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| Serial No. | Questions | CO | Bloom’s Taxonomy Level | Difficulty Level | Competitive Exam Question Y/N | Area | Topic | Unit | Marks |
| 1 | Define partially ordered set (Poset). | CO6 | K1 | L | N | Lattice | Posets | **6** | **2** |
| 2 | Show that the “greater than or equal” relation (≥) is a partial ordering on the set of integers. | CO6 | K1 | M | N | Lattice | Posets | 6 | 6 |
| 3 | Show that the inclusion relation  is a partial ordering on the power set of set S. | CO6 | K1 | H | N | Lattice | Posets | 6 | 6 |
| 4 | In the poset, are the integers 3 and 9 comparable? Are 5 and 7 comparable? | CO6 | K1 | M | N | Lattice | Posets | 6 | 2 |
| 5 | Determine whether the relations represented by these zero-one matrices are partial orders.   1. b) | CO6 | K1 | M | N | Lattice | Posets | 6 | 2 |
| 6 | Find the dual of Poset . | CO6 | K1 | H | N | Lattice | Posets | 6 | 6 |
| 7 | Find the dual of Poset | CO6 | K1 | H | N | Lattice | Posets | 6 | 6 |
| 8 | Find the dual of Poset. | CO6 | K1 | H | N | Lattice | Posets | 6 | 6 |
| 9 | Draw the Hasse diagram representing the partial ordering on | CO6 |  |  |  | Lattice | Hasse Diagram | 6 |  |
| 10 | Draw the Hasse diagram for the partial ordering on the power set , where | CO6 |  |  |  | Lattice | Hasse Diagram | 6 |  |
| 11 | Let S= {1, 2, 3, 4}. With respect to the lexicographic order based on the usual “less than” relation, find all pairs in less than . | CO6 |  |  |  | Lattice | Hasse Diagram | 6 |  |
| 12 | Let S= {1, 2, 3, 4}. With respect to the lexicographic order based on the usual “less than” relation, find all pairs in less than . | CO6 |  |  |  | Lattice | Hasse Diagram | 6 |  |
| 13 | Let S= {1, 2, 3, 4}. With respect to the lexicographic order based on the usual “less than” relation,draw the Hasse diagram of the poset. | CO6 |  |  |  | Lattice | Hasse Diagram | 6 |  |
| 14 | Draw the Hasse diagram for divisibility on the set. | CO6 |  |  |  | Lattice | Hasse Diagram | 6 |  |
| 15 | Draw the Hasse diagram for divisibility on the set. | CO6 |  |  |  | Lattice | Hasse Diagram | 6 |  |
| 16 | Define Lattice. | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 17 | Define maximal and minimal element. | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 18 | Which elements of the poset are maximal, and which are minimal? | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 19 | Let S be a set. Determine whether there is a greatest element and a least element in the poset . | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 20 | Find the greatest lower bound and the least upper bound of the set and , if they exist, in the poset. | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 21 | Is the poset a lattice? | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 22 | Determine whether (P(S), ) is a lattice where S is a set. | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 23 | Answer these questions for the poset : | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 24 | Answer these questions for the poset ({{1}, {2}, {4}, {1, 2}, {1, 4}, {2, 4}, {3, 4}, {1, 3, 4}, {2, 3, 4}},  ). | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 25 | Give a poset that has | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 26 | Show that every totally ordered set is a lattice. | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 27 | Give an example of an infinite lattice with | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 28 |  | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 29 |  | CO6 |  |  |  | Lattice | Lattice | 6 |  |
| 30 |  | CO6 |  |  |  | Lattice | Lattice | 6 |  |