# 12:30 PM - 2:30 PM <br> Junior Assistant (Fire Service) NE 4 

Section : Domain section
Q. 1 The LCM of two numbers is 12 times their HCF, and the difference between their LCM and HCF is 4829 . $\backslash$ Vhen one of
these two numbers is divided by 375 , the quotient is 3 and the remainder is 192 . The other number is:
Ans $\times 1$. _195
X2. 878
"'3. 1756
X4. _634
Question ID: 75322920112
Status : Not Attempted and
Chosen Option :--
Q. 2 The cost of 5 notebooks and 4 pens is H42. The cost of 7 notebooks and 3 pens is US less than the cost of 9 notebooks and 1 pen. What is the cost of 4 notebooks and 5 pens?
Ans $\quad x 1, \quad$ zl44
""2. zl28
x3. z150
x4. zB6

Question ID: 75322920114
Status *
Not Attempted and Marked For Review Chosen Option : --
-
Q. 3 The internal and external radii of a hollow spherical shell are 4 cm and 8 cm , respectively. It is melted and recast into a solid right circular cylinder of height $93 / 4 \mathrm{~cm}$. What is curved smface area (in $\mathrm{cm}^{2}$ ) of the cylinder?

Ans $\quad<1.168 \mathrm{rr}$

- "2. $44 \underline{8}$
$\times 3$. $\underline{896}$
x4. H2 rr
Q. 4 Which of the following has/have terminating decimal expansion(s)?
(a) $\frac{2139}{3750}$
(b) $\frac{39}{9375}$
(c) $\frac{64}{455}$
(d) $\frac{245}{1344}$

Ans
$X$ 1. (c) only
$X$ 2. (a) only
$X$ 3. (b) and (d)
4. (a) and (b)
Q. 5 A cylinder of radius 2.8 cm and height 8 cm is removed from a solid cone of radius 5.6 cm and height 24 cm . What is
the volume (in $\mathrm{cm}^{3}$ ) of the remaining part of the cone? (Take $\pi=\frac{22}{7}$ )
Ans
$\times 1.581 .46$
2. 591.36
$\times 3.588 .84$
X 4. 488.48
Q. 6 When the polynomial $r(x)=a x+b$ is added to the polynomial $\mathrm{p}(x)=4 x^{4}+2 x^{3}-2 x^{2}+x-1$, then the resulting polynomial is divisible by the polynomial $\mathrm{q}(x)=x^{2}+2 x-3$. What is the value of $(\mathrm{a}-\mathrm{b})$ ?
Ans
$\times 1.121$

- 2. 126
$\times 3.97$
$\times 4.123$
Q. 7 Consider the following distribution of daily wages of workers:

| Daily <br> wages <br> (in ₹) | $400-$ <br> 450 | $450-$ <br> 500 | $500-$ <br> 550 | $550-$ <br> 600 | $600-$ <br> 650 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| No. of <br> workers | 6 | 3 | 5 | x | 10 |

If the median daily wages are ₹ 570 , then what is the value of $x$ ?
Ans
$\times 1.15$
$\times 2.18$

- 3. 20

X4. 16
Q. 8 In an arithmetic progression, the sum of the $3^{\text {rd }}, 4^{\text {th }}$ and $5^{\text {th }}$ terms is 12 . What is the sum of the first 7 terms?

Ans
$\times 1.32$
$\times 2.26$
-3. 28
X4. 24
Q. 9 Two fair dice are rolled together. What is the probability of getting the sum of the numbers appearing on their tops as 6 and one of the dice shows number 2 on its top?

Ans
$\times 1 . \frac{4}{9}$
$\times 2 . \frac{1}{9}$
3. $\frac{1}{18}$

X4. $\frac{1}{6}$
Q. 10 The speed of a boat in still water is $15 \mathrm{~km} / \mathrm{h}$. It can go 15 km upstream and 10 km downstream in a total time of 2 hours. How much time (in hours) will it take to go 32 km downstream?
Ans
$\times 1.1 .8$
$\times 2.1 .5$
$\times 3.2$

- 4.1 .6
Q. 11 From the top of a tower, two boats on the same side of the tower are observed at angles of depression of $30^{\circ}$ and $60^{\circ}$, respectively. If the distance between the boats is $\frac{k \sqrt{3}}{3} \mathrm{~m}$, then what is the height (in m ) of the tower?
Ans
$\times 1 \cdot \frac{2 k}{3}$
X 2. k

