{'headers': {'date': 'Sun, 14 Apr 2024 10:04:20 GMT', 'content-type': 'application/json;charset=utf-8', 'content-length': '13512', 'connection': 'keep-alive', 'keep-alive': 'timeout=25', 'vary': 'Accept-Encoding', 'access-control-allow-origin': '\*', 'access-control-expose-headers': '\*', 'x-acs-request-id': '703B6BB9-BC78-5EFF-9DEB-0AFBA08F1C0C', 'x-acs-trace-id': '72d1ef977022520e19b10eee1c798e9d', 'etag': '110jPQRfMS73KK2h+bW+hfw0'}, 'statusCode': 200, 'body': {'Data': '{"algo\_version":"","doc\_layout":[{"layout\_type":"text","pos":[{"x":131,"y":1683},{"x":131,"y":1723},{"x":590,"y":1723},{"x":590,"y":1683}]},{"layout\_type":"text","pos":[{"x":53,"y":31},{"x":53,"y":73},{"x":412,"y":73},{"x":412,"y":31}]},{"layout\_type":"text","pos":[{"x":133,"y":1628},{"x":133,"y":1668},{"x":486,"y":1668},{"x":486,"y":1628}]},{"layout\_type":"foot","pos":[{"x":758,"y":2267},{"x":758,"y":2297},{"x":892,"y":2297},{"x":892,"y":2267}]},{"layout\_type":"text","pos":[{"x":129,"y":1569},{"x":129,"y":1618},{"x":1148,"y":1618},{"x":1148,"y":1569}]},{"layout\_type":"text","pos":[{"x":128,"y":88},{"x":128,"y":240},{"x":1059,"y":240},{"x":1060,"y":88}]},{"layout\_type":"text","pos":[{"x":134,"y":252},{"x":134,"y":293},{"x":414,"y":293},{"x":414,"y":253}]},{"layout\_type":"text","pos":[{"x":133,"y":920},{"x":133,"y":960},{"x":490,"y":960},{"x":490,"y":920}]},{"layout\_type":"text","pos":[{"x":133,"y":975},{"x":133,"y":1017},{"x":356,"y":1017},{"x":356,"y":975}]},{"layout\_type":"text","pos":[{"x":134,"y":694},{"x":134,"y":736},{"x":577,"y":736},{"x":577,"y":694}]},{"layout\_type":"text","pos":[{"x":131,"y":308},{"x":131,"y":350},{"x":803,"y":350},{"x":803,"y":308}]},{"layout\_type":"text","pos":[{"x":54,"y":1307},{"x":54,"y":1349},{"x":412,"y":1349},{"x":412,"y":1307}]},{"layout\_type":"text","pos":[{"x":132,"y":1362},{"x":132,"y":1402},{"x":506,"y":1402},{"x":506,"y":1362}]},{"layout\_type":"text","pos":[{"x":54,"y":639},{"x":53,"y":681},{"x":411,"y":681},{"x":411,"y":639}]},{"layout\_type":"text","pos":[{"x":635,"y":1423},{"x":634,"y":1556},{"x":1079,"y":1556},{"x":1079,"y":1423}]},{"layout\_type":"text","pos":[{"x":133,"y":864},{"x":133,"y":957},{"x":1477,"y":957},{"x":1477,"y":864}]},{"layout\_type":"text","pos":[{"x":662,"y":758},{"x":662,"y":851},{"x":1056,"y":851},{"x":1056,"y":758}]},{"layout\_type":"text","pos":[{"x":132,"y":253},{"x":132,"y":349},{"x":803,"y":349},{"x":803,"y":253}]},{"layout\_type":"text","pos":[{"x":50,"y":639},{"x":50,"y":737},{"x":579,"y":737},{"x":579,"y":639}]},{"layout\_type":"text","pos":[{"x":133,"y":919},{"x":133,"y":1019},{"x":491,"y":1019},{"x":491,"y":919}]}],"doc\_sptext":[{"layout\_type":"bold","pos":[{"x":814,"y":2271},{"x":814,"y":2296},{"x":835,"y":2296},{"x":835,"y":2271}]}],"doc\_subfield":[{"layout\_type":"single