# how many digits will appear twice in... 



## Y. Arunveera Kumar

Subject Expert
IACE

## MODEL QUESTIONS

Directions (Q.No.1-5): Read the following information carefully and answer the questions given below:

There are total ten persons divided in two groups. In each group there is equal number of person. They sit in two parallel rows. One group faces north while other group faces south in such a manner that each member of group one faces other member of group two. In group 1- there are five persons $\mathrm{N} 1, \mathrm{~N} 2, \mathrm{~N} 3$, N4 and N5 and all of them facing towards north direction. In group2there are five persons $\mathrm{S} 1, \mathrm{~S} 2, \mathrm{~S} 3, \mathrm{~S} 4$
and S5 and all of them facing south direction. All of them like different colour like Pink, Red, Blue, Black, White, Green, Yellow, Violet, Brown and Orange but not necessarily in the same order.

S1 sits third to right of S2 Immediate neighbor of S2 faces the person who likes pink colour. There are gap of two persons between the one who likes pink and the one who likes red colour. There is only one person between S3 and S4. Neither S3 nor S5 face the person who likes red colour. Immediate neighbor of S1 faces the person who like blue colour. N5 likes blue colour. There is only one person between N5 and the one who like Black colour. The one who likes white colour faces the one who likes the green colour. There are gap of two persons between the one
who likes the white and the one who

likes yellow colour. The one who likes the violet colour is not immediate neighbour of one who likes white colour. N1 likes red colour and sits third to left of N4. N2 does not like black colour. S3 likes brown colour.

1. Who among the following sits at the corner?
a) N1,S2
b)N1, N4


## c)S1, N1 d)N4, S2

e) None of these
2. Who sits third to right S5?
a) The one who likes orange colour.
b) The one who likes yellow colour.
c) The one who likes violet colour.
d) The one who likes white colour.
e) None of these
3. S 4 is related to N 1 and S 3 is related to N 5 , in the same way S 5 is related to?
a) N 1 b) N 2
c) N 4
d) N3e) None of these
4. Immediate neighbor of N 1 faces which person?
a) The one who like brown colour
b) S 5
c) The one who like red colour
d) The one who like white colour e) S 2
5. Who among following likes yellow colour?
a) S 5
b) The one who sits one of the corner.
c) The one who sits third to left of S3.
d) The person who faces pink colour.
e) The person who is immediate neighbor of one who like white colour.

Directions (Q.No.6-7): Study the following information carefully and answer the questions given below:

Eight members are living in a family. Tej is the only son of Arun. Suma is wife of Uma. Suma is sister
of Tej and Rama. Vani is daughter in law of Bharathi. Suri is son of Suma.
Bharathi is the mother of Tej.
6. How is Suri related to Rama?
a) Son b) Daughter
c) Nephew
d) Niece
e) Can't be determined
7. How many male members are in the family?
a) Four
b) Five
c) Three
d) $\operatorname{Six}$
e) None of these

Directions (Q.No.8-10): Study the following information carefully and answer the questions given below:

Point D is 14 m towards the West of Point A. Point B is 4 m towards the South of point D. Point F is 9 m towards the South of point D. Point E is 7 m towards the East of point B . Point C is 4 m towards the North of point E . Point G is 4 m towards the South of point A.
8. Which of the following points are in a straight line?
a) D, E, A
b) E, G, C
c) D, B, G
d) E, G, B
e) F, B, C
9. A is in which direction with respect to C ?
a) East
b) West
c) North d) South
e) Cannot be determined
10. If a person walks 5 m towards North from point $F$ and then takes a right turn, which of the following points would he reach first?
a) G
b) D
c) E
d) A
e) C


## మాదిరి ప్రశ్నలు

1. రెండు సంఖ్యల గ.సా.భా. 4, క.సా.గు. 24. అందులో ఒక సంఖ్య 8 అయితే మరో సంఖ్య ఎంత?