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

X4. 2 k
Q. 12 In $\triangle A B C, \angle A=2 \angle B$. The bisector of $\angle A$ meets $B C$ at $D$ such that $C D=4 \mathrm{~cm}$ and $B D=6 \mathrm{~cm}$. The length of side $A C$
is:
Ans
$\times 1.6 \sqrt{5} \mathrm{~cm}$
$\times 2.4 \sqrt{5} \mathrm{~cm}$
3. $2 \sqrt{10} \mathrm{~cm}$
$\times 4 . \sqrt{10} \mathrm{~cm}$
Q. 13 In $\triangle \mathrm{ABC}, \angle \mathrm{ABC}=135^{\circ}, \mathrm{AB}=8 \sqrt{2} \mathrm{~cm}$ and $\mathrm{BC}=7 \mathrm{~cm}$. What is the length of side AC ?

Ans

1. 17 cm
$\times 2.18 \mathrm{~cm}$
X 3. $18 \sqrt{2} \mathrm{~cm}$
X4. $15 \sqrt{2} \mathrm{~cm}$
Q. 14 In $\triangle \mathrm{ABC}, \angle \mathrm{C}=90^{\circ}, \mathrm{AC}=2 \sqrt{3} \mathrm{~cm}$ and $\mathrm{BC}=1 \mathrm{~cm}$. What is the value of $\left(13 \sin ^{2} A+6 \sec ^{2} A+\operatorname{cosec}^{2} A\right)$ ?

Ans
$\times 1.15 \frac{1}{2}$
$\times 2.13 \frac{1}{2}$
$\times$ 3. $14 \frac{1}{2}$

- $40 \frac{1}{2}$
Q. 15 If $\frac{\sin \theta-2 \sin ^{3} \theta}{2 \cos ^{3} \theta-\cos \theta}=\frac{1}{\sqrt{7}}, 0^{\circ}<\theta<90^{\circ}$, then what is the value of $\left(\sec ^{2} \theta+\operatorname{cosec}^{2} \theta\right) \div\left(\sec ^{2} \theta-\operatorname{cosec}^{2} \theta\right)$ ?

Ans
$\times 1.1 \frac{1}{8}$
X2. $-1 \frac{1}{4}$
ง. $-1 \frac{1}{3}$
X4. $1 \frac{2}{3}$
Q. 16 The sum of the first k terms of the arithmetic progression $-10,-7,-4, \ldots \ldots$, is 104 . What is the value of $\frac{\mathrm{k}+9}{\mathrm{k}-5}$ ?

Ans $\times 1 . \frac{3}{7}$
$\times 2 . \frac{12}{3}$
3. $\frac{11}{4}$
$\times 4 . \frac{10}{3}$
Q. 17 Let P and Q be the points of trisection of the line segment joining the points $\mathrm{A}(4,-1)$ and $\mathrm{B}(-2,-3)$, where P is
nearest to A . If the coordinates of P and Q are $(\alpha, \beta)$ and $(\gamma, \delta)$ respectively, then the value of $(\alpha+2 \beta-3 \gamma-\delta)$ is:
Ans
$\times 1.1 \frac{1}{3}$
$\times 2 . \frac{2}{3}$
-3. 1
X4. $\frac{1}{3}$
Q. 18 In a compound having molecular formula $X Y$, element ' $X$ ' belongs to the $3^{\text {rd }}$ period and the $2^{\text {nd }}$ group, whereas, element ' Y ' belongs to the $2^{\text {nd }}$ period and the $16^{\text {th }}$ group. What is the relative molecular mass of the compound XY?
Ans
$\times 1.50 \mathrm{u}$

- 2. 40 u
$\times 3.64 \mathrm{u}$
$\times 4.35 \mathrm{u}$
Q. 19 Which tissue in the respiratory system is most sensitive and destroyed to the greatest extent by tobacco smoke?

Ans $\times 1$. Tiny capillaries where exchange of gases occurs.
$\times$ 2. Mucosal epithelium in the nasal passage.
3. Ciliated epithelium in the upper respiratory tract.
$X$ 4. Cartilage rings in the trachea.
Q. 20 Which molecules are believed to be absent in the atmosphere of the Earth before living cells were formed?