","pos":[{"x":50,"y":2},{"x":50,"y":1721},{"x":1476,"y":1721},{"x":1476,"y":2}]}],"figure":[{"type":"subject\_big\_bracket","x":135,"y":88,"w":918,"h":157,"box":{"x":0,"y":0,"w":0,"h":0,"angle":-90},"points":[{"x":135,"y":88},{"x":1053,"y":88},{"x":1053,"y":245},{"x":135,"y":245}]},{"type":"subject\_big\_bracket","x":665,"y":754,"w":389,"h":96,"box":{"x":0,"y":0,"w":0,"h":0,"angle":-90},"points":[{"x":665,"y":754},{"x":1054,"y":754},{"x":1054,"y":850},{"x":665,"y":850}]},{"type":"subject\_pattern","x":767,"y":1426,"w":165,"h":130,"box":{"x":0,"y":0,"w":0,"h":0,"angle":-90},"points":[{"x":767,"y":1426},{"x":932,"y":1426},{"x":932,"y":1556},{"x":767,"y":1556}]},{"type":"subject\_big\_bracket","x":863,"y":754,"w":396,"h":95,"box":{"x":0,"y":0,"w":0,"h":0,"angle":-90},"points":[{"x":863,"y":754},{"x":1259,"y":754},{"x":1259,"y":849},{"x":863,"y":849}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":565,"y":198,"w":304,"h":1000,"angle":-90},"points":[{"x":65,"y":47},{"x":1065,"y":47},{"x":1065,"y":349},{"x":65,"y":349}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":762,"y":833,"w":388,"h":1444,"angle":-90},"points":[{"x":41,"y":639},{"x":1484,"y":639},{"x":1484,"y":1026},{"x":41,"y":1026}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":613,"y":1528,"w":431,"h":1080,"angle":-90},"points":[{"x":73,"y":1313},{"x":1152,"y":1313},{"x":1152,"y":1742},{"x":73,"y":1742}]}],"height":2339,"orgHeight":2339,"orgWidth":1654,"page\_id":0,"page\_title":"","part\_info":[{"part\_title":"","pos\_list":[[{"x":53,"y":35},{"x":1474,"y":35},{"x":1474,"y":1718},{"x":53,"y":1720}]],"subject\_list":[{"index":0,"type":15,"num\_choices":0,"prob":0,"text":"(21)(本题满分11分)(I)求a,b的值;$$P ^ { - 1 } A P$$(Ⅱ)求可逆矩阵P,使 为对角矩阵.","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":35},{"x":1654,"y":35},{"x":1654,"y":639},{"x":0,"y":639}]],"pos\_list":[[{"x":53,"y":35},{"x":1065,"y":35},{"x":1065,"y":349},{"x":53,"y":349}]],"element\_list":[{"type":0,"text":"(21)(本题满分11分)","pos\_list":[[{"x":53,"y":35},{"x":406,"y":35},{"x":406,"y":67},{"x":53,"y":66}]],"content\_list":[{"type":1,"prob":97,"string":"(21)(本题满分11分)","option":"","pos":[{"x":53,"y":35},{"x":406,"y":35},{"x":406,"y":67},{"x":53,"y":66}]}]},{"type":0,"text":"(I)求a,b的值;$$P ^ { - 1 } A P$$","pos\_list":[[{"x":132,"y":257},{"x":600,"y":255},{"x":600,"y":345},{"x":132,"y":346}]],"content\_list":[{"type":1,"prob":98,"string":"(Ⅰ)求a,b的值;","option":"","pos":[{"x":132,"y":257},{"x":406,"y":256},{"x":406,"y":288},{"x":132,"y":289}]},{"type":2,"prob":99,"string":"$$P ^ { - 1 } A P$$","option":"","pos":[{"x":491,"y":306},{"x":600,"y":307},{"x":600,"y":345},{"x":491,"y":344}]}]},{"type":0,"text":"(Ⅱ)求可逆矩阵P,使 为对角矩阵.","pos\_list":[[{"x":133,"y":311},{"x":800,"y":311},{"x":800,"y":343},{"x":133,"y":343}]],"content\_list":[{"type":1,"prob":99,"string":"(Ⅱ)求可逆矩阵P,使","option":"","pos":[{"x":133,"y":311},{"x":491,"y":311},{"x":491,"y":343},{"x":133,"y":343}]},{"type":1,"prob":90,"string":"为对角矩阵.","option":"","pos":[{"x":600,"y":311},{"x":800,"y":311},{"x":800,"y":343},{"x":600,"y":343}]}]}]},{"index":1,"type":15,"num\_choices":0,"prob":0,"text":"(22)(本题满分11分)设随机变量X的概率密度为对X进行独立重复的观测,直到第2个大于3的观测值出现时停止,记Y为观测次数.