

By. Er. Dharmendra Sir

7974073108, 9584873492

# DPM CLASSES

6th to 10th (Math's & Science), 11th & 12th (Physics, Chemistry, Math's)

---

**TEST - PAPER (CBSE/NCERT)**

## LINEAR PROGRAMMING

**SESSION -2024-25**

**CLASS - 12<sup>th</sup>**

**JOIN TODAY FOR ADVANCE CONCEPTS**

**ONLY IN ₹3000 PER MONTH**

**MRP: ₹ 100/- ONLY**

**ALSO, BASIC CONCEPTS CLASSES IN SUMMER**

**VACATION Apr, May & Jun (Every Year)**

# DPM CLASSES

6th to 10th (Math's &amp; Science), 11th &amp; 12th (Physics, Chemistry, Math's)

Time : 1 hr

Linear programming

mm: 40

Q. 1. Determine the maximum value of  $z = 11x + 7y$   
 Subject to the constraints  $2x + y \leq 6$ ,  $x \leq 2$ ,  $x \geq 0$ ,  $y \geq 0$

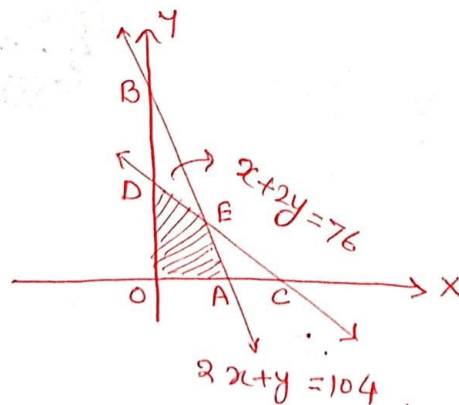
Q. 2. Maximise  $z = 3x + 4y$ , Subject to the constraints  
 $x + y \leq 1$ ,  $x \geq 0$ ,  $y \geq 0$ .



Q. 3. Maximise the function  $z = 11x + 7y$ , Subject to  
 the constraints  $x \leq 3$ ,  $y \leq 2$ ,  $x \geq 0$  and  $y \geq 0$ .

Q. 4. Minimise  $z = 13x - 15y$  Subject to the constraints  
 $x + y \leq 7$ ,  $2x - 3y + 6 \geq 0$ ,  $x \geq 0$  and  $y \geq 0$ .

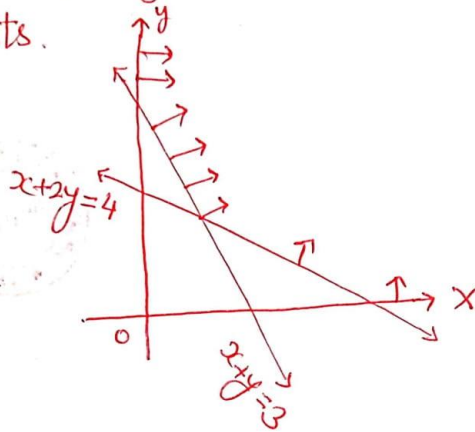
Q. 5. Determine the maximum value of  $z = 3x + 4y$ ,  
 if the feasible region (shaded) for a LPP is shown  
 in the following figure.



# DPM CLASSES

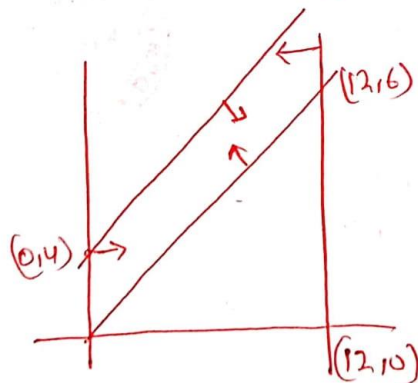
6th to 10th (Math's &amp; Science), 11th &amp; 12th (Physics, Chemistry, Math's)

Q.6. The feasible region for a LPP is shown in the following figure. Evaluate  $z = 4x + y$  at each of the corner points of this region. Find the minimum value of  $z$ , if it exists.



Q.7. maximise  $z = x + y$  subject to  $x + 4y \leq 8$ ,  
 $2x + 3y \leq 12$ ,  $3x + y \leq 9$   $x \geq 0$  and  $y \geq 0$ .

Q.8 The feasible region for an LPP is shown in the following figure. Let  $F = 3x - 4y$  be the objective function. maximum value of  $F$  is



By. Er. Dharmendra Sir

7974073108, 9584873492

# DPM CLASSES

6th to 10th (Math's & Science), 11th & 12th (Physics, Chemistry, Math's)

---





By. Er. Dharmendra Sir

7974073108, 9584873492

# DPM CLASSES

6th to 10th (Math's & Science), 11th & 12th (Physics, Chemistry, Math's)

---



By. Er. Dharmendra Sir

7974073108, 9584873492

# DPM CLASSES

6th to 10th (Math's & Science), 11th & 12th (Physics, Chemistry, Math's)

---



By. Er. Dharmendra Sir

7974073108, 9584873492

# DPM CLASSES

6th to 10th (Math's & Science), 11th & 12th (Physics, Chemistry, Math's)

---



By. Er. Dharmendra Sir

7974073108, 9584873492

# DPM CLASSES

6th to 10th (Math's & Science), 11th & 12th (Physics, Chemistry, Math's)

---





By. Er. Dharmendra Sir

7974073108, 9584873492

# DPM CLASSES

6th to 10th (Math's & Science), 11th & 12th (Physics, Chemistry, Math's)

---



By. Er. Dharmendra Sir

7974073108, 9584873492

# DPM CLASSES

6th to 10th (Math's & Science), 11th & 12th (Physics, Chemistry, Math's)

---