Ans

1. Oxygen
$X$ 2. Ammonia
$X$ 3. Methane
$X$ 4. Hydrogen sulphide
Q. 21 Which of the following is NOT a redox reaction?

Ans
$\checkmark$ 1. $\mathrm{CaO}_{(\mathrm{s})}+\mathrm{H}_{2} \mathrm{O}_{(\mathrm{l})} \rightarrow \mathrm{Ca}(\mathrm{OH})_{2(\mathrm{aq})}$
$\times 2$.
$\mathrm{MnO}_{2(\mathrm{~s})}+4 \mathrm{HCl}_{(\mathrm{aq})} \rightarrow \mathrm{MnCl}_{2(\mathrm{aq})}+2 \mathrm{H}_{2} \mathrm{O}_{(\mathrm{l})}+\mathrm{Cl}_{2(\mathrm{~g})}$
$x_{3 .} \mathrm{CuO}_{(\mathrm{s})}+\mathrm{H}_{2(\mathrm{~g})} \rightarrow \mathrm{Cu}_{(\mathrm{s})}+\mathrm{H}_{2} \mathrm{O}_{(\mathrm{l})}$
$\times 4.3 \mathrm{Fe}_{(\mathrm{s})}+4 \mathrm{H}_{2} \mathrm{O}_{(\mathrm{g})} \rightarrow \mathrm{Fe}_{3} \mathrm{O}_{4(\mathrm{~s})}+4 \mathrm{H}_{2(\mathrm{~g})}$
Q. 22 Which of the following represents a homologous series?

Ans $\times{ }_{1} . \mathrm{HCOOH}, \mathrm{CH}_{3} \mathrm{CHO}, \mathrm{CH}_{3} \mathrm{CH}_{2} \mathrm{CHO}$
$\times$ 2. $\mathrm{CH}_{3} \mathrm{OH}, \mathrm{CH}_{3} \mathrm{CHO}, \mathrm{CH}_{3} \mathrm{CH}_{2} \mathrm{CH}_{2} \mathrm{OH}$
3. $\mathrm{HCHO}, \mathrm{CH}_{3} \mathrm{CHO}, \mathrm{CH}_{3} \mathrm{CH}_{2} \mathrm{CHO}$
$\times$ 4. $\mathrm{HCHO}, \mathrm{CH}_{3} \mathrm{CHO}, \mathrm{CH}_{3} \mathrm{COCH}_{3}$
Q. 23 What mass of hydrogen gas would be required to completely react with 8 g of oxygen gas to form water?

Ans
-1. 1 g
$\times 2.4 \mathrm{~g}$
$\times 3.8 \mathrm{~g}$
X4. 2 g
Q. 24 Which kind of lens can correct the defective vision in the given figure?


Corrective lens


Ans
$X$ 1. Lens type $\mathbf{b}$
$X$ 2. Lens type c
$X$ 3. Lens type a
4. Lens type d
Q. 25 What is the chemical formula of a salt formed by the reaction between aluminium hydroxide and acetic acid?

Ans $\times 1 . \mathrm{CH}_{3} \mathrm{COOAl}$
$\times$ 2. $\mathrm{Al}_{2}\left(\mathrm{C}_{2} \mathrm{O}_{4}\right)_{3}$

- 3. $\left(\mathrm{CH}_{3} \mathrm{COO}\right)_{3} \mathrm{Al}$
$\times 4 . \mathrm{AlCl}_{3}$
Q. 26 An object is placed on the principal axis of a lens of power -10.0 D , at a distance of 30 cm from it. The image is formed at a distance of $\qquad$ from the lens and is $\qquad$ _.
Ans $\times 1.7 .5 \mathrm{~cm}$; real
$\times 2.15 .0 \mathrm{~cm}$; virtual

3. 7.5 cm ; virtual
$\times 4.15 .0 \mathrm{~cm}$; real
Q.27 A ray of light passes from a slab of glass (refractive index 1.50 ) to water (refractive index 1.33 ). The ratio $\left(\mathrm{v}_{1} / \mathrm{v}_{2}\right)$ of speed of light in glass $\left(\mathrm{v}_{1}\right)$ to that in water $\left(\mathrm{v}_{2}\right)$ is $\qquad$ and the ray bends $\qquad$ the normal after refraction.

Ans

- 1. 0.89 ; away from

X 2. 1.13; away from
$X$ 3. 0.89 ; towards
X 4. 1.13; towards
Q. 28 A $10 \Omega$ resistor is connected across a battery. The heat produced in the resistor per second is 40 J . The potential difference across the resistor is:

Ans
X1. 5 V
2. 20 V

X 3. 15 V
X4. 10 V
Q. 29 The sun is visible to us about $\qquad$ before the actual sunrise and about $\qquad$ after the actual sunset because of atmospheric refraction.
Ans $\times 1.1$ minute; 1 minute
$\times$ 2. 1 minute; 2 minutes
3. 2 minutes; 2 minutes

