

## Puzzle test for SBI PO Pre, IBPS PO Pre, SBI Clerk Mains, IBPS Clerk Mains and IBPS SO Pre Exams.

PT Set No 96
Directions: Study the following information carefully and answer the questions given beside.
Six envelopes - A, B, C, X, Y, and Z are placed one above another, each containing different number of pages - 20, 29, 36, 43, 56 and 60 (but not necessarily in the same order) and envelopes were containing notes of different subjects - Physics, Chemistry, Mathematics, English, Hindi, and Computer (but not necessarily in the same order).

Only three envelopes are placed between envelopes $A$ and $X$, which has odd number of pages. Only one envelope is placed between $X$ and $B$, which has notes of Chemistry. Envelope $Y$ has notes of Physics and isn't place adjacent to envelope $B$, but placed one of the envelopes above envelope $B$. The envelope which is placed just above $X$ has notes of Hindi. The envelope which is placed at top has 17 pages more than envelope $X$. Envelope $Z$ has notes of the subject which is not Hindi. Envelope which has notes of English has 36 pages. At least two envelopes are placed below $A$, which has odd number of pages. Envelope $X$ has notes of the subject which is not Computer and envelope $C$ doesn't have 56 pages.

1. The envelope which least number of pages has notes of which subject?
A. Chemistry
B. Hindi
C. Mathematics
D. Computer
E. None of these
2. Which of the following envelope(s) has pages not less than 50?
A. A
B. C
C. $Y$
D. Z
E. None of these
3. Envelope which has notes of Chemistry has how many pages?
A. 56
B. 60
C. 43
D. 36
E. None of these
4. What is the sum of the pages in envelopes $A$ and $Z$ ?
A. 63
B. 85
C. 56
D. 65
E. None of these
5. Which of the following envelopes has least composite number of pages?
A. B
B. C
C. X
D. A
E. None of these.

## Correct Answers:

| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- |
| B | C | A | D | B |



## Common explanation :

## Reference:

Six envelopes - A, B, C, X, Y, and $Z$ are placed one above another, each containing different number of pages 20, 29, 36, 43, 56 and 60 (but not necessarily in the same order) and envelopes were containing notes of different subjects - Physics, Chemistry, Mathematics, English, Hindi, and Computer (but not necessarily in the same order).

## Inference:

We will keep this information in mind while solving the puzzle.

## Reference:

Only three envelopes are placed between envelopes $A$ and $X$, which has odd number of pages.
At least two envelopes are placed below $A$, which has odd number of pages.
The envelope which is placed just above X has notes of Hindi.

## Inference:

At this point there are two possible scenarios in which the above hints can be used accordingly.

Case 1:

| Envelope | Notes | Pages |
| :---: | :---: | :---: |
| A |  |  |
|  |  |  |
|  |  |  |
|  | Hindi |  |
| $X$ |  |  |
|  |  |  |

## Case 2:

| Envelope | Notes | Pages |
| :---: | :---: | :---: |
|  |  |  |
| $A$ |  |  |
|  |  |  |
|  |  |  |
|  | Hindi |  |
| $X$ |  |  |

Here, we will make a mental note that both envelopes $A$ and $X$ have odd number of pages.

## Reference:

Only one envelope is placed between $X$ and $B$, which has notes of Chemistry.
Envelope $Y$ has notes of Physics and isn't place adjacent to envelope $B$, but placed one of the envelopes above
envelope $B$.

## Inference:

At this point we cannot use the second hint in case 1 so we can say that case $\mathbf{1}$ is an invalid case.

Case 2:

| Envelope | Notes | Pages |
| :---: | :---: | :---: |
| $Y$ | Physics |  |
| $A$ |  |  |
|  |  |  |
| $B$ | Chemistry |  |
|  | Hindi |  |
| $X$ |  |  |

## Reference:

The envelope which is placed at top has 17 pages more than envelope $X$.

Envelope Z has notes of the subject which is not Hindi.

Inference:
As we already know that both envelopes $A$ and $X$ have odd number of pages and with the information we can draw following conclusions:

## Conclusion 1:

Pages in envelope $X+17=$ Pages in envelope $Y$

Now, we have two possible scenarios in which envelope $X$ can have odd number of pages.

## Scenario 1:

Envelope X has 29 pages.

This means, pages in envelope $Y=29+17=46$ (from conclusion 1)
It is not possible because none of the envelopes has $\mathbf{4 6}$ pages.

## Scenario 1:

Envelope X has 43 pages.

This means, pages in envelope $Y=43+17=60$ (from conclusion 1)
It might be possible.

Case 2:

| Envelope | Notes | Pages |
| :---: | :---: | :---: |
| Y | Physics | 60 |
| A |  | 29 |
| Z |  |  |
| B | Chemistry |  |
|  | Hindi |  |
| X |  | 43 |

Here, we can say that envelope C has notes of Hindi.

## Reference:

Envelope which has notes of English has 36 pages.
Envelope $X$ has notes of the subject which is not Computer and envelope $C$ doesn't have 56 pages.

## Inference:

Using the above hints case 2 can be redrawn as:

Case 2:

| Envelope | Notes | Pages |
| :---: | :---: | :---: |
| Y | Physics | 60 |
| A | Computer | 29 |
| Z | English | 36 |
| B | Chemistry | 56 |
| C | Hindi |  |
| X |  | 43 |



At this we can say that envelope $X$ has notes of Mathematics and envelope $C$ has 20 pages.

## Case 2:

| Envelope | Notes | Pages |
| :---: | :---: | :---: |
| Y | Physics | 60 |
| A | Computer | 29 |
| Z | English | 36 |
| B | Chemistry | 56 |
| C | Hindi | 20 |
| X | Mathematics | 43 |

## Answers:

1. Following the final solution we can say that the envelope which least number of pages has notes of Hindi.

Hence, the correct answer is option B.
2. Following the final solution we can say that of all the given options $Y$ is the only envelope which has 56 pages.

Hence, the correct answer is option C.
3. Following the final solution we can say that of envelope which has notes of Chemistry has 56 pages.

Hence, the correct answer is option A.
4. Following the final solution we can say that the pages in envelopes $A$ and $Z$ are 29 and 36 respectively.

Required Sum $=29+36=65$

Hence, the correct answer is option D.
5. In the following common explanation it is clear the envelope $C$ has least composite number of pages.

Hence, the correct answer is option B.

## -' Smarkeeda

## Presents

## TestZone

India's least priced Test Series platform


## ALL BANK EXAMS

## 2020-2021 Test Series

$\square$ Brilliant Test Analysis<br>$\boxed{\square}$ Excellent Content<br>$\checkmark$ Unmatched Explanations

