

Q 3	Discuss potential outcome model for casual inference with example. OR Elaborate the Bradford Hill's criteria for causality.	5	CO4
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Q 4	Write about any 2 strategies for controlling confounding in clinical research.	5	CO2
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Section C
(2Qx15M=30 Marks)

Q 1	Data in below table displays the number of individuals with and without the exposure and the number of individuals with and without outcome. Calculate following measures of association : a) relative risk, b) odds ratio, c) risk difference, d) number need to treat	15	CO4											
<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Exposure</th> <th colspan="2">Outcome</th> </tr> <tr> <th>Present</th> <th>Absent</th> </tr> </thead> <tbody> <tr> <th>Present</th> <td style="text-align: center;">200</td> <td style="text-align: center;">300</td> </tr> <tr> <th>Absent</th> <td style="text-align: center;">400</td> <td style="text-align: center;">500</td> </tr> </tbody> </table>				Exposure	Outcome		Present	Absent	Present	200	300	Absent	400	500
Exposure	Outcome													
	Present	Absent												
Present	200	300												
Absent	400	500												

Q 2	Construct a note on steps involved in developing a clinical prediction model.	15	CO3
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Section D
(2Qx10M=20 Marks)

Q 1	Define clinical epidemiology. Give a thorough overview focusing on key features and example of cohort, case-control and cross-sectional study designs.	10	CO1
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Q 2	<div style="text-align: center;"> <pre> graph TD Diabetes --> Infections Diabetes --> Surgery Diabetes --> VascularDisease[Vascular Disease] Infections --> Analgesics Surgery --> Analgesics VascularDisease --> Analgesics Analgesics -.-> RenalFailure[Renal Failure] </pre> </div> <p>Judge the above hypothetical situation comprising of association between diabetes and analgesics. Propose possible confounders for it.</p>	10	CO2
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