{'headers': {'date': 'Sun, 14 Apr 2024 10:08:09 GMT', 'content-type': 'application/json;charset=utf-8', 'content-length': '16143', 'connection': 'keep-alive', 'keep-alive': 'timeout=25', 'vary': 'Accept-Encoding', 'access-control-allow-origin': '\*', 'access-control-expose-headers': '\*', 'x-acs-request-id': '5FAE8694-CBB3-503D-BA5E-09FE54679B8D', 'x-acs-trace-id': '8f3b27a5aeab77bde26b008dbc09bd21', 'etag': '1L3Y5TnAmTbJqUG5bse4t2Q7'}, 'statusCode': 200, 'body': {'Data': '{"algo\_version":"","doc\_layout":[{"layout\_type":"text","pos":[{"x":140,"y":566},{"x":140,"y":832},{"x":1147,"y":832},{"x":1147,"y":566}]},{"layout\_type":"text","pos":[{"x":138,"y":1229},{"x":137,"y":1418},{"x":1599,"y":1418},{"x":1599,"y":1229}]},{"layout\_type":"text","pos":[{"x":125,"y":86},{"x":124,"y":285},{"x":1598,"y":285},{"x":1598,"y":86}]},{"layout\_type":"text","pos":[{"x":54,"y":1174},{"x":54,"y":1216},{"x":420,"y":1216},{"x":420,"y":1174}]},{"layout\_type":"text","pos":[{"x":53,"y":522},{"x":53,"y":563},{"x":422,"y":563},{"x":422,"y":522}]},{"layout\_type":"foot","pos":[{"x":758,"y":2267},{"x":758,"y":2298},{"x":892,"y":2298},{"x":892,"y":2267}]},{"layout\_type":"text","pos":[{"x":145,"y":1763},{"x":145,"y":1947},{"x":1598,"y":1947},{"x":1598,"y":1763}]},{"layout\_type":"text","pos":[{"x":52,"y":32},{"x":52,"y":73},{"x":421,"y":73},{"x":421,"y":32}]},{"layout\_type":"text","pos":[{"x":55,"y":1706},{"x":55,"y":1750},{"x":421,"y":1750},{"x":421,"y":1706}]}],"doc\_sptext":[],"doc\_subfield":[{"layout\_type":"single","pos":[{"x":58,"y":1},{"x":58,"y":1954},{"x":1606,"y":1954},{"x":1606,"y":1}]}],"figure":[{"type":"subject\_pattern","x":1178,"y":578,"w":417,"h":259,"box":{"x":0,"y":0,"w":0,"h":0,"angle":-90},"points":[{"x":1178,"y":578},{"x":1595,"y":578},{"x":1595,"y":837},{"x":1178,"y":837}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":824,"y":686,"w":330,"h":1541,"angle":-90},"points":[{"x":53,"y":521},{"x":1594,"y":521},{"x":1594,"y":850},{"x":53,"y":850}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":825,"y":1298,"w":279,"h":1547,"angle":-90},"points":[{"x":51,"y":1159},{"x":1597,"y":1159},{"x":1597,"y":1436},{"x":51,"y":1436}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":824,"y":165,"w":267,"h":1560,"angle":-90},"points":[{"x":45,"y":32},{"x":1603,"y":32},{"x":1603,"y":297},{"x":45,"y":297}]},{"type":"subject\_question","x":0,"y":0,"w":0,"h":0,"box":{"x":825,"y":1822,"w":273,"h":1543,"angle":-90},"points":[{"x":53,"y":1686},{"x":1596,"y":1686},{"x":1596,"y":1957},{"x":53,"y":1957}]}],"height":2339,"orgHeight":2339,"orgWidth":1654,"page\_id":0,"page\_title":"","part\_info":[{"part\_title":"","pos\_list":[[{"x":54,"y":36},{"x":1595,"y":37},{"x":1595,"y":1946},{"x":54,"y":1948}]],"subject\_list":[{"index":0,"type":15,"num\_choices":0,"prob":0,"text":"(17)(本题满分11分)设函数y=f(x)由参数方程$$\\\\left\\\\{ \\\\begin{array}{l} x = 2 t + t ^ { 2 } , \\\\\\\\ y = y \\\\left( t \\\\right) \\\\end{array} \\\\left( t > - 1 \\\\right)$$所确定,其中ϕ(t)具有2阶导数,且(t)$$\\\\varphi \\\\left( 1 \\\\right) = \\\\frac { 5 } { 2 } , 4 \' \\\\left( 1 \\\\right) = 6 ,$$已知$$\\\\frac { d ^ { 2 } y } { d x ^ { 2 } } = \\\\frac { 3 } { 4 \\\\left( 1 + t \\\\right) } ,$$求函数φ(t).","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":32},{"x":1654,"y":32},{"x":1654,"y":521},{"x":0,"y":521}]],"pos\_list":[[{"x":45,"y":32},{"x":1603,"y":32},{"x":1603,"y":297},{"x":45,"y":297}]],"element\_list":[{"type":0,"text":"(17)(本题满分11分)","pos\_list":[[{"x":54,"y":36},{"x":420,"y":37},{"x":419,"y":69},{"x":54,"y":68}]],"content\_list":[{"type":1,"prob":99,"string":"(17)(本题满分11分)","option":"","pos":[{"x":54,"y":36},{"x":420,"y":37},{"x":419,"y":69},{"x":54,"y":68}]}]},{"type":0,"text":"设函数y=f(x)由参数方程$$\\\\left\\\\{ \\\\begin{array}{l} x = 2 t + t ^ { 2 } , \\\\\\\\ y = y \\\\left( t \\\\right) \\\\end{array} \\\\left( t > - 1 \\\\right)$$所确定,其中ϕ(t)具有2阶导数,且(t)$$\\\\varphi \\\\left( 1 \\\\right) = \\\\frac { 5 } { 2 } , 4 \' \\\\left( 1 \\\\right) = 6 ,$$已知$$\\\\frac { d ^ { 2 } y } { d x ^ { 2 } } = \\\\frac { 3 } { 4 \\\\left( 1 + t \\\\right) } ,$$求函数φ(t).","pos\_list":[[{"x":139,"y":85},{"x":1594,"y":84},{"x":1594,"y":287},{"x":139,"y":288}]],"content\_list":[{"type":1,"prob":99,"string":"设函数","option":"","pos":[{"x":141,"y":116},{"x":257,"y":115},{"x":257,"y":150},{"x":141,"y":150}]},{"type":1,"prob":99,"string":"y=f(x)","option":"","pos":[{"x":257,"y":111},{"x":404,"y":112},{"x":404,"y":155},{"x":257,"y":155}]},{"type":1,"prob":99,"string":"由参数方程","option":"","pos":[{"x":404,"y":115},{"x":612,"y":114},{"x":613,"y":148},{"x":404,"y":149}]},{"type":2,"prob":96,"string":"$$\\\\left\\\\{ \\\\begin{array}{l} x = 2 t + t ^ { 2 } , \\\\\\\\ y = y \\\\left( t \\\\right) \\\\end{array} \\\\left( t > - 1 \\\\right)$$","option":"","pos":[{"x":619,"y":85},{"x":981,"y":85},{"x":981,"y":173},{"x":619,"y":173}]},{"type":1,"prob":99,"string":"所确定,其中","option":"","pos":[{"x":981,"y":109},{"x":1219,"y":109},{"x":1219,"y":151},{"x":981,"y":150}]},{"type":1,"prob":89,"string":"ϕ(t)","option":"","pos":[{"x":1219,"y":112},{"x":1291,"y":112},{"x":1291,"y":153},{"x":1219,"y":153}]},{"type":1,"prob":99,"string":"具有2阶导数,且","option":"","pos":[{"x":1291,"y":109},{"x":1594,"y":110},{"x":1594,"y":151},{"x":1291,"y":151}]},{"type":1,"prob":99,"string":"(t)","option":"","pos":[{"x":708,"y":150},{"x":780,"y":150},{"x":780,"y":181},{"x":708,"y":181}]},{"type":2,"prob":97,"string":"$$\\\\varphi \\\\left( 1 \\\\right) = \\\\frac { 5 } { 2 } , 4 \' \\\\left( 1 \\\\right) = 6 ,$$","option":"","pos":[{"x":139,"y":198},{"x":534,"y":195},{"x":535,"y":282},{"x":140,"y":285}]},{"type":1,"prob":99,"string":"已知","option":"","pos":[{"x":534,"y":203},{"x":612,"y":203},{"x":612,"y":275},{"x":534,"y":275}]},{"type":2,"prob":99,"string":"$$\\\\frac { d ^ { 2 } y } { d x ^ { 2 } } = \\\\frac { 3 } { 4 \\\\left( 1 + t \\\\right) } ,$$","option":"","pos":[{"x":612,"y":196},{"x":871,"y":198},{"x":870,"y":287},{"x":612,"y":285}]},{"type":1,"prob":99,"string":"求函数","option":"","pos":[{"x":871,"y":208},{"x":991,"y":208},{"x":991,"y":277},{"x":871,"y":277}]},{"type":1,"prob":91,"string":"φ(t).","option":"","pos":[{"x":991,"y":219},{"x":1080,"y":219},{"x":1080,"y":262},{"x":991,"y":263}]}]}]},{"index":1,"type":15,"num\_choices":0,"prob":0,"text":"(18)(本题满分10分)一个高为l的柱体形贮油罐,底面是长轴为2a,短轴为2b的椭圆.现将贮油罐平放,当油罐中油面高度为$$\\\\frac { 3 } { 2 } b$$时(如图),计算油的质量.(长度单位为m,质量单位为kg,油的密度为常量ρ,,单位为$${ k g / m ^ { 3 } } \\\\right) .$$","figure\_list":[[{"x":1178,"y":578},{"x":1595,"y":578},{"x":1595,"y":837},{"x":1178,"y":837}]],"table\_list":[],"answer\_list":[[{"x":0,"y":521},{"x":1654,"y":521},{"x":1654,"y":1159},{"x":0,"y":1159}]],"pos\_list":[[{"x":53,"y":521},{"x":1598,"y":521},{"x":1598,"y":850},{"x":53,"y":850}]],"element\_list":[{"type":0,"text":"(18)(本题满分10分)","pos\_list":[[{"x":54,"y":527},{"x":419,"y":526},{"x":419,"y":557},{"x":54,"y":558}]],"content\_list":[{"type":1,"prob":99,"string":"(18)(本题满分10分)","option":"","pos":[{"x":54,"y":527},{"x":419,"y":526},{"x":419,"y":557},{"x":54,"y":558}]}]},{"type":0,"text":"一个高为l的柱体形贮油罐,底面是长轴为2a,短轴为2b的椭圆.现将贮油罐平放,当油罐中油面高度为$$\\\\frac { 3 } { 2 } b$$时(如图),计算油的质量.(长度单位为m,质量单位为kg,油的密度为常量ρ,,单位为$${ k g / m ^ { 3 } } \\\\right) .$$","pos\_list":[[{"x":141,"y":578},{"x":1140,"y":578},{"x":1140,"y":830},{"x":141,"y":830}]],"content\_list":[{"type":1,"prob":98,"string":"一个高为l的柱体形贮油罐,底面是长轴为2a,短轴为2b的椭","option":"","pos":[{"x":141,"y":583},{"x":1140,"y":578},{"x":1140,"y":610},{"x":141,"y":615}]},{"type":1,"prob":98,"string":"圆.现将贮油罐平放,当油罐中油面高度为","option":"","pos":[{"x":141,"y":641},{"x":819,"y":641},{"x":819,"y":707},{"x":141,"y":707}]},{"type":2,"prob":99,"string":"$$\\\\frac { 3 } { 2 } b$$","option":"","pos":[{"x":819,"y":633},{"x":875,"y":633},{"x":875,"y":714},{"x":819,"y":714}]},{"type":1,"prob":99,"string":"时(如图),计算","option":"","pos":[{"x":875,"y":641},{"x":1139,"y":641},{"x":1139,"y":707},{"x":875,"y":707}]},{"type":1,"prob":98,"string":"油的质量.