## (2) Q

చుటుకొలత ఎంత?
03

సీత వయస్సు $=$ రమ వయస్సు +18 ఏళ్లు $=37+18=55$ ఏళ్ల
3. ఒక చతురస్ర భుజం 7 సెం.మీ. అయితే దాని చుట్టుకొలత ఎంత?(సెం.మీ.లలో) $\begin{array}{ll}\text { 1) } 49 & \text { 2) } 38\end{array}$ 3) 28 4) 36

జ. 3; చతురస్ర భుజం $=7$ సెం.మీ. చుట్టుకొలత $=4 \times$ భుజం $=4 \times 7=28$ సెం.మీ.
4. చతురస్రాకార పొలం వైశాల్యం 1024 చ.మీ. అయితే దాని భుజం (మిటర్లలో)?
$\begin{array}{ll}\text { 1) } 22 & \text { 2) } 42\end{array}$
3) 32
4) 12

జ. 3; చతుర్రస్ర పొలం వైశాల్యం
$\left(\right.$ భుజం) ${ }^{2}=1024$ చ.మీ.
భుజం $=\sqrt{1024}=32$ మీ.
5. 6 పుస్తకాల ఖరీదు రూ. 210 అయితే 4 పుస్తకాల ఖరీదు ఎంత(రూ.లలో)?
$\begin{array}{ll}\text { 1) } 180 & \text { 2) } 160\end{array}$
3) 140
4) 40
※. 3;
6 పస్తకాల ధర $=$ రూ. 210


4 పస్తకాల ధర $=\frac{210}{6} \times 4=140$
6. $3(x+2)-2(x-1)=7$ అయితే $x$

విలువ?

1) 2
2) -1
※. 3;
$3(x+2)-2(x-1)=7$
$3 x+6-2 x+2=7$
$x+8=7$
$x=7-8=-1$
7. మొదటి పది ప్రధాన సంఖ్యల మధ్యగతం?
$\begin{array}{llll}\text { 1) } 7 & \text { 2) } 13 & \text { 3) } 17 & \text { 4) } 12\end{array}$
జ. 4; మొదటి 10 ప్రధానాంకాలు
$2,3,5,7,11,13,17,19,23,29$
రాజుల సంఖ్య $=10$
మధ్యగతం $\frac{\mathrm{n}}{2}$ వ రాశి,
$\frac{\mathrm{n}}{2}+1$ రాశుల సరాసరి
5,6 రాశుల సరాసరి
$=\frac{11+13}{2}=\frac{24}{2}=12$
8. $\left(\frac{2}{3}\right)^{x}=\left(\frac{3}{2}\right)^{-5}$ అయితే $5 x$ విలువ?
$\begin{array}{ll}\text { 1) } 25 & \text { 2) } 5\end{array}$
3)-5
2) 5
3) -25
※. 1;
$\left(\frac{2}{3}\right)^{x}=\left(\frac{3}{2}\right)^{-5}$
$a^{-m}=\frac{1}{a^{m}}$
$\left(\frac{2}{3}\right)^{x}=\left(\frac{2}{3}\right)^{5}$
$x=5$
$\Rightarrow 5 x=25$
9. $a^{2}-\frac{1}{16}$ సి సమానమైంది?
1) $\left(a+\frac{1}{4}\right)\left(a-\frac{1}{4}\right)$
2) $\left(a-\frac{1}{4}\right)\left(a-\frac{1}{4}\right)$
3) $\left(\frac{1}{4}-a\right)\left(\frac{1}{4}+a\right)$
4) $\left(\frac{1}{4}+a\right)\left(a+\frac{1}{4}\right)$

జ. 1;
$a^{2}-\frac{1}{16}$
$a^{2}-\frac{1}{4^{2}}$
$\mathrm{a}^{2}-\mathrm{b}^{2}=(\mathrm{a}+\mathrm{b})(\mathrm{a}-\mathrm{b})$
$=(a+1 / 4)(a-1 / 4)$

