checkmark$ 3. 12144
X4. 11220
Q. 11 A can do a work in 8 days and $B$ in 12 days. If they work together on it for 3 days, then the fraction of the work that is left is:
Ans

1. $\frac{8}{3}$
2. $\frac{7}{8}$
3. $\frac{3}{8}$

X4. $\frac{5}{8}$
Q. 12 In a room, there are some children and some benches. If 5 children sit on each bench, 2 children will have no bench to sit on. If 6 children sit on each bench, then one bench remains unoccupied. What is the sum of the number of children and the number of benches?
Ans
$\times 1.52$
-2. 50
$\times 3.49$
$\times 4.53$
Q. 13 A person P purchases a washing machine for Rs.22,000 cash or for Rs.9,000 cash down payment and two monthly instalments of Rs.8,000 each. The rate of the simple interest is:

Ans

1. $215 \%$
2. $240 \%$
3. $250 \%$
4. $200 \%$
Q. 14 Find the value of $2 \operatorname{cosec}^{2} 23^{\circ} \cot ^{2} 67^{\circ}-\sin ^{2} 23^{\circ}-\sin ^{2} 67^{\circ}-\cot ^{2} 67^{\circ}$.

Ans ${ }^{1} \cdot \sec ^{2} 23^{\circ}$
2. 1
3. $\tan ^{2} 23^{\circ}$
4. 0
Q. 15

If $\frac{y^{2}-1}{y}=6$, then the value of $\frac{y^{6}-1}{y^{3}}$ will be:
Ans

1. 234
$\times 2.220$
X 3. 254
$\times 4.184$
Q. 16 The list price of an article is Rs.1,200. If it is available on a discount series of $\mathbf{1 0 \%}$, $8 \%$ and $5 \%$, the selling price of the article is:
Ans
X 1.Rs.812.76
2. Rs.943.92

X 3. Rs.1,080.00
X 4.Rs.993.60
Q. 17 Simplify the following expression.
$1243 \times 1243-928 \times 928$
315
Ans
-1.2171
$\times 2.928$
X 3.1243
$\times 4.315$
Q. 18 The price of an A.C. is first increased by $16 \%$, and later on, the price is decreased by $\mathbf{2 2 \%}$ due to reduction in sales. Find the net percentage change in final price of the A.C.
Ans $\times 1$. Decrease of $19.25 \%$
2. Decrease of $9.52 \%$

X 3. Increase of $9.52 \%$
X 4. Increase of 19.25\%
Q. 19 The radius of a roller is 56 cm and its length is 240 cm . It takes 875 complete revolutions to move once over to the level of a playground. Find the area of the playground.
Ans
$1.7392 \mathrm{~m}^{2}$
$\times 2.8400 \mathrm{~m}^{2}$
3. $6389 \mathrm{~m}^{2}$
$4.7650 \mathrm{~m}^{2}$
Q. 20 Two trains start at the same time from stations $P$ and $Q, 1800 \mathrm{~km}$ apart, and proceed towards each other at an average speed of $108 \mathrm{~km} / \mathrm{h}$ and $92 \mathrm{~km} / \mathrm{h}$, respectively. The trains will meet at:
Ans
X 1.828 km from station $P$
X 2.972 km from station Q
X 3.540 km from Station Q

- 4.972 km from station P
Q. 21 In $\triangle A B C, L B=90^{\circ}$ and $B D \perp A C$. If $A C=9 \mathrm{~cm}$ and $A D=3 \mathrm{~cm}$, then $B D$ is equal to:

Ans
$\times 1.2 \sqrt{3} \mathrm{~cm}$
X2. $3 \sqrt{3} \mathrm{~cm}$
X 3. $2 \sqrt{2} \mathrm{~cm}$
4. $3 \sqrt{2} \mathrm{~cm}$
Q. 22 A radii of the bases of the two cylinders are in the ratio 5:7 and their height are in the ratio $3: 5$. Find the ratio of their curved surface areas.

Ans
$\times 1.9: 8$
2. $2: 7$
3. $3: 5$
4. $3: 7$
Q. 23 The following table shows the marks of students A, B, C, D and E in three subjects out of 100 each.

| Name | English | Maths | Science |
| :--- | :--- | :--- | :--- |
| A | 65 | 68 | 69 |
| B | 76 | 74 | 72 |
| C | 68 | 72 | 71 |
| D | 66 | 73 | 71 |
| E | 77 | 78 | 78 |

Which of the following students obtained the highest marks in aggregate?
Ans
X1. C
2. D
3. E
4. B
Q. 24 Ram, Shyam and Ghanshyam have ₹ 32 , ₹ 46 and ₹ 50 , respectively, with them. Their mother asks them to give her equal amounts so that the money held by them now are in continued proportion. Find the amount taken from each of them.
Ans
X 1 . ₹91.36
X 2 . ₹ 51.78
X 3 . ₹ 91.78
4. ₹51.60
Q. 25 If $(3 x+4 y)(5 x-6 y)=a x^{2}+2 h x y+b y^{2}$, then what is the value of $(4 a-h+2 b)$ ?

Ans
$\times 1.13$
$\times 2.107$
$\times 3.108$

- 4.11

Section: Part-D-Reasoning
Q. 1 In a certain code language, 'AIR' is written as ' 84 ', and 'CHAIR' is written as ' 195 '. How will 'LAND' be written in that language?
Ans

1. 124
(2. 128
$\times 3.120$
< 4.132
Q. 2 Which of the following numbers will replace the question mark (?) in the given series?

5, 7, 12, 19, ?, 50
Ans $\times 1.30$
$\times 2.29$

- 3.31
$\times 4.34$
Q. 3 Select the figure from among the given options that can replace the question mark (?) in the following series.


