Subject Code: ULF20G01J
Time: 90 Minutes

Subject Name: French I
Total Marks: 30

Section- A (10Marks)
Choisissez la bonne réponse :

1) Vous mangez _____ biscuits.
a) de la   b) du   c) des   d) de l'

2) Les étudiants _____ des examens.
a) avons   b) ont   c) avez   d) as

3. _____ choisissent les réponses.
A) Nous   b) Ils   c) Elle   d) Je

4. _____ habitez – vous ?
a) pourquoi   b) combien   c) Où   d) Quand

5.) Tu invites _____ amis.
a) mon   b) votre   c) tes   d) sa

6) Un garçon sportif et une fille _____
a) sportifs   b) sportive   c) sportives d) sportivee

7) Tu achètes _____ de bonbons ?
a) Combien   b) quand   c) où   d) comment

8)72 en français, c'est _____
a) soixante –deux   b) soixante – douze c) soixante d) cinquante

9). _____ sont pro.esseurs.

a) ils   b) ce   c) nous   d) vous

10) Comment dit-on<< Sorry>> en français

a) bienvenue   b) désolé(e)   c) s'il vous plait   d) merci

Section- B

(Attempt any 4 questions)   5X4=20)

11) **Trouvez les questions**   (5)

a) C'est une fleur.

b)C'est Cléopâtre.

c) Ce sont des pommes.

d) C'est une tortue.

e) C'est un écrivain

12) **Complétez dans la forme négative.**   (5)

a) Nous buvons du jus de fruits.

b) Il va au cinéma

c) Ils habitent en France.

d) Rahul et Riya visitent le Louvre.

e) Tu remplis la fiche d'identité.

13) **Conjuguez les verbes au présent.**   (5)

a) Aller b) Venir c) Être d) Avoir c) Visiter

14) **Complétez avec l'adjectif possessif :**   (5)

a) C'est _____ portable.

b) _____ amie s'appelle Charlotte.

c) La gomme est sur _____ table.

d) Je discute avec _____ patron.

e) Nous invitons _____ amis

15) **Décrivez votre ami(e)**

                                                              (5)

Subject Name & Code: Role of Mathematics in AI (UDS21G01T)

Max. Marks: 30 **Time: 1Hr 30 min**

PART - A (Marks: 2*5=10) *Attempt all questions*

Q1. Check whether the sequence $a_n = \frac{3n-1}{1+2n}$ is convergent or not.

Q2. Why do we use statistics in AI?

Q3. Define measure of central tendency and its various types?

Q4. Find $\mathcal{L}\{e^{at}\}$, where a is real.

Q5. If $y = \sin(\sin x)$, prove that $\frac{d^2y}{dx^2} + \tan x \frac{dy}{dx} + y\cos^2 x = 0$.

PART - B (Marks: 5*4=20) *Attempt any four question*

Q6. Test for the convergence of the series $1 + \frac{2}{3} + \frac{3}{4} + \frac{4}{5} + \cdots + \frac{n}{n+1} + \cdots \infty$.

Q7. Find the Laplace transform of $\cos^2 t$.

Q8. Discuss various types of graphical representation of numerical data with an example.

Q9. Find the Fourier series representing $f(x) = x$, $\quad 0 < x < 2\pi$.

Q10. Minimize $Z = 5x_1 + 4x_2$

Subject to $\quad 6x_1 + 4x_2 \leq 24, x_1 + 2x_2 \leq 6, -x_1 + x_2 \leq 1, x_2 \leq 2, x_1 \geq 0, x_2 \geq 0$.

SRM Institute of Science and Technology
NCR Campus, Modinagar
Department of Computer Applications
CT-1, August-2022

Subject Name & Code: Introduction to Data Engineering (UDS21S01T)

Max. Marks: 30   Time: 1Hr 30 min

PART - A (Marks: 1*10=10) *Attempt all questions*

1. Define Apache Hive?
2. What is NoSQL database?
3. Define Apache Spark?
4. What is functional programming?
5. What is Data Model?
6. Define MQTT.
7. Define IoT.
8. What are the hardware requirements in IIoT?
9. Define Data ingestion.
10. Define Data storage for Data Engineering?

PART - B (Marks: 5*4=20) *Attempt any four questions*

11. What is ETL Process? Explain its architecture in detail.

12. Differentiate between relational and non relational databases.

13. What is Data warehouse? Explain its models.

14. What is IIoT? Explain its applications.

15. Explain IIoT driving factors and IIoT business challenges.

SRM Institute of Science and Technology

NCR Campus, Modinagar

Department of Computer Applications
CT-2, November-2022

Subject Name & Code: Business English (ULE21AE1T)

Max. Marks: 30   **Time: 1Hr 30 min**

PART - A (Marks: 1*10=10) *Attempt all questions*

1. What do you understand by Memorandum?
2. Write two formats of letter.
3. Mention any two Email Etiquette?
4. What do understand by Circular?
5. Define Precis writing?
6. Name any two types of letters.
7. What is purpose in presentation?
8. Write two principles of Business letter?
9. What is salutation in Business letter?
10. Explain the importance of body language in communication.

PART - B (Marks: 5*4=20) *Attempt any four question*

1. What is the importance of audience and locale in Presentation?
2. You are Raj/Sneha member of cultural committee. Write a notice (50 words) regarding the upcoming Freshers party to your department.
3. Discuss Various types of reports-
4. Differentiate between Business and Personal letters-
5. Write a claim and complaint letter to the dealer about the laptop purchased two months ago -

DEPARTMENT OF COMPUTER APPLICATIONS
CYCLE TEST-2, NOVEMBER 2022
BCA-DS, First Semester

UDS21101T-INTRODUCTION TO ARTIFICIAL INTELLIGENCE

Time: 90 Minutes

Max. Marks: 30

Answer **ALL** Questions
PART – A (1 × 10 = 10 Marks)

1. What is data science? Where it is needed?
2. Define business analytics.
3. Compare data science with business analytics.
4. What is machine learning?
5. What is reinforcement learning?
6. What is Robotic Process Automation (RPA)?
7. What is intelligent automation?
8. Define the various roles of intelligent automation.
9. Give the various applications of intelligent automation.
10. Define instruction driven automaton.

Answer **ANY FOUR** Questions
PART – A (5 × 4 = 20 Marks)

11. What is data analytics? Describe the process of data analytics.
12. Define supervised and unsupervised machine learning? Compare supervised machine learning with unsupervised machine learning.
13. What is computer vision? Why it is difficult? Write down various activities involve in computer vision.
14. Describe the various Intelligent Automation Platforms.
15. What do you mean by natural language processing? Why it is needed?

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Subject Name: I.A.C   Max. Marks:30

Subject Code: UDS21102J   Time: 1hr 30 min

PART - A (Marks: 1*10=10) Attempt all questions

1. What is the difference between list and tuple in python?

2. Write any three syntaxes from string datatype of python with example?

3. Introduce python's latest version?

4. What are python modules?

5. Write three drawbacks of micro-services?

6. What are the examples of real time event processing?

7. Define In-Memory computing for enterprise?

8. How do we deploy numbers in python programs?

9. Write a python program for palindrome?

10. Write a program to replace vowels from any string?

PART - B (Marks: 5*4=20) Attempt any four question

1. Explain In-Memory computing with its features and applications?

2. Give a brief overview of real time event processing?

3. Elucidate micro services architecture?

4. Give the overview of GPU?

5. Explain all the datatypes of python along with the examples of each.