X 4. 2 minutes; 1 minute
Q.30 An object is placed at 3.6 m in front of a convex mirror of focal length 1.2 m . Following New Cartesian Sign Convention, the image formed at $\mathrm{v}=$ $\qquad$ -.
Ans $\quad \times 1 .-0.9 \mathrm{~m}$
X 2. -1.8 m
X $3 .+1.8 \mathrm{~m}$

- 4. +0.9 m
Q. 31 We honour the memory of Amrita Devi Bishnoi who dedicated her life to: $\qquad$ .
Ans $\times 1$.
establish the rights of tribals living in forest areas to use tendu leaves to make bidis for a living
$\times 2$.
bring awareness of water pollution of Ganga and motivated the Ganga Action Plan 3.
protect a stand of trees from being chopped down to provide timber for construction of a palace $\times 4$.
provide justice to people displaced by mega hydroelectric projects like Sardar Sarovar Dam
Q. 32 Two resistors, each of $30 \Omega$ are connected in parallel. The combination is connected in series to a third resistor of $30 \Omega$.

The equivalent resistance of this arrangement is:
Ans
X1. $20 \Omega$
$\times 2.10 \Omega$

- 3. $45 \Omega$

X4. $90 \Omega$
Q. 33 Which of the following numbers marks the position of the cerebrum in the human brain?


Ans
X 1. Position 3
2. Position 2
$X$ 3. Position 1
X 4. Position 4
Q. 34 Which of the following will happen when an aqueous solution of ammonium chloride is tested with a litmus solution?

Ans $\quad \times 1$. It will turn red litmus blue.
2. It will turn blue litmus red.
$X$ 3. It will turn blue litmus into a darker shade of blue.
$X$ 4. It will not affect the colour of litmus.

Status: Answered
Chosen Option : 2
Q. 35 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.
A. When the first drops fell, they started dancing in joy.
B. Dark clouds could be seen approaching from the east
C. It seemed they had got a new lease of life.
D. The farmers had been waiting for the rain anxiously.

Ans

1. BDAC
$\times$ 2. ABDC
X 3. CADB
X4.DCBA
Q. 36 Select the most appropriate ANTONYM of the given word

Forbid
Ans 1.Admit
X 2.Ban
X 3. Stop
X 4. Deny
Q. 37 Select the most appropriate option to fill in the blank

There is a lot of $\qquad$ in his drawing room.
Ans $X$ 1.furnishings
$X$ 2. furnish
3. furniture
$\times 4$. furnitures
Q. 38 Select the most appropriate article to fill in the blanks
$\qquad$ water is $\qquad$ precious resource which must be saved.
Ans $\times 1$. A; the
X 2. No article; No article
X 3. The; a

- 4. No article; a
Q. 39 Select the most appropriate synonym of the given word

Adverse
Ans $\times 1$. Advantageous
X 2. Helpful
$\times$ 3. Beneficial
4. Unfavourable
Q. 40 Select the most appropriate meaning of the given idiom

Fit as a fiddle
Ans $\boldsymbol{X} 1$. A well-fitting dress
2. In very good health
$X 3$. A musical quality
X 4. A very lean figure
Q. 41 Select the most appropriate meaning of the given proverb

A leopard can't change its spots
Ans 1. One's innate nature doesn't change
$\times 2$. One can't deceive others easily
X 3. One should accept one's faults
X 4. One can't change one's looks
Q. 42 Select the option that can be used as a one-word substitute for the given group of words.

Something which is impossible to read
Ans
X 1. Illiterate
X 2. lllegal

- 3 . Illegible

X 4. lllicit
Q. 43 Select the option that can be used as a one-word substitute for the given group of words.

A five-sided polygon
Ans

1. Pentagon
2. Hexagon
3. Rectangle
4.Rhombus
Q. 44 Select the most appropriate article to fill in the blank

Lack of education is one of $\qquad$ most important reasons for poverty
Ans
X 1. No article
X 2.a
3. the
$\times 4$. an
Q. 45 Select the most appropriate option to fill in the blank

She $\qquad$ quite tall in the past one year.
Ans 1.has grown
$X 2$ grow
$\times$ 3. grows
X 4. grew
Q. 46 Select the option that can be used as a one-word substitute for the given group of words.

