

OSBM (Option Selector based on the Best Matching) (by N Paul) **Mechanism (Excel Implemented Version)**

Actual Input

1	0	0	0
1	0	0	0
1	0	0	0
1	1	1	1

Option A

1	1	0	0
1	1	0	0
1	1	1	1
1	1	1	1

Option B

0	0	0	1
0	0	1	0
0	1	0	0
1	0	0	0

Option C

0	0	0	1
0	0	0	1
0	0	0	1
1	1	1	1

Actual Input VS Option A

0	1	0	0
0	1	0	0
0	1	1	1
0	0	0	0

1
1
3 T
0 5

Actual Input VS Option B

1	0	0	1
1	0	1	0
1	1	0	0
0	1	1	1

2
2
2 T
3 9

Actual Input VS Option C

1	0	0	1
1	0	0	1
1	0	0	1
0	0	0	0

2
2
2 T
0 6

0 3 1 1
T 5

3 2 2 2
T 9

3 0 0 3
T 6

Step 1

Mismatching Value	
Actual input VS A	5
Actual input VS B	9
Actual input VS C	6

Matching Rates

∴ A>C>B

Step 3

∴ Matching % with respect to Actual Input (wrtActual)

A	$(4*4 - 5)/(4*4)*100$	68.75 %
B	$(4*4 - 9)/(4*4)*100$	43.75 %
C	$(4*4 - 6)/(4*4)*100$	62.50 %
(in case of A≠B≠C)		

Step 3 Further (in case of same output/label)

∴ Matching % with respect to Actual Input (wrtActual)

A	(Max(68.75,43.75))	68.75 %
C	(62.50)	62.50 %
(in case of A=B≠C)		

Step 2

Complement of Mismatch Value	
A	$(5+9+6)-5$ 15
B	$(5+9+6)-9$ 11
C	$(5+9+6)-6$ 14
Total	40

∴ Matching % with respect to other options (wrtOption)

(in case of A≠B≠C)

Option A	$(15/40*100)$	37.50 %
Option B	$(11/40*100)$	27.50 %
Option C	$(14/40*100)$	35.00 %
Total	100	%

Step 4 Further (in case of same output/label)

∴ Matching % with respect to other options (wrtOption)

(in case of A=B≠C)

Option A	(MAX(37.50,27.50))	37.50	$(37.50/72.50*100)$	51.7 %
Option C	(35.00)	35.00	$(35.00/72.50*100)$	48.3 %
		72.50	Total	100