Ans

$\times 2$

$\times 3$.
B
M
18

Q. 4 ' $A$ \% B' means ' $A$ is the husband of $B$ '.
' $A$ \& $B$ ' means ' $A$ is the daughter of $B$ '.
'A @ $B$ ' means ' $A$ is the wife of $B$ '.
' $A$ \# $B$ ' means ' $A$ is the father of $B$ '.
If P @ Q \# B \% Y \& C @ E, then how is B related to E?
Ans $\times 1$. Father-in-law
X 2. Mother
3. Son-in-law
$\times 4$. Father
Q. 5 A paper is folded and cut as shown below. How will it appear when unfolded?


Ans

Q. 6 Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.
gela___k_e_arxtkgel_r_t_
Ans
X 1. rxxgalkt
X 2. rxglaxkt
3. rxtglaxk

X 4. rxlgaxkt
Q. 7 Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.
37 * 23 * 15 * ( 64 * 4 ) * 5 * 125
Ans
<1. $\times,+,-,=,+, \div$
X2. $\div,+,=,+,-, \times$
X $3 . \div,-,+,-, \times,=$
2.,,,$+-+ \div, \times,=$
Q. 8 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
Some mountains are lakes.
Some lakes are fountains.
All fountains are cars.
Conclusions:
I. Some cars are lakes.
II. Some cars are mountains.
III. Some fountains are mountains.

Ans $\times 1$. Only conclusion II follows
X 2. Only conclusion III follows
3. Only conclusion I follows

X 4. None of the conclusions follow
Q. 9 Six students are sitting around a circular table facing the centre. Tulsi is sitting second to the right of Lata. Tulsi is an immediate neighbour of both Devi and Jaya. Amar is sitting second to the right of Tulsi. Amar is an immediate neighbour of both Manu and Jaya. Who is sitting between Amar and Lata?
Ans
X 1. Jaya
X 2. Tulsi
3. Manu
4. Devi
Q. 10 Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.
Statements:
Some umbrellas are mobiles.
Some mobiles are pens.
Some pens are erasers.
Conclusions:
I. Some erasers are mobiles.
II. Some pens are umbrellas.
III. Some erasers are umbrellas.

Ans

1. None of the conclusions follow
2. Only conclusion I follows
3. Only conclusion II follows

X 4. Only conclusion III follows
Q. 11 There are five friends Annie, Babila, Charu, Diksha, Era. Annie is taller than Babila but not taller than Charu. Charu and Diksha are of the same height. Annie is shorter than Era. Who is shortest amongst all?

Ans

1. Era
2. Annie
3. Babila
4. Diksha
Q. 12 Select the set in which the numbers are related in the same way as are the numbers of the given sets.
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)
(12, 71, 3408)
$(3,18,216)$
Ans
X $1 .(13,5,455)$
5. $(9,18,648)$
6. $(41,1148,7)$
7. $(23,15,345)$
Q. 13 A paper is folded and cut as shown below. How will it appear when unfolded?


Ans

Q. 14 Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.
$(\sqrt{289} * 2) * 64 *(96 * 4) * 6$
Ans
Х $1 . \div,=,+,+,-$
Х2. $\times,+,=,+, \div$
3. $\times,=,-, \div,-$
$\times 4 .-, \times,=,-, \div$
Q. 15 Select the option that represents the correct order of the given words as they would appear in an English dictionary.

1. Logwood
2. Logarithm
3. Logically
4. Logophile
5. Logistic
6. Logotype

Ans
X 1.2,5,3, 4, 6, 1
2. $2,3,5,4,6,1$

X 3.2,5,3, 6, 1, 4
4. $2,3,5,1,4,6$
Q. 16 Seven people, A, B, C, D, E, F and G, are sitting in a straight row, facing north. Only two people sit to the right of $D$. Only two people sit to the left of $C$. Only two people sit between D and G. Only three people sit between C and E. A is not an immediate neighbour of $D$. $B$ sits to the right of $D$. Who sits at the extreme left?

Ans
$\times 1$. F
$\times 2$. G
X3.E
4. A
Q. 17 Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.
$\mathrm{O}_{-} \mathrm{O}_{-} \mathrm{O}_{-} \mathrm{O}_{-} \mathrm{D}_{-} \mathrm{L}_{-} \mathrm{N}_{-} \mathrm{ON} \mathrm{N}_{--} \mathrm{ND} \mathrm{N}_{-} \mathrm{N}$
Ans

1. LDNNONODLOO

X 2. NONODOLOLDN
X 3. LDNONNNOOLD
X4. NONDOOLOODL
Q. 18 In a certain code language, 'PIGEON' is written as 'OPFHJQ' and 'TURKEY' is written as 'ZFLSVU'.How will 'PARROT' be written in that language?
Ans
X 1.UPSTCQ
2. UPSSBQ
3. VPSTBQ
4. VQSTCQ
Q. 19 Select the figure that will come in place of the question mark (?) in the following figure series.