A valley with steep sides of rock
Ans 1. Canyon
$X$ 2. Plateau
X 3. Island
X 4. Gulf
Q. 47 Select the most appropriate option to fill in the blank

The sky grew dark $\qquad$ and it started pouring
Ans

1. suddenly
$X$ 2. seriously
X 3. simply
$X 4$. severely
Question ID: 75322920145
Status : Answered
Chosen Option : $\mathbf{1}$

## Comprehension:

Read the given passage and answer the questions that follow
Each day is a chance to invest in life; a chance to renew yourself, to shed yesterday's skin, to unburden yourself to get rid of yesterday's hurt. Be glad of life each day as it gives you a chance to work, love and play, and to look at the sun. And then when the sun sets, don't crythe tears will make you miss the beauty of the stars.
Life moves on and if you don't stop and look at the wonders already present in your life, you will miss life altogether.
Think of big thoughts but relish the small joys life offers you each day. Maybe it's as simple as smiling at someone. For, that could be the last day of life - for you or for the other person. A small genuine act from you will cost you nothing but it could mean everything to somebody that day. Life is a succession of moments. Live each moment. Life has no romance without risk. All actions carry some amount of risk, may be less or more, but the element of risk is always present.
If there is no wind, row. Make things happen rather than let things happen. One can give nothing whatsoever without giving oneself, risking oneself. The most important thing in life is not what you get but what you give.

SubQuestion No : 48
Q. 48 What is meant by 'a small genuine act'?

Ans
$X 1$. A selfish act
$\times 2$. An act of heroism
3. An act of kindness

X 4. A romantic act

## Comprehension:

Read the given passage and answer the questions that follow.
Each day is a chance to invest in life; a chance to renew yourself, to shed yesterday's skin, to unburden yourself to get rid of yesterday's hurt. Be glad of life each day as it gives you a chance to work, love and play, and to look at the sun. And then when the sun sets, don't crythe tears will make you miss the beauty of the stars.
Life moves on and if you don't stop and look at the wonders already present in your life, you will miss life altogether.
Think of big thoughts but relish the small joys life offers you each day. Maybe it's as simple as smiling at someone. For, that could be the last day of life - for you or for the other person. A small genuine act from you will cost you nothing but it could mean everything to somebody that day. Life is a succession of moments. Live each moment. Life has no romance without risk. All actions carry some amount of risk, may be less or more, but the element of risk is always present.
If there is no wind, row. Make things happen rather than let things happen. One can give nothing whatsoever without giving oneself, risking oneself. The most important thing in life is not what you get but what you give.

SubQuestion No : 49

## Q. 49 Which of the following statements is NOT true?

Ans 1. It is more important to get than to give.
X 2. Risk is a part of life.
X 3. We must enjoy small joys in life.
4. There is beauty in both, the day and the night.

## Comprehension:

Read the given passage and answer the questions that follow .
Each day is a chance to invest in life; a chance to renew yourself, to shed yesterday's skin, to unburden yourself to get rid of yesterday's hurt. Be glad of life each day as it gives you a chance to work, love and play, and to look at the sun. And then when the sun sets, don't crythe tears will make you miss the beauty of the stars.
Life moves on and if you don't stop and look at the wonders already present in your life, you will miss life altogether.
Think of big thoughts but relish the small joys life offers you each day. Maybe it's as simple as smiling at someone. For, that could be the last day of life - for you or for the other person. A small genuine act from you will cost you nothing but it could mean everything to somebody that day. Life is a succession of moments. Live each moment. Life has no romance without risk. All actions carry some amount of risk, may be less or more, but the element of risk is always present.
If there is no wind, row. Make things happen rather than let things happen. One can give nothing whatsoever without giving oneself, risking oneself. The most important thing in life is not what you get but what you give.

SubQuestion No : 50
Q. 50 Why should we be grateful for each day?

Ans 1. It gives us a chance to live, love and work each day.
$X 2$. Each day gives us more energy.
$X 3$. We grow wiser with each passing day.
X 4. We can take new risks.
Q. 1 Which of the following dynasties is known to be the first Deccanese dynasty to build an empire in Daksinapatha-i.e., the southern region?
Ans $\times 1$. Pandyan Dynasty
X 2. Chola Dynasty
X 3. Pallava Dynasty
4. Satavahana dynasty
Q. 2 Muḥammad ibn Tughluq was the $\qquad$ sultan of the Tughluq dynasty.
Ans
X 1. third
2. second
$X$ 3. fourth
$\times 4$. first
Q. 3 The Lalit Kala Akademi was inaugurated in New Delhi in the year $\qquad$ .
Ans

- 1.1954

X 2.1961
X 3.1966
X 4.1978
Q. 4 The Veligallu Dam Reservoir Project is an irrigation project across $\qquad$ .

Ans $\times 1$. Godavari River
2. Papagni River

X 3. Tammileru River
X 4. Cheyyeru River
Q. 5 National Commission for Backward Classes (NCBC) was initially constituted by the Central Government through the National Commission for Backward Classes Act in the year $\qquad$ -.