(长度单位为m,质量单位为kg,油的密度为常量","option":"","pos":[{"x":142,"y":735},{"x":1065,"y":735},{"x":1065,"y":769},{"x":142,"y":769}]},{"type":1,"prob":87,"string":"ρ,","option":"","pos":[{"x":1066,"y":742},{"x":1099,"y":742},{"x":1099,"y":775},{"x":1066,"y":775}]},{"type":1,"prob":99,"string":",单","option":"","pos":[{"x":1099,"y":735},{"x":1140,"y":735},{"x":1140,"y":769},{"x":1099,"y":769}]},{"type":1,"prob":99,"string":"位为","option":"","pos":[{"x":141,"y":790},{"x":223,"y":790},{"x":223,"y":825},{"x":141,"y":825}]},{"type":2,"prob":96,"string":"$${ k g / m ^ { 3 } } \\\\right) .$$","option":"","pos":[{"x":223,"y":786},{"x":349,"y":785},{"x":349,"y":829},{"x":223,"y":830}]}]}]},{"index":2,"type":15,"num\_choices":0,"prob":0,"text":"(19)(本题满分11分)设函数u=f(x,y)具有二阶连续偏导数,且满足等式$$4 \\\\frac { d ^ { 2 } u } { d x ^ { 2 } } + 1 2 \\\\frac { d ^ { 2 } u } { d x d y } + 5 \\\\frac { z ^ { 2 } u } { \\\\partial y ^ { 2 } } = 0$$确定a,b的值,使等式在变换,ξ=x+ay,n=x+by下简化为$$\\\\frac { \\\\partial ^ { 2 } u } { \\\\partial \\\\xi o g } = 0 .$$","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":1159},{"x":1654,"y":1159},{"x":1654,"y":1686},{"x":0,"y":1686}]],"pos\_list":[[{"x":51,"y":1159},{"x":1597,"y":1159},{"x":1597,"y":1436},{"x":51,"y":1436}]],"element\_list":[{"type":0,"text":"(19)(本题满分11分)","pos\_list":[[{"x":54,"y":1179},{"x":419,"y":1178},{"x":419,"y":1210},{"x":54,"y":1210}]],"content\_list":[{"type":1,"prob":99,"string":"(19)(本题满分11分)","option":"","pos":[{"x":54,"y":1179},{"x":419,"y":1178},{"x":419,"y":1210},{"x":54,"y":1210}]}]},{"type":0,"text":"设函数u=f(x,y)具有二阶连续偏导数,且满足等式$$4 \\\\frac { d ^ { 2 } u } { d x ^ { 2 } } + 1 2 \\\\frac { d ^ { 2 } u } { d x d y } + 5 \\\\frac { z ^ { 2 } u } { \\\\partial y ^ { 2 } } = 0$$确定a,b的值,使等式在变换,ξ=x+ay,n=x+by下简化为$$\\\\frac { \\\\partial ^ { 2 } u } { \\\\partial \\\\xi o g } = 0 .$$","pos\_list":[[{"x":140,"y":1227},{"x":1594,"y":1224},{"x":1594,"y":1420},{"x":141,"y":1423}]],"content\_list":[{"type":1,"prob":99,"string":"设函数","option":"","pos":[{"x":141,"y":1255},{"x":260,"y":1254},{"x":260,"y":1288},{"x":141,"y":1288}]},{"type":1,"prob":99,"string":"u=f(x,y)","option":"","pos":[{"x":260,"y":1250},{"x":449,"y":1251},{"x":449,"y":1295},{"x":260,"y":1294}]},{"type":1,"prob":99,"string":"具有二阶连续偏导数,且满足等式","option":"","pos":[{"x":449,"y":1254},{"x":991,"y":1253},{"x":992,"y":1287},{"x":449,"y":1288}]},{"type":2,"prob":93,"string":"$$4 \\\\frac { d ^ { 2 } u } { d x ^ { 2 } } + 1 2 \\\\frac { d ^ { 2 } u } { d x d y } + 5 \\\\frac { z ^ { 2 } u } { \\\\partial y ^ { 2 } } = 0$$","option":"","pos":[{"x":1001,"y":1225},{"x":1433,"y":1226},{"x":1433,"y":1318},{"x":1001,"y":1317}]},{"type":1,"prob":99,"string":"确定a,b","option":"","pos":[{"x":1439,"y":1254},{"x":1594,"y":1253},{"x":1594,"y":1285},{"x":1439,"y":1286}]},{"type":1,"prob":99,"string":"的值,使等式在变换,","option":"","pos":[{"x":141,"y":1337},{"x":466,"y":1339},{"x":466,"y":1403},{"x":141,"y":1401}]},{"type":1,"prob":99,"string":"ξ=x+ay,n=x+by","option":"","pos":[{"x":466,"y":1355},{"x":841,"y":1353},{"x":842,"y":1398},{"x":466,"y":1400}]},{"type":1,"prob":99,"string":"下简化为","option":"","pos":[{"x":841,"y":1342},{"x":998,"y":1342},{"x":998,"y":1406},{"x":841,"y":1406}]},{"type":2,"prob":82,"string":"$$\\\\frac { \\\\partial ^ { 2 } u } { \\\\partial \\\\xi o g } = 0 .