18DCS007
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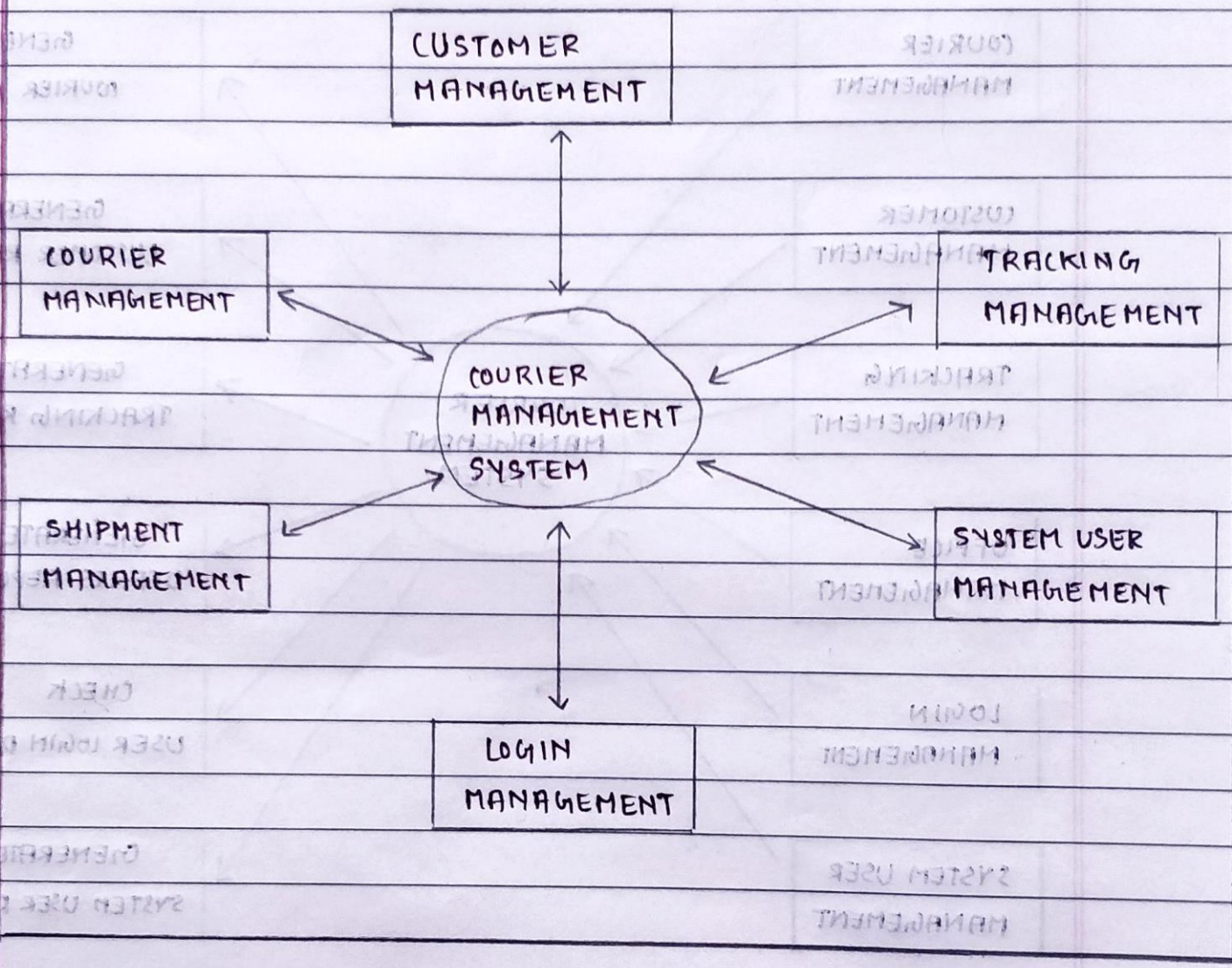
6CSE1 - BATCH A
SUBJECT - SE
DATE - 26/04/21

