



Dharampeth M. P. Deo Memorial Science College, Nagpur

B. Sc. (Computer Science) SEMESTER -V Paper-II (Data Base Management System)

UNIT I

Three level architecture in DBMS: -

<https://youtu.be/CZfmqC9dMJA?si=ZQZrx3AjjlF28vT>

<https://youtu.be/15QEvXIVHpM?si=0swasJt49B53ok-q>

https://youtu.be/CZfmqC9dMJA?si=Tj_Sb2YaEEaT7_n9

Building Blocks, Application, Advantages and Disadvantages and Data Models in DBMS:

https://youtu.be/NPT_vt-hCg?si=cmPFNzSDAyBXauzn

<https://youtu.be/1Thk90gJF6U?si=p4W92vpBC6ynYDmt>

Components of DBMS: -

<https://youtu.be/tOohitf2CNE?si=k0wKZfTbKLcIS0eN>

Database Users, Database Administrator (Def, Working, Responsibilities of DBA): -

<https://youtu.be/c9zR90MU51s?si=9ShKercmR4NR7YNQ>

<https://youtu.be/fO5tDyOY5Fw?si=dsIO1hg4ElYna9eM>

UNIT II

E-R Model in DBMS: -

<https://youtu.be/wOD02sezmx8?si=A1nC7TRamhANyHmM>

<https://youtu.be/kMJR5gexfs8?si=jazzA9vkVcwdmp5j>

Entity Relationship Diagram: -

<https://youtu.be/obb7SIUmKQE?si=CLEcXjNCIOvQ6L2j>

Attributes and Types of Attributes: -

<https://youtu.be/nW515J19GKw?si=g-byGhDeF4aaYRvm>

https://youtu.be/coHxp23wTyc?si=cv0JHpxH_tYCjBz7

Reduction of an E-R Schema to Tables: -

<https://youtu.be/W9Oo4CjHIXg?si=EDAWxxmwOE7XCxrW>

Mapping Cardinality in DBMS: -

<https://youtu.be/W9Oo4CjHIXg?si=EDAWxxmwOE7XCxrW>

Weak Entity Set: -

<https://youtu.be/B-HDLP45VqA?si=d2hydS7ALVaNh0Ss>

Keys in DBMS: -

Introduction: - <https://youtu.be/zZPUTJjKpzs?si=oI5VeeFJ44AKEV>

Super Key: - https://youtu.be/MjA_Jx1z6ME?si=887Pr28j4iuu_Dfu

Candidate Key: - <https://youtu.be/GLH22JoqeMw?si=rwPtrvxeYkLOtZnN>

Primary Key: - https://youtu.be/p8iRFHfKI_Q?si=s3DVjc44awfPNqO9
Foreign Key: - <https://youtu.be/fXoJFB5E2-k?si=BXjJRV6gHEwFuCYP>

UNIT III

Relational Algebra in DBMS:

<https://youtu.be/5bmFEANOivg?si=KQxp32bQgr6OJVHW>

Relational Algebra Operations: -

<https://youtu.be/KaIRmVD-v3U?si=Lx654FxD3wFiVLhZ>

<https://youtu.be/KaIRmVD-v3U?si=AFryRzYkfqmInnx>

Select, Project, Set Difference, Union, Cartesian Product, Set –Intersection, Natural Join

<https://youtu.be/Pnzda0Tz-yo?si=i2o6eNvKQ5asQQP1>

<https://youtu.be/FOWQRPeXB00?si=CJ2E1Hb5AaucG8nS>

https://youtu.be/t2_IrL5U--o?si=-cli2HJK8ggNdTi3

https://youtu.be/YdoQdPt_9NI?si=raMq_oYCxuwVIEa5

https://youtu.be/ams5CCN_xqw?si=eTtC75by9qP_34--

<https://youtu.be/KasQpgDpFbE?si=LB6NcajzpNmVQD9P>

Aggregate Function in DBMS: -

<https://youtu.be/I95z0pSOUU0?si=-gTzwPLyxPwqzvsH>

UNIT IV

Functional Dependencies: -

<https://youtu.be/X3c1phdyjbU?si=SjsNf7BSpzrIteXv>

https://youtu.be/X3c1phdyjbU?si=j9A_eQH_tuV4hdXv

<https://youtu.be/fzfT2vp3kjM?si=ZQo74ZDKPWdX4FSw>

Decomposition in DBMS, Lossless Decomposition in DBMS: -

<https://youtu.be/H8RI1MM4ucI?si=oL9Gj6rCpjNIQLnC>

https://youtu.be/hs_ubhFPNzo?si=TTimQu67xMTlj9up

Normalization in DBMS: -

https://youtu.be/pkp0HKvl0mw?si=s7qUpoJHTabh_gEH

https://youtu.be/EGEwkad_IIA?si=4iKbK6tKFDAzX7g1

<https://youtu.be/pkp0HKvl0mw?si=zf2UD51QoJva7kdH>

1NF: - <https://youtu.be/Vjz6OohFwUk?si=0dC2XIh14jGcSQkQ>

2NF: - https://youtu.be/rm0k3hINE64?si=nWAKbkfu6_3YtydI

3NF: - <https://youtu.be/iz1XZaA3ZpY?si=P5A5C5nLmbeZJWRD>

BCNF: - <https://youtu.be/b39IhcO7qsA?si=18tlB7M5nrhmFd4H>

4NF: - <https://youtu.be/pr0UbOCILAQ?si=aLeSOF-vEQOvPox9>