$$","option":"","pos":[{"x":998,"y":1330},{"x":1155,"y":1330},{"x":1155,"y":1421},{"x":998,"y":1421}]}]}]},{"index":3,"type":15,"num\_choices":0,"prob":0,"text":"(20)(本题满分10分)计算二重积分$$I = \\\\int { r ^ { 2 } } \\\\sin \\\\theta \\\\sqrt { 1 - r ^ { 2 } \\\\cos 2 \\\\theta } d r d \\\\theta ,$$其中D={(r, θ) |0≤r≤secθ,D$$0 \\\\le \\\\theta \\\\le \\\\frac { \\\\pi } { 4 } \\\\right) .$$","figure\_list":[],"table\_list":[],"answer\_list":[[{"x":0,"y":1686},{"x":1654,"y":1686},{"x":1654,"y":2339},{"x":0,"y":2339}]],"pos\_list":[[{"x":53,"y":1686},{"x":1596,"y":1686},{"x":1596,"y":1957},{"x":53,"y":1957}]],"element\_list":[{"type":0,"text":"(20)(本题满分10分)","pos\_list":[[{"x":54,"y":1711},{"x":419,"y":1712},{"x":419,"y":1744},{"x":54,"y":1743}]],"content\_list":[{"type":1,"prob":99,"string":"(20)(本题满分10分)","option":"","pos":[{"x":54,"y":1711},{"x":419,"y":1712},{"x":419,"y":1744},{"x":54,"y":1743}]}]},{"type":0,"text":"计算二重积分$$I = \\\\int { r ^ { 2 } } \\\\sin \\\\theta \\\\sqrt { 1 - r ^ { 2 } \\\\cos 2 \\\\theta } d r d \\\\theta ,$$其中D={(r, θ) |0≤r≤secθ,D$$0 \\\\le \\\\theta \\\\le \\\\frac { \\\\pi } { 4 } \\\\right) .$$","pos\_list":[[{"x":143,"y":1760},{"x":1594,"y":1759},{"x":1594,"y":1946},{"x":143,"y":1948}]],"content\_list":[{"type":1,"prob":99,"string":"计算二重积分","option":"","pos":[{"x":143,"y":1775},{"x":396,"y":1775},{"x":396,"y":1831},{"x":143,"y":1831}]},{"type":2,"prob":96,"string":"$$I = \\\\int { r ^ { 2 } } \\\\sin \\\\theta \\\\sqrt { 1 - r ^ { 2 } \\\\cos 2 \\\\theta } d r d \\\\theta ,$$","option":"","pos":[{"x":396,"y":1764},{"x":933,"y":1761},{"x":934,"y":1844},{"x":396,"y":1846}]},{"type":1,"prob":99,"string":"其中","option":"","pos":[{"x":933,"y":1774},{"x":1050,"y":1774},{"x":1050,"y":1831},{"x":933,"y":1831}]},{"type":1,"prob":99,"string":"D={(r, θ) |0≤r≤secθ,","option":"","pos":[{"x":1050,"y":1759},{"x":1594,"y":1764},{"x":1593,"y":1844},{"x":1050,"y":1839}]},{"type":1,"prob":99,"string":"D","option":"","pos":[{"x":489,"y":1838},{"x":506,"y":1838},{"x":506,"y":1856},{"x":489,"y":1856}]},{"type":2,"prob":91,"string":"$$0 \\\\le \\\\theta \\\\le \\\\frac { \\\\pi } { 4 } \\\\right) .$$","option":"","pos":[{"x":147,"y":1866},{"x":371,"y":1867},{"x":370,"y":1947},{"x":146,"y":1946}]}]}]}]}],"prism\_version":"1.0.9","prism\_wnum":0,"width":1654}', 'RequestId': '5FAE8694-CBB3-503D-BA5E-09FE54679B8D'}}