Ans
X 1.1992
X 2.1991

- 3.1993

X 4.1994
Q. 6 Famous classical singer Gangubai Hangal belongs to which of the communities of performers who share a distinctive musical style?
Ans 1. Kirana gharana
X 2. Bhendibazaar gharana
X 3. Rampur-Sahaswan gharana
X 4. Mewati gharana
Q. 7 Who among the following cricket players is associated with the book called "The Test of My Life From Cricket to Cancer and Back"?
Ans
X 1. Brian Lara
2. Yuvraj Singh
$X$ 3. Ricky Ponting
X 4. Kapil Dev
Q. 8 Barabar Caves are in which of the following states?

Ans
X 1. Karnataka
$X$ 2. Telangana
X 3. Odisha
4. Bihar
Q. 9 Interpreted, object-oriented, and high-level programming language Python was
developed by $\qquad$ -.
Ans $\quad$ 1. Bjarne Stroustrup

- 2. Guido van Rossum
$X$ 3. Larry Wall
X 4. James Gosling
Q. 10 The Central Pollution Control Board (CPCB) statutory organisation was constituted in
$\qquad$ -
Ans

1. 1974
$\times 2.1976$
X 3.1973
X 4.1975
Q. 11 What is the approximate total length of the coastline of India including that of Lakshadweep and Andaman and Nicobar Islands?
Ans

- $1.7,517 \mathrm{~km}$

X 2. 9,517 km
X 3.8,517 km
X $4.6,517 \mathrm{~km}$
Q. 12 In which of the following years Mother Teresa died?

Ans

1. 1997
$\times 2.1996$
X 3.1998
X 4.1995
Q. 13 Defence allocation in the budget has been increased to $\qquad$ crores for the Financial
Year 2021-22.
Ans
X 1. ₹7,78,195.62
X 2. ₹6,78,195.62
X 3. ₹5,78,195.62
2. ₹4,78,195.62
Q. 14 As per the OXFAM India data, (2011 census) the average literacy rate in India stands at
$\qquad$ -.

Ans $\quad$ 1.54.04\%
X 2.64.04\%
X 3.44.04\%
4. $74.04 \%$

Status: Answered
Q. 15 As per the Annual Report 2020-21 published by the Ministry of Micro, Small and Medium Enterprises, which of the following states had the largest number of estimated MSMEs with a share of $14.20 \%$ of MSMEs in the country?
Ans
X 1. Chhattisgarh
X 2. Karnataka

* 3. Uttar Pradesh

X 4. Maharashtra
Q. 16 By which of the following amendment of the Constitution in 1973, the seats in Lok Sabha were increased from 500 to 525 ?
Ans 1. The 31st Amendment to the Constitution
$X 2$. The 30th Amendment to the Constitution
$X$ 3. The 32nd Amendment to the Constitution
X 4. The 33rd Amendment to the Constitution
Q. 17 Which of the following articles of the Indian Constitution deals with Equality of opportunity in matters of public employment?
Ans

- 1.16

X 2.17
$\times 3.18$
$\times 4.15$
Q. 18 What approximate value should come in place of the question mark (?) in the following expression?
$4.999^{2.99}+23.988-19.002=?$
Ans
$\times 1.139$
$\times 2.90$
X 3. 29
4. 130
Q. 19 Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.

VK__P_KT__V_TNP
Ans
X 1. TNVKPK
2. TNVNPK

X 3. KNTVPK
$X$ 4. TNNVPK
Q. 20 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 pears are apples.
All apples are grapes.
All grapes are fruits.
Conclusions:
I. All pears are fruits.
II. Some fruits are apples.

Ans
$X 1$. Only conclusion I follows.
2. Both conclusions I and II follow.
$X$ 3. Neither conclusion I nor II follows.
$X$ 4. Only conclusion II follows.
Q. 21 Which two signs should be interchanged to make the following equation correct?
$169 \div 13-18 \times 4+5=15$
Ans
$\times 1 . \div$ and +
$\times 2 . \div$ and $\times$
3. + and $x$

X4. - and +
Q. 22 Read the given statements and conclusions carefully. Find out which of the given conclusions is/are true based on the statements.
Statements:
$\mathrm{P}=\mathrm{Q} \geq \mathrm{R}>\mathrm{M}$
$\mathrm{R}<\mathrm{T} \leq \mathrm{L}$
Conclusions:
I. $\mathrm{L} \geq \mathrm{M}$
II. $\mathrm{T}>\mathrm{Q}$

Ans $\quad$. Neither conclusion I nor II is true.
$X$ 2. Only conclusion $I$ is true.
$X$ 3. Both conclusions I and II are true.
$X$ 4. Only conclusion II is true.
Q. 23 Select the figure from among the given options that can replace the question mark (?) in the following series.


