PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
Ministry of Higher Education & Scientific Research
Djillali Liabes University Of Sidi Bel Abbes
Exact Sciences Faculty

Probabilities & Statistics Department
Academic Year: 2022/2023.
First Year Master, Statistics (SA) & Probabilities (PA)

First Name (Prénom): …….

Last Name (Nom): ……

FIRST SEMESTER EXAM : TECHNICAL ENGLISH 1

CORRIGE TYPE

Task n1: Give equivalents in French of the following terms:

Terms in English	Equivalents in French
Number	**Nombre**
Odd number	**Nombre impair**
Even number	**Nombre pair**
Random value	**Valeur aléatoire**
Prime number	**Nombre premier**
Decimal number	**Nombre décimal**
Rational number	**Nombre rationnel**
Angle	**Angle**
Acute angle	**Angle aigu**
Obtuse angle	**Angle obtus**
Right angle	**Angle droit**
Sine	**Sinus**
Cosine	**Cosinus**
Slope	**Pente**
Data	**Données**
Radius	**Rayon**
Function	**Fonction**
Derivative	**Dérivée**
Matrix	**Matrice**
Product	**Produit**
Scalar product	**Produit scalaire**
Root	**Racine**
Square root	**Racine carrée**
Greatest commom divisor	**plus grand diviseur commun**
Least commom divisor	**Plus petit diviseur commun**
Sample	**Echantillon**
Input	**Donnée d'entrée**
Output	**Donnée de sortie (résultat)**
parametric curve	**Courbe paramétrique**
Set	**Ensemble**
Subset	**Sous-ensemble**
Scale	**Echelle**
Sequence	**Suite**
Rhombus	**Losange**
isosceles	**Isocèle**

Task n2: Refer to each expression below:

f(x)	**f of x**
Sin(x)	**Sine of x**
tan(x)	**Tangent of x**
arccos(x)	**Arccosine of x**
$Sin(x)^2$	**Sine squared of x**
f'	**f prime**
f''	**f second (the second derivative of x)**
$\frac{d^2y}{dx^2}$	**d squared y by dx squared**
$\frac{\partial^2 y}{\partial x^2}$	**The second partial derivative of y with respect to x squared**
$\int f(x)dx$	**Integral of f of x dx**
$\int_a^b t^2 dt$	**Integral from a to b of t squared dt**
$\iint_s h(x,y)dxdy$	**Double integral oves s of h of x y dx dy**
$\frac{x+1}{tan(y^4)}$	**x plus one all over tangent of y to the power of four**
$3^{x-\cos(2x)}$	**Three to the power of x minus cosine of two x**
$\exp(x^3+y^3)$	**Exponential of x cubed plus y cubed**
∀ x ∈ A	**For every x in A**
∄ x ∈ A	**It exists no x in A**
A ∪ B	**A union B**
A ∩ B = ∅	**The intersection of A and B is an empty set**

Task n3: Fill in the blanks within the following terms:

calculus, areas, procedures, rates, curves, applications, quantity, calculating

What is calculus? It is the mathematics of instantaneous **rates** of change – how rapidly is some particular **quantity** changing at this very instant? Calculus has two main branches. *Differential calculus;* which provides methods for **calculating** rates of change, and it has many geometric **applications**, in particular finding tangents to **curves** . *Integral calculus* does the opposite: given the rate of change of some quantity, it specifies the quantity itself. Geometric applications of integral calculus include the computation of **areas** and volumes. Perhaps the most significant discovery is this unexpected connection between two apparently unrelated classical geometric questions: finding tangents to a curve and finding areas. **Calculus** is about *functions*: **procedures** that take some general number and calculate an associated number. The procedure is usually specified by a formula, assigning to a given number *x* an associated number *f*(*x*).

GOOD LUCK