Ans

Q. 20 If
' $M=N$ ' means ' $M$ is the father of $N$ ',
' $M$ \# N' means ' $M$ is the sister's son of $N$ ',
' $M \times N$ ' means ' $M$ is the husband of $N$ ',
' $M \& N$ ' means ' $M$ is the sister of $N$ ',
'M \$ N' means ' $M$ is the wife of $N$ ', and
' $M$ @ $N$ ' means ' $M$ is the brother of $N$ ',
then how is $A$ related to $C$ in the following expression?
$A$ \# L = K \& P @ C = B
Ans
X1. Sibling
X 2. Sister-in-law
X 3. Maternal aunt
4. Paternal cousin

[^2]Q. 1 In MS-Excel 2010, a $\qquad$ is at the bottom, where various information about the current mode or any special keys
that are engaged can be seen.
Ans
$X$ 1. Task bar
2. Title bar
3. Status bar

X4. Tool bar
Q. 2 Cc in an email stand for:

Ans
$X$ 1. Copy Carbon
2. Carbon Copy
$X$ 3. Copy Column
X4. Column Copy
Q. 3 The $\qquad$ shortcut key is used to select the entire row in MS-Excel 2010.
Ans $\quad \times 1$. Alt + Spacebar
X 2. $\mathrm{Ctrl}+\mathrm{Alt}+$ Spacebar
, 3. Shift + Spacebar
X 4. $\mathrm{Ctrl}+$ Spacebar
Q. 4 $\qquad$ is not a search engine.

Ans
$X$ 1. Google
$\times$ 2. Yandex
3. Gmail
$\times 4$. Bing
Q. 5 Which of the following built-in function is used to generate random text when creating a MS-Word 2010 document, template for mockup?

Ans
$X$ 1. CREATE
2. RANDOM
3. GENERATE
4. RAND
Q. 6 Bing search engine is owned by $\qquad$ .
Ans
$X$ 1. Amazon
2. Microsoft
$X$ 3. Google
X4. Yahoo
Q. 7 In MS-Excel 2010, which of the following shortcut is used to open the delete dialog box to deleted selected cells?

Ans

1. Ctrl + '-'

X 2. Shift + '-'
X 3. F4
X 4. Alt + '-'
Q. 8 Which of the following text formatting task is achieved with the help of keyboard shortcut 'Ctrl + E' in MS-Word 2010?

Ans
X 1 . Justify
$X$ 2. Align Right
$X$ 3. Align Left
4. Align Center
Q. 9 In MS-Excel 2010, if value in cell A3 is 300 , value in cell B3 is 225 , value in cell C3 is 180 , D3 value in cell is 350 and value in cell F 3 is 400 then the formula ' $=$ AVERAGE(A3,B3,C3,D3,E3)' in cell $F 3$ will give value as

Ans
X1. 297

- 2. 291

X 3. 292
X4. 290
Q. 10 To reverse the changes done in MS-Excel 2010 sheet, $\qquad$ is used.
Ans
X 1. $\mathrm{Ctrl}+\mathrm{V}$
X2. $\mathrm{Ctrl}+\mathrm{O}$
3. $\mathrm{Ctrl}+\mathrm{Z}$

X 4. $\mathrm{Ctrl}+\mathrm{X}$

Head Constable AWO TPO in Delhi Police Examination 2022

| Roll Number |  |
| :--- | :--- |
| Candidate |  |
| Name |  |$\quad$| Venue Name |
| :--- | iON Digital Zone iDZ Sandalpur

Section : Part-A-General Awareness
Q. 1 In which of the following regions did the Indigo Peasant Rebellion occur?

Ans $\times 1$. Mysore
2. Hyderabad
3. Bengal

X4. Awadh
Q. 2 Who among the following was the author of Satyarth Prakash written in 1875?

Ans
X 1. Raja Ram Mohan Roy
X 2. Ramakrishna Paramhansa
X 3. Swami Vivekanand
4. Dayanand Saraswati
Q. 3 The growth of revenue deficit as a percent of fiscal deficit may NOT indicate

Ans $\qquad$ —.

1. an increase in the government revenue
2. lowering the capital formation
3. deterioration in the quality of government expenditure
4. increase in public welfare
Q. 4 Which of the following is NOT true?

Ans
Х 1. In 2019, India ranked $2^{\text {nd }}$ among the world crude steel producers.
2. In 2019, India ranked $1^{\text {st }}$ in per capita consumption of finished steel.
3. In 2019, India was the largest producer of sponge iron.
4. In 2019, India produced 111 million tonnes of crude steel.
Q. 5 Who among the following national leaders of British India was the first to form the Home Rule League in April 1916 in Poona?

Ans $\times 1$. Annie Besant
2. Bal Gangadhar Tilak

X 3. Madan Mohan Malviya
X 4. Indulal Yagnik
Q. 6 Which of the following Mughal rulers built the imperial capital Shahjahanabad?

Ans

1. Shahjahan

X 2. Akbar
X 3. Jahangir
X4. Babur
Q. 7 In Asia Cup 2022, against which of the following countries Virat Kohli scored an unbeaten 122 off 61 balls?

Ans
X 1. Sri Lanka
2. Afghanistan
3. Pakistan
4. Bangladesh
Q. 8 The Tomb of Itimad-ud-Daulaha is located at $\qquad$


X 3. Delhi
4. Lucknow
Q. 9 Which of the following Bharatnatyam dancers received the prestigious title 'Sangeetha kala Vibhushanam' 2020 in Mumbai?

Ans
X 1. Shijith Nambiar and Parvathy Menon
2. Kiran Subramanyam and Sandya Kiran
3. Shanta and Vannadil Pudiaveettil Dhananjay
4. Raja and Radha Reddy
Q. 10 Which of the following is a Fundamental Duty of a citizen?

