UDHNA CITIZEN COMMERCE COLLEGE &

S.P.B. COLLEGE OF BUSINESS ADMINISTRATION &

SMT. DIWALIBEN HARJIBHAI GONDALIA COLLEGE OF BCA & IT

(Self Financed)

(Managed by Udhna Academy Education Trust)

214, Ranchhod Nagar, Opp. Swaminarayan Temple,Surat-Navsari Road, SURAT-394 210

Class: T.Y.B.Com. (Sem. 6)

Subject: Advanced Accounting & Auditing - 8

Ch- Accounting for Decision Making

Solution of Practice-1

Ans-1

- BEP = FC/PVR
  = 180000/30%
  = Rs 600000
- MOS = Sales × 25%
  = Rs 0.25 sales
- MOS = Actual Sales – Sales @ BEP
  0.25 Sales = Actual Sales – 6,00,000
  0.25 Sales – Sales = - 6,00,000
  Sales = Rs 8,00,000
- Required Sales = FC + Profit / PVR
  8,00,000 = 1,80,000 + Profit / 30%
  2,40,000 – 1,80,000 = Profit
  Profit = Rs 60,000

Ans-2

1. BEP = FC / PVR
   = 12,50,000 / 40%
   = Rs 31,25,000
   MOS = 37.5%
   BEP = 62.5%
   - Sales = 31,25,000 / 62.5%
     = Rs 50,00,000
2. MOS = Profit / PVR
   18,75,000 = Profit / 40%
   Profit = Rs 7,50,000

Ans-3

- Contribution at BEP is fixed cost
- PVR = Contribution / sales × 100
  = 12,50,000 / 31,25,000 × 100
  = 40%

Full capacity = 100%
BEP capacity = 60%
MOS = 40%

60% = 31,25,000
40% = (?)

At 40% = $31,25,000 \times 40 / 60$
$(MOS) = 20,83,333.33$

- MOS = Profit / PVR
  20,83,333.33 = Profit/40%
  Profit = Rs 8,33,333

Ans-4

- BEP = FC/PVR
  = 80,000 / 40%
  = Rs 2,00,000

- Let the SP = Rs 100
  VC = Rs 60
  Contribution = Rs 40
- New SP = 100 + 20% = 120
  New VC = 60 + 30% = 78
  New contribution = 42
- New PVR = $42 / 120 \times 100$
  $= 35\%$
- New BEP = 70,000 / 35%
  = Rs 2,00,000
  ∴ There is no change in BEP.

Ans-5

- PVR = - 10,000 – 40,000 Rs / 10,000 – 15,000 units
  (Contribution PU) = - 50,000 / -5000
  = 10 Rs / unit

1. 2019
   Total contribution = $15,000 \text{ unit} \times 10$
   $= \text{Rs } 1,50,000$
   1,50,000 = FC + Profit
   $\therefore 1,50,000 = FC + 40,000$
   FC = Rs 1,10,000

2. BEP = Rs 1,10,000 / 10 Rs/unit
   (In unit) = 11,000 units

Ans-6

- Profit (Rs) = 30,00,000 Rs $\times$ 33.33%
  $= \text{Rs } 10,00,000$
  $\therefore \text{Sales} = 30,00,000 + 10,00,000$
  = Rs 40,00,000
- MOS = Profit / PVR
  = 10,00,000 / 40%
  = Rs 25,00,000

∴ MOS = Sales – BEP
∴ 25,00,000 = 40,00,000 – BEP

1. ∴ BEP = Rs 15,00,000
   ∴ BEP = FC / PVR
   ∴ 15,00,000 = FC / 40%
   ∴ FC = Rs 6,00,000
2. 20,00,000 = 6,00,000 + Profit / 40%
   ∴ 8,00,000 – 6,00,000 = Profit
   ∴ Profit = Rs 2,00,000
3. Sales required = 6,00,000 + 12,00,000 / 40%
   = Rs 45,00,000
4. Sales required = 6,00,000 – 2,00,000 / 40%
   = Rs 10,00,000
5. MOS = Profit / PVR
   = 5,00,000 / 40%
   = Rs 12,50,000

