

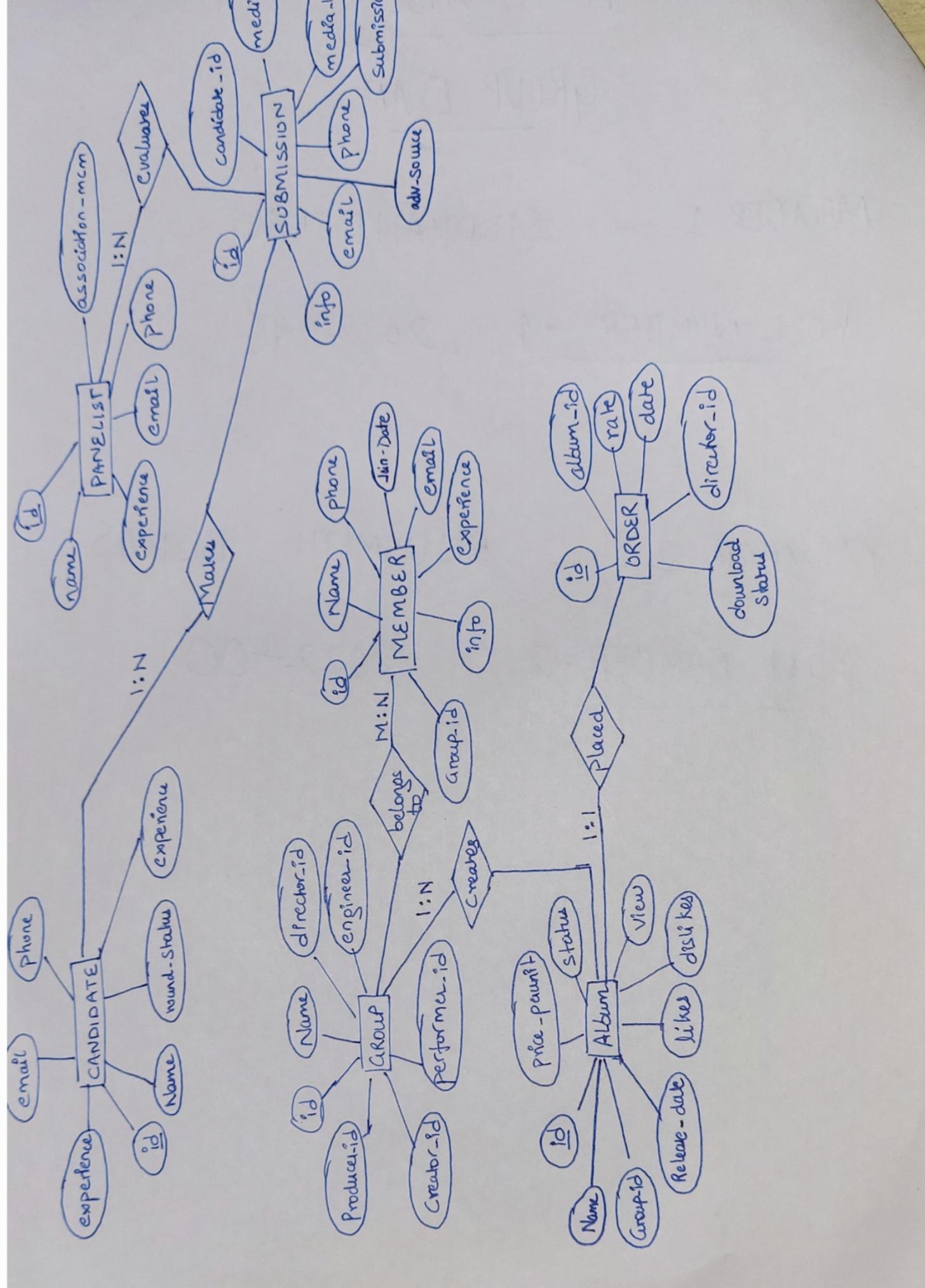
PAIR-WISE
GROUP EXAM

MEMBER-1 - SIDDHANT BALI

ROLL NUMBER - 1 2022496

MEMBER-2 - RIJU SMITH BISWAS

ROLL NUMBER-2 - 2022400



1. $\pi_{\text{album-id}, \text{release-date}, \text{media-type}, \text{submission-date}, \text{ad-source}} (\sigma_{\text{media-type}} = \text{'audio'} \text{ AND } \text{YEAR}(\text{release-date}) = 2020 (\text{album} \bowtie \text{submission}))$
2. $\pi_{\text{candidate-id}, \text{name}} (\sigma_{\text{round-status} = \text{'participant'}} \text{ AND } (\sigma_{\text{media-type} = \text{'audio'}} (\text{submission} \bowtie \text{candidate})) \bowtie (\sigma_{\text{media-type} = \text{'video}} (\text{submission} \bowtie \text{candidate})))$
3. $\pi_{\text{member-id}, \text{name}} (\tau_{\text{member-id}}; \text{count}(\text{album-id})) (\text{member} \bowtie \text{order-table}) \bowtie (\sigma_{\text{count}(\text{album-id}) > 1})$
4. $\pi_{\text{member-id}, \text{name}} (\sigma_{\text{name} = \text{'pop group'}} (\text{group-table} \bowtie \text{member})) - (\pi_{\text{member-id}, \text{name}} (\text{group-table} \bowtie \text{member}) - (\sigma_{\text{name} = \text{'pop group'}} (\text{group-table} \bowtie \text{member})))$
5. $\pi_{\text{director-id}, \text{name}} (\tau_{\text{director-id}}; \text{count}(\text{DISTINCT album-id})) (\text{order-table} \bowtie \text{member})$

