**COMSATS University Islamabad, Wah Campus**

**Assignment # 02**

Department of Computer Science

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| Class/Program: | | **BS(CS)/BS(SE) – 5A/5B** | | Date: | **March 14, 2024** | | | |
| Subject: | **Database System** | | | Instructor: | | **AYESHA NAEEM** | | |
| Total Time Allowed: | | |  | Maximum Marks: | | | | **10** |
| Student Name: | |  | | Registration #: | | |  | |

**Q 01, 02: [C5, CLO-5]**

**Question # 01: (05)**

Construct an ER Diagram for Company having following details:  
• Company organized into DEPARTMENT. Each department has unique name and a particular employee who manages the department. Start date for the manager is recorded. Department may have several locations.  
• A department controls a number of PROJECT. Projects have a unique name, number and a single location.  
• Company’s EMPLOYEE name, ssno, address, salary, sex and birth date are recorded. An employee is assigned to one department, but may work for several projects (not necessarily controlled by her dept). Number of hours/week an employee works on each project is recorded; The immediate supervisor for the employee.  
• Employee’s DEPENDENT are tracked for health insurance purposes (dependent name, birthdate, relationship to employee).

**Question # 02: (05)**

Construct an E-R diagram of given NHL.

Suppose you are given the following requirements for a simple database for the National Hockey League (NHL):  
• the NHL has many teams,  
• each team has a name, a city, a coach, a captain, and a set of players,  
• each player belongs to only one team,  
• each player has a name, a position (such as left wing or goalie), a skill level, and a set of injury records,  
• a team captain is also a player,  
• a game is played between two teams (referred to as host\_team and guest\_team) and has a date (such as May 11th, 1999) and a score (such as 4 to 2).