Ans

1. To preserve rich heritage
$\times 2$. To indulge in a profitable trade
X 3. To propagate religion
2. To set up educational institutions
Q. 11 The $\qquad$ festival is celebrated thrice in a year in Assam.
Ans $\times 1$. Doljatra
X 2. Hareli
3. Bihu

X 4. Kajari
Q. 12 As per the Multidimensional Poverty Index national (MPI) Report by Niti Aayog in 2021, what is the score of India?
Ans
$\times 1.0 .811$
2. 0.118
$\times 3.0 .818$
4. 0.111
Q. 13 Researchers from which institute built a portable desalination unit that generates clear, clean drinking water without the need for filters or high-pressure pumps in April 2022?
Ans

1. Nanyang Technological University, Singapore
2. The Hong Kong University of Science and Technology, Hong Kong
3. Delft University of Technology, Netherlands
4. Massachusetts Institute of Technology, USA
Q. 14 The crude literacy rate in India according to the 2011 Census is $\qquad$ -.
Ans
5. $64.32 \%$
$\times 2.64 .83$ \%
X 3. $82.14 \%$
$\times 4.65 .56 \%$
Q. 15 Which of the following state governments announced in March 2022 to confer the

Sushma Swaraj Award on women for their contribution to different walks of life?
Ans

1. Haryana
2. Uttarakhand
3. Punjab
4. Uttar Pradesh
Q. 16 What was Turkan-i-Chahalgani formed by Iltutmish?

Ans
X 1. Group of 40 elite warriors
2. Group of transferable generals of army
3. Group of 40 trusted slaves
4. Group of 40 Turkish Amirs
Q. 17 Which state of India records the highest reserves of lignite coal as reflected in the data of 2014 from the Mines and Minerals Yearbook?

Ans
X 1. Gujarat
2. Tamil Nadu
3. Jammu and Kashmir
4. Rajasthan
Q. 18 Which of the following is NOT a benefit of SHGs?

Ans
X 1. Social integrity
2. Gender bias

X 3. Banking literacy
X 4. Financial inclusion
Q. 19 Which of the following is a first-of-its-kind hardware/software product which attaches to power wheelchairs to provide security, stability and connectivity through cloud and sensor-fusion technologies launched in February 2021?
Ans
(1. LEXI

X 2. PIE

- 3. LUCI

X4. AMY
Q. 20 When did the Rolling Plan come into effect?

Ans
X 1. After the sixth Five-Year Plan
X 2. After the seventh Five-Year Plan
X 3. After the fourth Five-Year Plan
4. After the fifth Five-Year Plan

## Section: Part-B-General Science

Q. 1 The location magnetic south pole of earth's magnet is at $79.74^{\circ} \mathrm{S}, 108.22^{\circ} \mathrm{E}$ in the
$\qquad$
Ans $\times 1$. New Zealand
X 2. Australia
3. Antarctica
4. Canada

## Q. 2 The word magnet is derived from

Ans

1. Magnesia
2. Electromagnet
3. Ferromagnet
4. Temporary magnet
Q. 3 Find the speed of a vehicle in $\mathrm{km} \mathrm{h}^{-1}$ if its speed is $5 \mathrm{~m} \mathrm{~s}^{-1}$ ?

Ans
$\times 1.72$
$\times 2.20$
3. 18
4. 36

## Q. 4 Norethindrone is

1. combination of estrogen and progesterone
2. synthetic estrogen derivative
3. synthetic progesterone derivative
4. Enzyme inhibitors
Q. 5 Identify the correct option which correctly fill up the blanks in the below three statements related to compass.
(I) A compass needle consists of a $\qquad$ needle which floats on a pivotal point.
(II) Knowing the magnetic $\qquad$ at a place allows us to correct the compass to determine the direction of true north.
(III)In some places on the earth there are deposits of $\qquad$ which cause the compass needle to deviate from the magnetic meridian.
Ans $\times 1$.I- Magnetic, II-direction, III- Magnetic minerals
5. I- Magnetic, II-declination, III- electrochemical minerals
6. I-Electric, II-direction, III-electric minerals
7. I-Magnetic, II-declination, III- Magnetic minerals
Q. 6 When the concentrations of all the species involved in a half-cell is unity then the electrode potential is known as
Ans
8. Redox potential
9. Half-cell potential
10. Standard electrode potential
11. Single potential
Q. 7 The dimension of resistivity is $\qquad$ -.
Ans
X $1 .\left[M L^{-2} T^{3} A^{-2}\right]$
12. $\left[M L^{-3} T^{3} A^{-2}\right]$
13. $\left[M L^{3} \mathrm{~T}^{-3} \mathrm{~A}^{-2}\right]$
14. $\left[\mathrm{M} \mathrm{L}^{3} \mathrm{~T}^{-2} \mathrm{~A}^{-2}\right]$
Q. 8 What is the size of a proton?

Ans

- $1.10^{-15}$
$\times 2.10^{-14}$
$\times 3.10^{-16}$
$\times 4.10^{-12}$
Q. 9 A body of mass 10 kg is acted upon by two perpendicular forces 6 N and 8 N . What will be the magnitude of acceleration of body
Ans
X1. $\mathrm{a}=2 \mathrm{~ms}^{-2}$

2. $a=1 \mathrm{~ms}^{-2}$
3. $a=0$
4. $\mathrm{a}=10 \mathrm{Nkg}-$
Q. 10 Newton's masterpiece Philosophiae Naturalis Principia Mathematica was often simply called the $\qquad$
Ans
X 1. Philosophiae
5. Naturalis
6. Mathematica
7. Principia
Q. 11 A batter hits back a ball straight in the direction of the bowler without changing its initial speed of $20 \mathrm{~m} \mathrm{~s}^{-1}$, If the mass of the ball is 0.25 kg , determine the impulse imparted to the ball. (Assume linear motion of the ball)?
Ans
X 1.62 .5 Ns
8. 5 N s
9. 6.25 N s
10. 10 N s
Q. 12 The concentration of ozone above which breathing becomes uncomfortable resulting in headache and nausea?

Ans
X 1.101 parts per million
2. 100 parts per million
3. 102 parts per million
4. 10 parts per million
Q. 13 What is the number of base units in Système Internationale d' Unites (French for International System of Units), abbreviated as SI?
Ans

1. 7
2. 9
$\times 3$.
X4.8
Q. 14 इलेक्ट्रॉनिक चालकत्व (electronic conductance) निम्नलिखित में से किस पर निर्भर नहीं करता है?