   Sales = BEP + MOS
   = 15,00,000 + 12,50,000
   = Rs 27,50,000
   MOS (%) = 12,50,000 / 27,50,000 × 100
   = 45.45%
6. FC = 6,00,000 – 50,000
   = Rs 5,50,000
   PVR = Contribution / Sales × 100
   ∴ 40 = Contribution / 40,00,000 × 100
   ∴ Contribution = Rs 16,00,000

- Contribution = Sales – VC
  16,00,000 = 40,00,000 – VC
  ∴ VC = Rs 24,00,000
- New sales = 40,00,000 + 20%
  =Rs 48,00,000
- New variable = 24,00,000 – 10%
  = Rs 21,60,000
- ∴ Contribution = Rs 26,40,000

- New PVR = 26,40,000 / 48,00,000 × 100
  = 55%
- New BEP = New FC / New PV
  = 5,50,000 / 55%
  = Rs 10,00,000

7. New VC = 24,00,000 + 25%
   = Rs 30,00,000

- New SP = 40,00,000 + 20%
  = Rs 48,00,000
- Desired profit = 10,00,000 + 40%
  = Rs 14,00,000
- Contribution = 48,00,000 – 30,00,000
  = Rs 18,00,000

- PVR = 18,00,000 / 48,00,000 × 100
  = 37.5%
- Sales required = 6,00,000 + 14,00,000 / 37.5%
  = Rs 53,33,333

Ans-7

1. PVR = Change in profit / Change in sales × 100
   = 1,04,000 / 2,60,000 × 100
   = 40%
2. PVR (2022) = Contribution / Sales × 100
   40% = Contribution / 5,00,000 × 100
   40 × 5,00,000 / 100 = Contribution
   ∴ Contribution = Rs 2,00,000
   - Contribution = Sales – VC
   ∴ 2,00,000 – 5,00,000 = -VC
   ∴ VC =Rs 3,00,000
3. Contribution – FC = Profit
   ∴ 2,00,000 – FC = 80,000
   ∴ FC = Rs 1,20,000

   BEP = FC / PVR
   = 1,20,000 / 40%
   = Rs 3,00,000
4. MOS (2022) = Profit / PVR
   = 80,000 / 40%
   = Rs 2,00,000
5. MOS = 25%
   ∴ BEP = 75%
   75 = Rs 3,00,000
   100 = (?)

   ∴ Sales = Rs 4,00,000
6. New sales @ BEP = 3,00,000 – 20%
   = Rs 2,40,000
   Sales = 1,20,000 – Loss / 40%
   2,40,000 × 40% = 1,20,000 – Loss
   96,000 – 1,20,000 = - Loss
   ∴ Loss = Rs 24,000
7. New profit = 80,000 + 25%
   = Rs 1,00,000
   Sales required = 1,20,000 + 1,00,000 / 40%
   = Rs 5,50,000