Ans


- 4. 


Q. 24 Select the option that is related to the fifth letter-cluster in the same way as the first letter-cluster is related to the second letter-cluster and the third letter-cluster is related to the fourth letter-cluster.

PDLG: SFOI :: FTMN : IVPP :: NKVH : ?
Ans
X 1. PNXK
2. QMYJ

X 3. QNYK
X 4. PMXJ
Q. 25 Six girls $\mathrm{K}, \mathrm{G}, \mathrm{N}, \mathrm{P}, \mathrm{U}$ and T are sitting around a circular table facing towards the center. G is sitting to the immediate right of T and second to the left of $\mathrm{U} . \mathrm{N}$ and U are immediate neighbours of K .
Who is sitting second to the right of T?
Ans

1. P

X 2. K
X 3. U
X4. N
Q. 26 In a certain code language, 'LOTUS' is written as MRUXT, and 'TULIP' is written as UXMLQ. How will 'DAISY' be written in that language?
Ans $X$ 1. GBLTB
$X$ 2. EDJUZ
X 3. FDKVZ
4. EDJVZ
Q. 27 Select the option that is related to the fifth letter-cluster in the same way as the first letter-cluster is related to the second letter-cluster and the third letter-cluster is related to the fourth letter-cluster.

NKD : EMQ :: GWP : QYJ :: SLN : ?
Ans
$X$ 1. PMV
$X$ 2. OMU
$X$ 3. ONW
4. ONV
Q. 28 In a certain code language, 'RED' is written as 6 , and 'PINK' is written as 8 . How will 'YELLOW' be written in that language?
Ans

1. 12
$\times 2.14$
$\times 3.10$
$\times 4.11$
Q. 29 Six boxes $\mathrm{M}, \mathrm{N}, \mathrm{O}, \mathrm{P}, \mathrm{Q}$ and R are placed one above the other. The lowermost box is numbered 1 , the box above it is numbered 2, and so on. Only three boxes are kept below box $M$. Box $N$ is kept just above box Q . Box $P$ is kept just
below box $R$, which is box number 3 ,
Which box is kept at the bottom?
Ans
$X$ 1. Box N
X 2. Box P
X 3. Box Q
2. Box O
Q. 30 Select the figure from among the given options that can replace the question mark (?) in the following series.


Ans

Q. 31 Select the cube that CANNOT be formed by folding the given sheet along the lines.


Ans
$\times 1$.

$\times 2$.

$\times 3$.

4.

Q. 32 Select the number from among the given options that can replace the question mark (?) in the following series.
$35,43,55,71$, ?
Ans
$\times 1.79$
$\times 2.87$
$\times 3.83$
-4. 91
Q. 33 C is the son of D 's brother K . L is the wife of $P$, who is the father of $D . N$ is the son of $V$ and $D$. How is C related to P ?

Ans
$X$ 1. Daughter's son
2. Son's son
$X$ 3. Son
$X$ 4. Brother
Q. 34 In a certain code language,
' $\mathrm{A}+\mathrm{B}$ ' means ' A is the brother of B ',
' $A-B$ ' means ' $A$ is the father of $B$ ',
' $A \times B$ ' means ' $A$ is the mother of $B$ ',
' $A$ \& $B$ ' means ' $A$ is the son of $B$ '.

Based on the above, how is $P$ related to $K$ if ' $P-Q-N \& M \times T+K$ '?
Ans
$X$ 1. Mother's father
$X$ 2. Father
$X$ 3. Brother
4. Father's father
Q. 35 Select the most appropriate option to fill in the blank

This weekend I $\qquad$ so don't make any plans

Ans
$X$ 1. will have worked
2. will be working

X 3. work
X 4. worked
Q. 36 Select the most appropriate option to fill in the blank

She kept running $\qquad$ her lines to memorise them.
Ans $\times$ 1.across
$\times$ 2. about
X 3. down
4. over
Q. 37 Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the correct order to form a meaningful and coherent paragraph.
A. For instance, they can solve the most complex mathematical problems.
B. They can also put large unrelated data in order.
C. These machines can be put to varied uses.
D. Computers are capable of doing extremely complicated work in all branches of learning.
Ans
X 1.CBDA
$\times$ 2. CABD
$X$ 3. DBAC
4. DCAB
Q. 38 Select the most appropriate synonym of the given word

Beguile
Ans
X 1. Resume
$X$ 2. Decline
X 3. Revert
4. Delude
Q. 39 Select the most appropriate meaning of the given idiom