Ans
X 1. तापमान
2. धातु की प्रकृति और संरचना
3. प्रति परमाणु संयोजी इलेक्ट्रॉनों की संख्या
4. दाब
Q. 15 The product of mass $(\mathrm{m})$ of an object and its velocity $(\mathrm{v})=$

Ans
$X$ 1. Force
2. Momentum

X 3. Acceleration
X 4. Displacement

## Q. 16 What is INCORRECT about current?

Ans 1. Currents follows vector law of addition
X 2. It is scalar quantity
3. Current through a given area of a conductor is the net charge passing per unit time through the area.

4 4. Currents do not obey the law of vector addition
Q. 17 Who among the following was able to explain the photoelectric effect using Planck's quantum theory of electromagnetic radiation as a starting point?
Ans
X 1. Faraday.
2. Edison.
3. Franklin.
4. Einstein.
Q. 18 ऊष्मागतिकी में कौन सा नियम, एक ऊष्मा इंजन की दक्षता और एक रेफ्रिजरेटर के निष्पादन गुणांक के लिए एक मूल परिसीमा (fundamental limitation)प्रदान करता है?
Ans

1. ऊष्मागतिकी का द्वितीय नियम
2. ऊष्मागतिकी का शून्य कोटि नियम
3. ऊष्मागतिकी का तृतीय नियम
4. ऊष्मागतिकी का प्रथम नियम
Q. 19 Which of the following statement is TRUE with respect to soaps?

Ans $\quad$ 1. Soaps that float in water are made by dissolving the soap in ethanol and then evaporating the excess solvent.
2. Transparent soaps are made by beating tiny air bubbles before their hardening.
3. Shaving soaps contain glycerol to prevent rapid drying.
4. Toilet soaps contain fillers like sodium rosinate, sodium silicate, borax and sodium carbonate.
Q. 20 Arrange the following elements in ascending order according to its specific heat
(a) Carbon
(b) Silver
(c) Tungsten
(d) Aluminium

Ans $\quad$ 1. ( $b$ ), (d), (c) \& (a)
X 2. (a ), (d), (c ) \& (b )
X 3. (d), (a ), (c ) \& (b )
4. (c ), (b), (a ) \& (d)
Q. 21 Which of the following statements is INCORRECT?

Rutherford's famous $\alpha$-particle scattering experiment, it was observed and concluded that:
Ans
1 1. a small fraction of the $\alpha$-particles was deflected by small angles.
$\times 2$. most of the $\alpha$-particles passed through the gold foil undeflected.
3. Most of the space in the atom is not empty as most of the $\alpha$-particles passed through
the foil undeflected.
X 4. a very few $\alpha$-particles ( $\sim 1$ in 20,000 )bounced back, that is, were deflected by nearly $180^{\circ}$.
Q. 22 Bithionol added to soap acts as

Ans
X 1. buffering agent
2. softener

X 3. Drying agent

- 4. antiseptic
Q. 23 The importance of which drug was so much that it remained the largest selling drug in the world until another drug, ranitidine (Zantac), was discovered?
Ans

1. Cimetidine
2. Brompheniramine
3. Histamine
4. Antihistamines.
Q. 24 The molar conductivity of a $0.3 \mathrm{~mol} / \mathrm{dm}^{3}$ solution of $\mathrm{AgNO}^{3}$ with electrolytic
conductivity of $2.61 \times 10^{-3} \mathrm{~S} \mathrm{~cm}-1$ at 298 K in $\mathrm{S} \mathrm{cm}^{2} / \mathrm{mol}$
Ans
×1. 11.52
5. 8.7

X 3.28 .8
$\times 4.2 .88$
Q. 25 Kepler's laws were extracted from data compiled by

Ans
X 1. Maxwell
2. Tycho Brahe

X 3. Nicolas Copernicus
4. Newton

Section: Part-C-Mathematics
Q. 1 Let R be a point on a straight line PQ. Two Circles are drawn with diameters PR and PQ. Let A be any point on the circumference of the circle with diameter PQ. If PA meets the other circle at $B$, then:
Ans

1. $\mathrm{BR} \| \mathrm{AQ}$
2. $\mathrm{BR}=\frac{1}{2} \mathrm{AQ}$
3. $\mathrm{BR}=\frac{1}{4} \mathrm{AQ}$
$x 4 . \mathrm{BR} \| \mathrm{AQ}$ and $\mathrm{BR}=\frac{1}{2} \mathrm{AQ}$
Q. 2 The amount received on a certain sum for $2 \frac{2}{5}$ years at $15 \%$ p.a. simple interest is $₹ 507$ less than the simple interest on the same sum for $9 \frac{1}{2}$ years at the same rate. The sum (in ₹) is:

Ans
<1.8,000
2. 7,400
3. 7,600
4. 7,800
Q. 3 What is $20 \%$ of $45 \%$ of $\mathbf{8 0 0}$ grams?

Ans
X 1.82 grams
X 2.62 grams
X 3.92 grams
2. 72 grams
Q. $4 A$ and $B$ together completed a piece of work costing Rs. 1,900. A worked for 5 days, $B$ for 6 days. If the daily wages of $A$ and $B$ are in the ratio of $4: 3$ respectively, then how much amount will be received by $A$ ?