Q1. ZERO LEVEL DFD - COURIER COMPANY WEB PORTAL



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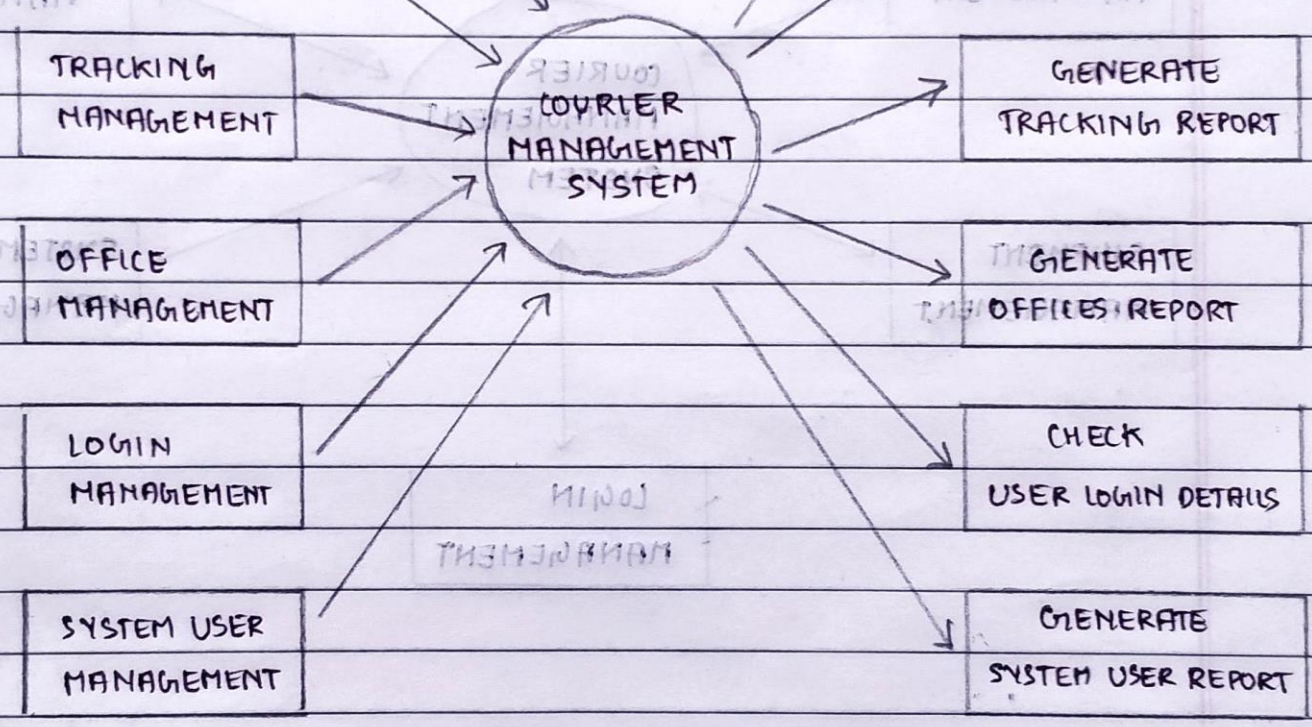
→ FIRST LEVEL DFD - COURIER COMPANY WEB PORTAL



Q2. LOCOMO MODEL

(1) ORGANIC :

a_1	a_2	b_1	b_2
2.4	1.05	2.5	0.38

→ ESTIMATED EFFORT : $2.4 (KLOC)^{1.05}$ PM

$= 2.4 (806)^{1.05}$ PM

$= 2.4 (1126.294)$ PM

$= 2703.105$ PM (approx)

→ DEVELOPMENT TIME

$T_{dev} = 2.5 (2703.105)^{0.38}$ months

$= 2.5 (20.14)$ months

$= 50.35$ months (approx)

→ AVG STAFF SIZE $= \frac{\text{EFFORT}}{\text{DEV. TIME}}$

$= \frac{2703.105}{50.35}$

$= 53.68$ persons

→ PRODUCTIVITY $= \frac{KLOC}{E}$ KLOC/PM

$= \frac{806}{2703.105}$ KLOC/PM

$= 0.298$ KLOC/PM (approx)

(II) EMBEDDED :

a_1	a_2	b_1	b_2
3.6	1.2	2.5	0.32

→ ESTIMATED EFFORT = $3.6(KLOC)^{1.20}$ PM

$= 3.6(806)^{1.2}$ PM

$= 11063.80$ PM approx

→ DEVELOPMENT TIME :

$T_{dev} = 2.5(effort)^{0.32}$ months

$= 2.5(11063.8)^{0.32}$

$= 49.202$ months approx

→ AVG STAFF SIZE $= \frac{EFFORT}{DEV.TIME}$

$= \frac{11063.80}{49.202}$

$= 224.86$ persons

→ PRODUCTIVITY $= \frac{KLOC}{E}$ KLOC/PM

$= \frac{806}{11063.80}$ KLOC/PM

$= 0.07285$ KLOC/PM