Math 201   **Section#:** ......   **Serial #:** ....   **Quiz 5(a) (Term 181)**

Name : .... **ID #**.................................... **Marks** ..../6

1. Evaluate $\displaystyle\int_0^8 \int_{\sqrt[3]{y}}^2 e^{x^4}\, dx\, dy$.

2. Set up a triple integral using $dxdydz$ as order of integration to find volume V of the solid bounded by the graphs of equations

$$y = 2 - z^2,\ y = z^2,\ x + z = 5 \,\text{and}\, x = 0$$

Math 201   **Section#: ......**   **Serial #: ....**   **Quiz 5(d) (Term 181)**

Name : .... **ID #**.................................... **Marks** ..../6

1. Evaluate $\displaystyle\int_0^{2\sqrt{\ln 3}} \int_{y/2}^{\sqrt{\ln 3}} e^{x^2}\, dx\, dy$.

2. Evaluate $\displaystyle\int\int_D e^{x^2+y^2}\, dA$ where D is the unit circle centered at the origin.

3. Evaluate $\displaystyle\int_0^1 \int_0^{1-x} \int_{x+z}^1 dy\, dz\, dx$.

1. Evaluate $\displaystyle\int_0^2 \int_0^{4-x^2} \frac{xe^{2y}}{4-y}\, dy\, dx$.

2. Let D be the disc with centre at origin and radius 3. Find the average distance from points in D and the origin.

Math 201   Section#: ......   Serial #: ....   **Quiz 5(b) (Term 181)**

Name : .... **ID #**.................................... **Marks** ..../6

1. Evaluate $\displaystyle\int_0^1 \int_0^{\sqrt{1-y^2}} \sin(x^2 + y^2)\, dx\, dy.$

2. Evaluate $\displaystyle\int_1^2 \int_z^2 \int_0^{\sqrt{3}y} \frac{y}{x^2 + y^2}\, dx\, dy\, dz$