Ans
X 1.Rs. 800
X 2. Rs. 900
3. Rs. 1,000
4. Rs. 1,100
Q. 5 The distance between two parallel chords of length 10 cm , each in a circle of diameter 12 cm , is:
Ans
$\times 1.11 \mathrm{~cm}$
2. $2 \sqrt{11} \mathrm{~cm}$
$x$ 3. $\sqrt{6} \mathrm{~cm}$
$\times 4.26 \mathrm{~cm}$
Q. 6

The value of $\frac{1}{2}+\frac{1}{3}-\frac{1}{6} \div \frac{3}{5} \times \frac{3}{5}$ is:
Ans
$\times 1 . \frac{1}{5}$
X2. $\frac{1}{3}$
$\times 3 \frac{2}{7}$
4. $\frac{2}{3}$
Q. $7 \quad A$ and $B$ can accomplish a certain piece of work in 15 days when they work together. $A$ alone can do that work in 30 days. If $A$ and $B$ work for 10 days and then onwards only A works. How long will it take for $A$ to do the remaining task?
Ans
X 1.25 days
X 2. 30 days
X 3.20 days
4. 10 days
Q. 8 The radius of the given circle $=7 \mathrm{~cm}$. What is the area of the major segment?


Ans

1. $153.42 \mathrm{~cm}^{2}$
2. $180.25 \mathrm{~cm}^{2}$
3. $193.41 \mathrm{~cm}^{2}$
$\times 4.125 .58 \mathrm{~cm}^{2}$
Q. 9 What is the volume of a hemisphere whose radius is $\mathbf{6 c m}$ ?
$\times 1.451 .16 \mathrm{~cm}^{3}$
4. $454.16 \mathrm{~cm}^{3}$
$\times 3.453 .16 \mathrm{~cm}^{3}$
5. $452.57 \mathrm{~cm}^{3}$
Q. 10 Aman's average score in a series of tests was ' $y$ '. He appeared in one more test and
obtained score ' $z$ '. If Aman appeared in total ' $n$ ' tests, then which one of the following expression shows his average score for all the tests?
Ans


X2. $y(n-1)+\frac{z}{n}$
$\times 3$.

$$
\frac{y(n-1)+1}{n}
$$

x4. $\frac{\mathrm{y}(\mathrm{n}-1)}{\mathrm{n}}$
Q. 11 A ship goes at a speed of $17 \mathrm{~km} / \mathrm{h}$ downstream and at $13 \mathrm{~km} / \mathrm{h}$ upstream. What will be the speed of the ship in still water?

Ans
X $1.14 \mathrm{~km} / \mathrm{h}$
X2. $16 \mathrm{~km} / \mathrm{h}$
3. $15 \mathrm{~km} / \mathrm{h}$
( $4.13 \mathrm{~km} / \mathrm{h}$
Q. 12 What is the value of the given expression?

$$
32 \div 8+\frac{3}{5} \text { of } 85-\left(\frac{2}{5}+\frac{4}{3}\right) \times 30
$$

Ans
$\times 1.55$
$\times 2.39$

- 3.3
$\times 4.7$
Q. 13 The system of equations: $2 x+3 y=7$ and $(a-b) x+(a+b) y=3 a+b-2$ have infinitely many solutions:

Ans
$\times 1 . a=5, b=3$
2. $a=2, b=3$
3. $a=2, b=1$
4. $a=5, b=1$
Q. 14

If $\cot 18^{\circ}=\frac{p}{q}$, then the value of $\frac{\operatorname{cosec}^{2} 378^{\circ}}{1+\tan ^{2} 378^{\circ}}$ is:
Ans
$\times 1.1$
$\times 2 . \frac{\mathrm{p}}{\mathrm{q}}$
$\times 3 . \frac{p^{3}}{q^{3}}$
4. $\frac{p^{2}}{q^{2}}$
Q. 15 If the sum of the first 100 terms of an arithmetic progression is 50 , and the sum of the first 200 terms is 90 , then what is the sum of the first 300 terms of the progression?
Ans
$\times 1.140$
$\times 2.100$
$\times 3.130$
-4. 120
Q. 16 The length and the breadth of a rectangular field are in the ratio $3: 2$. If the area of the field is $3456 \mathrm{~m}^{2}$, then what is the cost of fencing the field at the rate of Rs. 3.50 per m ?
Ans
< 1. Rs. 240
2. Rs. 840

X 3. Rs. 480
X 4. Rs. 420
Q. 17 If twice the son's age (in years) is added to the age of his father, the sum is 91 . If twice the age (in years) of father is added to the age of the son, the sum is 119 . What is the difference (in years) between the ages of father and son?
Ans
$\times 1.30$
$\times 2.27$

- 3. 28

X4. 29
Q. 18 In a government scheme, if an electricity bill is paid before due date, one gets a reduction of $13.5 \%$ on the amount of the bill. By paying the bill before due date, Ritu got a reduction of Rs. $\mathbf{6 , 0 7 5}$. The amount of her electricity bill was:
Ans
X 1. Rs. 48,000
X 2. Rs. 55,380
X 3. Rs. 60,750
4. Rs. 45,000
Q. 19 study the given table and answer the question(s) that follow(s).

The marks obtained by four students A, B, C and D in Mathematics, Statistics and Computers are given in the following
table.

| Students $\rightarrow /$ Subjects $\downarrow$ | A | B | C | D |
| :--- | :---: | :---: | :---: | :---: |
| Mathematics | 60 | 50 | 70 | 75 |
| Statistics | 70 | 45 | 60 | 80 |
| Computers | 80 | 55 | 55 | 75 |

Find the average score in Mathematics by the given students.
Ans
X 1. $66 \frac{3}{4}$
2. $63 \frac{3}{4}$

X 3. $61 \frac{3}{4}$
$\times 4.63 \frac{1}{4}$
Q. 20 If $y-\frac{1}{y}=2$, then the value of $y^{3}-\frac{1}{y^{3}}$ is equal to:

Ans

- 1.14
$\times 2.3$
$\times 3.21$
$\times 4.18$
Q. 21 If the denominator of a fraction is multiplied by 2 and the numerator is increased by 2 , the fraction becomes $\frac{1}{2}$. If instead, the numerator is multiplied by 2 and the denominator is increased by 2 , it becomes $\frac{6}{7}$. What is the sum of the
numerator and the denominator of the original fraction (in lowest form)?
Ans

1. 11
2. 8
3. 7
4. 6
Q. 22 If interest is compounded half-yearly, then find the compound interest on ₹3,125 at 8\% for 1 year.