(I)求Y的概率分布;(Ⅱ)求E(Y).","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":639},{"x":1654,"y":639},{"x":1654,"y":1311},{"x":0,"y":1311}]],"pos\_list":[[{"x":41,"y":639},{"x":1484,"y":639},{"x":1484,"y":1026},{"x":41,"y":1026}]],"element\_list":[{"type":0,"text":"(22)(本题满分11分)设随机变量X的概率密度为","pos\_list":[[{"x":53,"y":643},{"x":570,"y":644},{"x":570,"y":731},{"x":53,"y":729}]],"content\_list":[{"type":1,"prob":99,"string":"(22)(本题满分11分)","option":"","pos":[{"x":53,"y":644},{"x":406,"y":644},{"x":406,"y":676},{"x":53,"y":676}]},{"type":1,"prob":99,"string":"设随机变量X的概率密度为","option":"","pos":[{"x":131,"y":698},{"x":570,"y":699},{"x":570,"y":731},{"x":131,"y":730}]}]},{"type":0,"text":"对X进行独立重复的观测,直到第2个大于3的观测值出现时停止,记Y为观测次数.(I)求Y的概率分布;","pos\_list":[[{"x":131,"y":869},{"x":1474,"y":867},{"x":1474,"y":954},{"x":131,"y":956}]],"content\_list":[{"type":1,"prob":98,"string":"对X进行独立重复的观测,直到第2个大于3的观测值出现时停止,记Y为观测次数.","option":"","pos":[{"x":131,"y":869},{"x":1474,"y":867},{"x":1474,"y":899},{"x":131,"y":901}]},{"type":1,"prob":92,"string":"(Ⅰ)求Y的概率分布;","option":"","pos":[{"x":132,"y":924},{"x":488,"y":923},{"x":488,"y":955},{"x":132,"y":956}]}]},{"type":0,"text":"(Ⅱ)求E(Y).","pos\_list":[[{"x":133,"y":980},{"x":351,"y":979},{"x":351,"y":1011},{"x":133,"y":1012}]],"content\_list":[{"type":1,"prob":98,"string":"(Ⅱ)求E(Y).","option":"","pos":[{"x":133,"y":980},{"x":351,"y":979},{"x":351,"y":1011},{"x":133,"y":1012}]}]}]},{"index":2,"type":15,"num\_choices":0,"prob":0,"text":"(23)(本题满分11分)设总体X的概率密度为θ≤x≤1,其他,其中θ为未知参数.$$X \_ { 1 } , X \_ { 2 } , \\\\cdots , X \_ { n }$$为来自该总体的简单随机样本.(I)求θ的矩估计量;(Ⅱ)求θ的最大似然估计量.","figure\_list":[[{"x":767,"y":1426},{"x":932,"y":1426},{"x":932,"y":1556},{"x":767,"y":1556}]],"table\_list":[],"answer\_list":[[{"x":0,"y":1311},{"x":1654,"y":1311},{"x":1654,"y":2339},{"x":0,"y":2339}]],"pos\_list":[[{"x":53,"y":1311},{"x":1152,"y":1311},{"x":1152,"y":1742},{"x":53,"y":1742}]],"element\_list":[{"type":0,"text":"(23)(本题满分11分)","pos\_list":[[{"x":53,"y":1311},{"x":406,"y":1311},{"x":406,"y":1343},{"x":53,"y":1343}]],"content\_list":[{"type":1,"prob":98,"string":"(23)(本题满分11分)","option":"","pos":[{"x":53,"y":1311},{"x":406,"y":1311},{"x":406,"y":1343},{"x":53,"y":1343}]}]},{"type":0,"text":"设总体X的概率密度为","pos\_list":[[{"x":137,"y":1367},{"x":503,"y":1365},{"x":504,"y":1397},{"x":137,"y":1399}]],"content\_list":[{"type":1,"prob":96,"string":"设