Smell a rat
Ans $\quad \times 1$. Have an unpleasant experience
$X$ 2. Live in unhygienic conditions
X 3. Look for clues to solve a mystery
4. Suspect something is wrong
Q. 40 Select the most appropriate meaning of the given idiom

Butterflies in the stomach
Ans 1. To be nervous
X 2. To be happy
$X$ 3. To be unwell
X 4. To be jealous
Q. 41 Select the most appropriate ANTONYM of the given word

Grandeur
Ans
$X 1$. Dignity
2. Simplicity

X 3. Gravity
X 4. Greatness
Q. 42 Select the most appropriate option to fill in the blank
$\qquad$ that you would like the movie I had recommended.
Ans $\times 1$. was knowing
X 2. know
X 3. had known
4. knew
Q. 43 Select the option that can be used as a one-word substitute for the given group of words.

Holding an office without receiving a salary
Ans
X 1. Freelance
X 2. Sinecure
3. Honorary
$X 4$. Executive
Q. 44 Select the most appropriate option to fill in the blank

She was lucky to have her $\qquad$ support all along.
Ans $X$ 1.parent
X 2. parent's
3. parents'

X 4. parents
Q. 45 Select the option that can be used as a one-word substitute for the given group of words.

A person who is trained for travelling into space
Ans
X 1. Hypnotist
X 2. Scientist
3. Astronaut

X 4. Analyst

## Comprehension:

Read the given passage and answer the questions that follow.
Dr. APJ Abdul Kalam, the Eleventh President of India, was a great scientist, teacher and writer. He had written many books like 'Ignited Minds,' 'India 2020,' 'Mission India' and 'Wings of Fire'. He was a source of inspiration for the young and old alike. Here is an extract from 'Wings of Fire' which depicts his early life in his own words.
My parents, Jainulabdeen and Ashiamma were widely regarded as an ideal couple. My mother's lineage was the more distinguished, one of her forebears having been bestowed the title of 'BAHUDUR' by the British. I normally ate with my mother, sitting on the floor of the kitchen. She would place a banana leaf before me, on which she had ladled rice and aromatic sambhar, a variety of sharp home-made pickles and a dollop of fresh coconut chutney. The famous Shiva temple, which made Rameswaram so sacred to pilgrims was about a tenminute walk from our house. Our locality was predominantly Muslim, but there were quite a few Hindu families too, living amicably with their Muslim neighbours. There was a very old mosque in our locality where my father would take me for evening prayers. I had not the faintest idea of the meaning of the Arabic prayers chanted, but I was totally convinced that they reached God. When my father came out of the mosque after the prayers, people of different religions would be sitting outside, waiting for him. Many of them offered bowls of water to my father who would dip his fingers in them and say a prayer. This water was then carried home for invalids. I also remember people visiting our home to offer thanks after being cured. My father always smiled and asked them to thank Allah, the benevolent and merciful. The high priest of Rameswaram Temple, Pakshi Lakshmana, was a very 'close friend of my father'. One of the most vivid memories of my childhood is of the two men, each in his traditional attire, discussing spiritual matters.
When I was old enough to ask questions I asked my father about the relevance of prayer. "When you pray" he said, "you transcend your body and become a part of the cosmos which knows no division of wealth, age, caste or creed."

SubQuestion No: 46
Q. 46 The water in which Kalam's father dipped his fingers was believed:

Ans
$X 1$. to bless couples
$\times 2$. to atone for sins
X 3 . to bring prosperity
4. to cure the sick

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SubQuestion No: 47
Q. 47 Which of the following statements is NOT true?

Ans
X 1. Kalam's father was a devout Muslim.
$X 2$. Hindu and Muslims lived amicably together.
X 3. There was an old mosque in Kalam's locality

* 4. Rameswaram is a famous temple dedicated to Lord Ram.


## Comprehension:

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SubQuestion No: 48
Q. 48 The extract in the passage is taken from Kalam's:

Ans
$X 1$. Ignited Minds
X 2. India 2020
3. Wings of Fire

X 4. Mission India

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SubQuestion No: 49
Q. 49 Kalam's mother usually served him meals:

Ans
$X 1$. in a metal bowl
2. on a banana leat

X 3 . in a coconut kernel
$\times 4$. on a paper plate

## Comprehension:

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knows no division of wealth, age, caste or creed."
SubQuestion No: 50
Q. 50 Who discussed spiritual matters with Pakshi Lakshmana?

Ans
X 1. Abdul Kalam
2. Jainulabdeen

X 3. Ashiamma
I
X 4. The high priest of Rameswaram temple