Ans

1. ₹ 255
2. ₹254
3. ₹ 253
4. ₹ 252
Q. 23 If $x$ is a natural number such that 18 is the third proportional to $(x+2)$ and $(x+6)$, what is the value of $x$ ?

Ans
1.6
$\times 2.9$
$\times 3.4$
$\times 4.8$
Q. 24 A man sells 10 pens for ₹ 18 gaining $24 \%$. How many pens should he sell for ₹ 1,530 to earn a profit of $55 \%$ ?
Ans
$\times 1.540$
< 2.620
3. 680
<4. 760
Q. $25 \triangle P Q R$ and $\triangle S T U$ are congruent triangles under $A S A$. What are the values of $x$ and $y$, respectively?


Ans $\times 1.90^{\circ}$ and $30^{\circ}$
2. $30^{\circ}$ and $90^{\circ}$
$\times 3.45^{\circ}$ and $75^{\circ}$
$4.75^{\circ}$ and $45^{\circ}$

[^3]Q. 1 Select the correct combination of mathematical signs to sequentially replace the * signs and to balance the given equation.
(279 * 9) * 46 * 24 * (13 * 3)
Ans
ㅅ․ $\div,=,+,+,-$
Х2.,$- \times,=,-, \div$
3. $\div,=,+,-, \times$

人4. $\times,=,-, \div,-$
Q. 2 There are five persons in which Ajay is elder than Sanjeev. Mahesh is elder than Ajay but younger than Kumar. Kumar is elder than Sanjeev. Gaurav is the eldest. Who is the youngest?
Ans

1. Sanjeev

X 2. Ajay
X 3. Mahesh
4. Kumar
Q. 3 Study the given diagram carefully and answer the question. The numbers in different sections indicate the number of persons.

Singer


How many singers are NOT writers and researchers?
Ans
$\times 1.55$
$\times 2.13$

- 3.50
$\times 4.45$
Q. 4 Select the set in which the numbers are related in the same way as are the numbers of the given sets.
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /deleting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)
$(64,112,49)$
(121, 330, 225)
Ans
X 1. $(81,125,1331)$

2. $(256,480,225)$

X 3. $(144,252,441)$
×4. $(25,70,196)$
Q. 5 Select the figure that will come next in the following figure series.


Ans

$\times 3$

$\times 4$.

Q. 6 A \& $B$ means ' $A$ is the wife of $B$ '.
$A$ \# B means ' $A$ is the father of $B$ '.
$A$ @ $B$ means ' $A$ is the son $B$ '.
$A \% B$ means ' $A$ is the husband of $B$ '.
$A+B$ means ' $A$ is the mother of $B$ '.
If $A \& B \# C \& D @ E \% F+G$, then how is $C$ related to $F$ ?
Ans

1. Mother-in-law
2. Daughter-in-law
$\times$ 3. Daughter
X 4. Sister
Q. 7 Which of the following numbers will replace the question mark (?) in the given series? 6, 12, 20, 30, ?, 56
Ans $\times 1.44$
3. 42
$\times 3.32$
$\times 4.22$
Q. 8 ' $M=N$ ' means ' $M$ is the son of $N$ ', ' $M$ \# N' means ' $M$ is the mother's brother of $N$ ', ' $M \times N$ ' means ' $M$ is the husband of $N$ ',
' $M \& N$ ' means ' $M$ is the sister of $N$ ',
' $M$ \$ N' means ' $M$ is the wife of $N$ ', and
' $M$ @ N' means ' $M$ is the sister-in-law of N'.
If Rashmi is the only sister of $K$, then how is she related to $B$ in the following
expression?
D = L \$ K \# P \$ C = B
Ans $\times 1$. Mother-in-law
4. Wife
5. Maternal aunt
6. Son's mother-in-law
Q. 9 Seven people, A, B, C, D, E, F and G, are sitting in a straight row, facing the north. Only two people sit to the right of D. Only two people sit to the left of C. Only two people sit between D and G. Only three people sit between C and E. A is not an immediate neighbour of $D$. $B$ sits to the right of $D$. Who sits to the immediate left of $E$ ?
Ans
X1.C
2.B

X 3 . G
$\times 4 . \mathrm{F}$
Q. 10 Select the option that represents the correct order of the given words as they would appear in an English dictionary.

1. Borrelia
2. Boroughs
3. Boredom
4. Borderline
5. Bordellos
6. Borrower

Ans
X 1.5, 4, 3, 2, 6, 1
X 2. 5, 4, 1, 2, 3, 6
X $3.5,4,3,6,2,1$

- $4.5,4,3,2,1,6$
Q. 11 1,2,3,4,5 and 6 are written on different faces of a dice. Three different positions of the same dice are shown below. Find the number on the face opposite to the one showing ' 2 '.

figure 1

figure 2

filiure 3

Ans

- 1.5
$\times 2.1$
$\times 3.4$
$\times 4.3$
Q. 12 Select the figure from among the given options that can replace the question mark (?) in the following series.

|  |  |  |  | $?$ |
| :---: | :---: | :---: | :---: | :---: |

Ans

$\checkmark 2$.