总体Ⅹ的概率密度为","option":"","pos":[{"x":137,"y":1367},{"x":503,"y":1365},{"x":504,"y":1397},{"x":137,"y":1399}]}]},{"type":0,"text":"θ≤x≤1,其他,","pos\_list":[[{"x":767,"y":1424},{"x":1083,"y":1428},{"x":1082,"y":1560},{"x":765,"y":1556}]],"content\_list":[{"type":1,"prob":100,"string":"","option":"","pos":[{"x":767,"y":1426},{"x":932,"y":1426},{"x":932,"y":1556},{"x":767,"y":1556}]},{"type":1,"prob":96,"string":"θ≤x≤1,","option":"","pos":[{"x":906,"y":1437},{"x":1083,"y":1440},{"x":1082,"y":1485},{"x":906,"y":1483}]},{"type":1,"prob":99,"string":"其他,","option":"","pos":[{"x":935,"y":1521},{"x":1027,"y":1521},{"x":1027,"y":1553},{"x":935,"y":1553}]}]},{"type":0,"text":"其中θ为未知参数.$$X \_ { 1 } , X \_ { 2 } , \\\\cdots , X \_ { n }$$为来自该总体的简单随机样本.","pos\_list":[[{"x":130,"y":1573},{"x":1145,"y":1570},{"x":1145,"y":1616},{"x":130,"y":1619}]],"content\_list":[{"type":1,"prob":99,"string":"其中","option":"","pos":[{"x":130,"y":1578},{"x":215,"y":1578},{"x":215,"y":1609},{"x":130,"y":1609}]},{"type":1,"prob":99,"string":"θ","option":"","pos":[{"x":215,"y":1577},{"x":234,"y":1577},{"x":234,"y":1607},{"x":215,"y":1607}]},{"type":1,"prob":99,"string":"为未知参数.","option":"","pos":[{"x":234,"y":1578},{"x":441,"y":1577},{"x":441,"y":1609},{"x":234,"y":1609}]},{"type":2,"prob":99,"string":"$$X \_ { 1 } , X \_ { 2 } , \\\\cdots , X \_ { n }$$","option":"","pos":[{"x":441,"y":1572},{"x":648,"y":1571},{"x":648,"y":1617},{"x":441,"y":1618}]},{"type":1,"prob":99,"string":"为来自该总体的简单随机样本.","option":"","pos":[{"x":648,"y":1576},{"x":1145,"y":1575},{"x":1145,"y":1607},{"x":648,"y":1608}]}]},{"type":0,"text":"(I)求θ的矩估计量;","pos\_list":[[{"x":132,"y":1632},{"x":479,"y":1631},{"x":479,"y":1663},{"x":132,"y":1664}]],"content\_list":[{"type":1,"prob":84,"string":"(I)求","option":"","pos":[{"x":132,"y":1632},{"x":257,"y":1632},{"x":257,"y":1664},{"x":132,"y":1664}]},{"type":1,"prob":99,"string":"θ","option":"","pos":[{"x":257,"y":1632},{"x":277,"y":1632},{"x":277,"y":1662},{"x":257,"y":1662}]},{"type":1,"prob":99,"string":"的矩估计量;","option":"","pos":[{"x":277,"y":1632},{"x":479,"y":1631},{"x":479,"y":1663},{"x":277,"y":1664}]}]},{"type":0,"text":"(Ⅱ)求θ的最大似然估计量.","pos\_list":[[{"x":133,"y":1688},{"x":587,"y":1686},{"x":587,"y":1718},{"x":133,"y":1720}]],"content\_list":[{"type":1,"prob":98,"string":"(Ⅱ)求","option":"","pos":[{"x":133,"y":1688},{"x":255,"y":1687},{"x":255,"y":1719},{"x":133,"y":1720}]},{"type":1,"prob":99,"string":"θ","option":"","pos":[{"x":255,"y":1687},{"x":276,"y":1687},{"x":276,"y":1720},{"x":255,"y":1720}]},{"type":1,"prob":98,"string":"的最大似然估计量.","option":"","pos":[{"x":276,"y":1687},{"x":587,"y":1686},{"x":587,"y":1717},{"x":276,"y":1719}]}]}]}]}],"prism\_version":"1.0.9","prism\_wnum":0,"width":1654}', 'RequestId': '703B6BB9-BC78-5EFF-9DEB-0AFBA08F1C0C'}}