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|  | **East West University** A/2, Main Road, Jahurul Islam City, Aftabnagor, Dhaka-1219 | Department of Computer Science and Engineering  CSE246: Section 1  Algorithms |

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| Semester: Spring 2022 | Full Marks: 10 |
| Examination: Quiz 1 | Allowed Time: 30 min |
| Instructor: Dr. Taskeed Jabid | Answer all questions |

**Question#1**

A thief enters a house for robbing it. He can carry a maximal weight of 7 kg into his bag. There are 4 items in the house with the following weights and values. What **items** should thief take if he can take any item in any full and/or fractional amount? Show the necessary calculation.

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| Item | Weight (kg) | Value ($) |
| Mirror | 2 | 3 |
| Silver nugget | 3 | 4 |
| Painting | 4 | 5 |
| Vase | 5 | 6 |

**Question#2**

Mention start time and finish time of 12 jobs (choose on your own) and show which jobs can be served without conflicting one another to maximize the most number of served job