SYLLABUS : Sets

Max. Marks : 120 **Marking Scheme :** (+4) for correct & (–1) for incorrect answer **Time : 60 min.**

INSTRUCTIONS : This Daily Practice Problem Sheet contains 30 MCQs. For each question only one option is correct. Darken the correct circle/ bubble in the Response Grid provided on each page.

1. Let A = {(1, 2), (3, 4), 5}, then which of the following is incorrect?

(a) $\{3, 4\} \notin A$ as (3, 4) is an element of **A**

(b) {5}, {(3, 4)} are subsets of A but not elements of A

(c) {1, 2}, {5} are subsets of A

(d) {(1, 2), (3, 4), 5} is subset of A

2. A market research group conducted a survey of 1000 consumers and reported that 720 consumers liked product A and 450 consumers liked product B. What is the least number that must have liked both products ?

(a) 170 (b) 280

(c) 220 (d) None of these

3. One of the partitions of the set $\{1, 2, 5, x, y, \sqrt{2}, \sqrt{3}\}$ is

(a) $\{\{1,2,x\}, \{x,5,y\}, \{\sqrt{2}, \sqrt{3}\}\}$

(b) $\{\{1,2, \sqrt{2}\}, \{x,y, \sqrt{2}\}, \{5, \sqrt{2}, \sqrt{3}\}\}$

(c) $\{\{1,2\}, \{5,x\}, \{\sqrt{2}, \sqrt{3}\}\}$

(d) $\{\{1,2,5\}, \{x,y\}, \{\sqrt{2}, \sqrt{3}\}\}$

4. Let A and B be two sets then $(A \cup B)' \cup (A' \cap B)$ is equal to

(a) A' (b) A

(c) B' (d) None of these