$\times 3$.

$\times 4$.

Q. 13 Which letter-cluster will replace the question mark (?) to complete the given series? CAGJ, FCKO, ?, LGSY, OIWD

Ans
X 1. IEPU
X 2. IEPT
3. IERU
4. IEOT
Q. 14 Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series.
$\mathrm{A}_{-} \mathrm{AZ} Z_{-} \mathrm{N}_{-} \mathrm{MA} \mathrm{A}_{-} \mathrm{O}_{-} \mathrm{AM} \mathrm{M}_{-} \mathrm{O}_{-} \mathrm{A}_{-} \mathrm{A}_{-} \mathrm{O}_{-}$
Ans
X 1. OANZAMANNZM
2. MOAZNAZNMZN

X 3. OANMNMAZAZO
X 4. MOAANZMANNZ
Q. 15 In a certain code language, 'RABBIT' is written as 'UCEDLV' and 'DONKEY' is written as 'GQQMHA'. How will 'TURTLE' be written in that language?

Ans
X 1. XWUVPG
X 2. XXUVOG
3. WWUVOG

X4.WXUVOG
Q. 16 Six students are sitting around a circular table facing the centre. Ron is sitting second to the right of Ann. Brian is an immediate neighbour of both Luther and Ann. Eve is sitting third to the left of Luther. Who is sitting between Brian and Van?
Ans

1. Luther

X 2. Ann
3. Eve
4. Ron
Q. 17 Which two signs and numbers need to be interchanged to make the following equation correct?

$$
(\sqrt{225} \div 8)+(112 \times 7)+23-12=130
$$

Ans

1. 8 and $7, \times$ and -
2. 7 and $23, \div$ and $\times$
3. 112 and $23, \div$ and -
4. 8 and $7, \div$ and $\times$
Q. 18 In a certain code language, 'DUCK' is written as ' 16 ' and 'SHEEP' is written as ' 25 '. How will 'TURKEY' be written in that language?
Ans
$\times 1.42$
$\times 2.49$
$\times 3.30$

- 4.36
Q. 19 Study the given diagram carefully and answer the question. The numbers in different sections indicate the number of persons.


How many Farmers are Mothers and NOT Scientists?
Ans
$\times 1.10$
$\times 2.18$

- 3.27
$\times 4.12$
Q. 20 1, 2, 3, 4, 5 and 6 are written on different faces of a dice. Three different positions of the same dice are shown below Find the number on the face opposite to the one showing ' 3 '.


figure 2

figure 3

Ans
$\times 1.2$
2.5
$\times 3$.

- 4.4

[^4]Q. 1 एमएस-एक्सेल 2010 (MS-Excel 2010) फॉर्मूला में, कॉलम (columns) A से $E$ और रो (rows) 10 से 20 तक सेल की रेंज को संदर्भित करने के लिए निम्नलिखित में से कौन सा सही तरीका है?
Ans
X1. A10-E20
$\times$ 2. 10A:30E
X 3. 10A-20E

- 4. A10:E20
Q. 2 एमएस-एक्सेल (MS-Excel 2010) में, 'टेक्स्ट को टाइटल' केस में बदलने के लिए निम्नलिखित में से किस फंक्शन का उपयोग किया जाता है?

Ans
$\times$ 1. अपर केस (UPPER case)
2. प्रोपर केस (PROPER case)
$X$ 3. टाइटल केस (TITLE case)
4. लोअर केस (LOWER case)
Q. 3 The $\qquad$ keyboard shortcut to open a new workbook in MS-Excel 2010.

Ans
$X$ 1. $\mathrm{Ctrl}+\mathrm{S}$
X 2. $\mathrm{Ctrl}+\mathrm{H}$
3. $\mathrm{Ctrl}+\mathrm{N}$

X4. $\mathrm{Ctrl}+\mathrm{O}$
Q. 4 The keyboard shortcut key to open the format cells dialog box in MS-Excel 2010 is $\qquad$ .

Ans
X 1. $\mathrm{Ctrl}+\mathrm{F}$
2. $\mathrm{Ctrl}+\mathrm{Shift}+\mathrm{F}$

X 3. $\mathrm{Ctrl}+\mathrm{Alt}+\mathrm{F}$
X4. Alt + Shift + F
Q. 5 Which of the following is an invalid email address?

Ans
x1.989bcd@yahoo.com
2. abc123@Syahoo.com
3.abc123@yahoo.com
4.9a9b9c@yahoo.com
Q. 6 In MS-Excel 2010, the remove duplicates function is found in the ribbon under the $\qquad$ tab.
Ans

1. Data

X 2. Review
X 3. Insert
$\times$ 4. View
Q. 7 The 'Open' command that is used to open a MS-Word 2010 document is found in which of the following tab?

Ans
$X$ 1. Home
X 2. Help
$X$ 3. Layout
4. File
Q. 8 The URL for a secured website starts with $\qquad$ .
Ans

1. https
$\times$ 2. http
X 3. httsp
X 4. httss
Q. 9 A $\qquad$ consists of a matrix of rectangular cells grouped in rows and columns.

Ans

1. spreadsheet
2. document
3. Text
4. slide
Q. 10 The full form of URL is:

Ans $\times 1$. United Resource Logo
$\times$ 2. Uniform Resource Logo
$\checkmark$ 3. Uniform Resource Locator
X 4. United Resource Locator


[^0]:    Section: Part-C-Mathematics

[^1]:    Section: Part-C-Mathematics

[^2]:    Section : Part-E- Computer Fundamentals

[^3]:    Section : Part-D-Reasoning

[^4]:    Section : Part-E- Computer Fundamentals