Ans-8

- Sales = 5000 × 48
  = Rs 2,40,000
- MOS = Rs 1,08,000

- BEP = Sales – MOS = Rs 1,32,000 units = 2750

2. MOS = Profit / PVR
   1,08,000 = Profit / 33.33%
   ∴ Profit = Rs 36,000

1. BEP = FC / 33.33%
   ∴ 1,32,000 × 33.33% = FC
   ∴FC = Rs 44,000
3. Desired profit = 36,000 + 45,000
   = Rs 71,000
   MOS = Profit / PVR
   = 81,000/33.33%
   = Rs 2,43,000
4. VC = 2,40,000 × 66.666%
   = Rs 1,60,000
- New VC = 1,60,000 – 25%
  = Rs 1,20,000
- New contribution = 2,40,000 – 1,20,000
  = Rs 1,20,000
- New PVR = 1,20,000 / 2,40,000 × 100
  = 50%
- BEP = 44,000 / 50%
  = Rs 88,000
5. New sales = 6000 units × 48 Rs
   = Rs 2,88,000
   Contribution = 2,88,000 × 33.33%
   = Rs 96,000
   Profit = Contribution – FC
   = 96,000 – 44,000
   = Rs 52,000
6. New FC = 44,000 + 15%
   = Rs 50,600
   Sales @ BEP = 50,600 / 33.333%
   = Rs 1,51,800
   Units = 3163 unit
   Unit to be increased = 3163 – 2750
   = 413 units
7. New FC = 44,000 + 15%
   = Rs 50,600
- New VC = (48 × 66.67%) – 2
  = 32 – 2
  = Rs 30
- New selling price = 48+2
  = Rs 50
- New contribution = 50 – 30
  = Rs 20/unit
- New profit = 36,000 + 100%
  = Rs 72,000
- New PVR = 120 / 50 × 100
  = 40%
- Required sales = 50,600 + 72,000 / 40%
  = Rs 3,06,500
- In unit (sold) = Rs 3,06,500 / Rs 50/unit
  = 6130 units

Ans-9

1. Total Cost = Fixed cost + Variable
   Y = 2,50,000 + 0.75x
   ∴Variable cost = 75% of sales
   ∴ Contribution PVR = 25%
2. BEP = 2,50,000 / 25%
   = Rs 10,00,000
3. Required sales = 2,50,000 + 50,000 / 25%
   = Rs 12,00,000
4. 10,00,000 + 40,000 = 2,50,000 + Profit / 25%
   2,60,000 -2,50,000 = profit
   ∴ Profit = Rs 10,000
5. MOS = Profit / PVR
   = 80,000 / 25%
   = Rs 3,20,000

Ans-10

1. PVR = S – V / S × 100
   = 5 – 2 / 5 × 100
   = 60%

- BEP(Rs) = 7,50,000 / 60%
  = Rs 12,50,000

- In units = 12,50,000 / 5 Rs/unit
  = 2,50,000 units

2. Sales required = 7,50,000 + 6,00,000 / 60%
   = Rs 22,50,000

- In units = 22,50,000 / 5 Rs/unit
  = 4,50,000 units

3. Sales = 24,00,000
   -VC = 8,00,000
   Contr = 16,00,000
   Profit = 16,00,000 – 7,50,000
   = Rs 8,50,000

Ans-11

1. BEP = FC / PVR
   80,000 = 32,000 / PVR
   ∴PVR = 32,000 / 80,000
   = 0.4 × 100
   = 40%
2. Sales = 32,000 + 68,000 / 40%
   = Rs 2,50,000
3. 2,50,000 + 20% = 32,000 + Profit / 40%
   ∴ (3,00,000 × 40%) – 32,000 = Profit
   ∴ Profit = 1,20,000 – 32,000
   = Rs 88,000
4. New SP = 2,50,000 – 20%
   = Rs 2,00,000
   Old VC = 2,50,000 × 60%
   = Rs 1,50,000

- Contribution = 2,00,000 - 1,50,000
  = Rs 50,000

- PVR = 50,000 / 2,00,000 × 100
  = 25%
- New BEP = 32,000 / 25%
  = Rs 1,28,000
- New profit = 68,000 + 100%
  = Rs 1,36,000
- Sales required = 32,000 + 1,36,000 / 25%
  = Rs 6,72,000

5. New SP = 2,50,000 + 20%
   = Rs 3,00,000
- VC = 2,50,000 × 60%
  = Rs 1,50,000
- Contribution = Rs 1,50,000

- PVR = 1,50,000 / 3,00,000 × 100
  = 50%
- Sales required = 32,000 – 10,000 / 50%
  = Rs 44,000