**Department of**

**Computer Engineering**

**Opposite S.L.Raheja Hospital, Mahim Causeway, Mahim (West), Mumbai - 400016, Maharashtra. +91 22 24451961**

**Class: TE (SEM-V)**

**AY-21-22**

**Subject: Data warehousing and mining Lab**

**Subject Code: CSL503**

**Credits: 1**

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| **Assignment-1** | | | |
| **Q.NO** | **Question** | **BTL** | **LO** |
| 1. | Design a data warehouse for a hospital where there are three dimensions a)Doctor b)Patient c)Time consider two measures i)Count II)Charges is the fee that doctor charges to a patient for a visit. For the above create star schema and snowflake schema.  Create the cube for the same and apply following OLAP operations  i)Rollup II)Drill down III)Slice IV)Dice V)Pivot  Starting with the base cuboid [day, doctor, patient], what specific OLAP operations should be performed in order To list the total fee collected by each doctor in 2010? | **L3,L6** | **LO1** |
| 2. | Suppose that a data warehouse for DB-University consists of the four dimensions student, course, semester, and instructor, and two measures count and avg-grade. At the lowest conceptual level (e.g., for a given student, course, semester, and instructor combination), the avg-grade measure stores the actual course grade of the student. At higher conceptual levels, avg-grade stores the average grade for the given combination.   * 1. Draw a snowflake schema diagram for the data warehouse.   Starting with the base cuboid [student, course, semester, instructor], what specific OLAP operations (e.g., roll-up from semester to year) should you perform in order to list the average grade of CS courses for each DB-University student. | **L3,L6** | **LO1** |

Prof. Kavita Jain

(Subject In-charge)