Assignment Answers – Units 3, 5 & 20

UNIT 3 – DATA MINING

A – Find the answers in the text

1. Tool often used : **Artificial Intelligence (AI)**.

2. AI methods :

   a) **Decision trees**

   b) **Neural networks**

   c) **Clustering**

3. Patterns found by neural networks = **rules**.

4. Clusters are used when data is **not labelled**.

5. Storage used : **data warehouses, desktop databases, flat files**.

6. Analyst can **refine parameters, use other tools, or discard bad data**.

7. Uses : **health, law decisions, production, genetics, fraud detection, competitor news**.

B – Match Table A and B

Table A	Table B
a Data mining	iii
b AI	iv
c Cleansed data	ii
d Data warehouse	i

C – True or False

a) False

b) True

c) True

d) True

e) False

D – Complete the text

Large amounts of data stored in data **warehouses** are often used for data **mining**. The data is first **cleansed** to remove **duplicates** and errors. The **data** is then analysed using a tool such as **AI, neural networks, clustering, or decision trees**. An **analysis report** is reviewed by an **analyst** who decides if the **parameters** must be refined, other data tools used, or results discarded because they are **unusable**. Final results go to **decision makers** for **appropriate action**.

UNIT 5 – WRITING TASK 8

Introduction to Web Development

Aims :

1. Introduce beginners to web technologies and development environments.

2. Build a foundation in HTML, CSS, and JavaScript.

3. Provide an overview of front-end and back-end development.

4. Show real-world applications of web development in industry.

5. Offer hands-on experience in creating small web applications.

Description :   The course is organised into four structured parts :

Part 1 — Foundations   Setting up a development environment, using code editors, Git, and terminal tools.

Part 2 — Core Web Technologies   HTML for structure, CSS for design, JavaScript for interaction, responsive design, and debugging.

Part 3 — Advanced Concepts   Introduction to frameworks, APIs, server-side basics, and connecting front-end to back-end.

Part 4 — Real-World Practice   Building websites, using CMS, and ensuring security, accessibility, and performance.

Staff :   Ms. Imane Zouine

Classes :   Two weekly lectures + one practical laboratory session.

Assessment :   Three practical projects and a final web development assignment.

UNIT 20 – THE EX-HACKER

Starter – Find the answers quickly

1. Group that hacked Hotmail : **Hackers Unite**.

2. Internet bank customers faced **phishing / Trojan fraud**.

3. Hacker jailed for fraud : **Kevin Mitnick**.

4. Effect of 1996 raid : **£1m phone bill for Scotland Yard**.

5. Teenagers involved : **Raphael Gray** and **Sven Jaschan**.

6. MyDoom.O made search engines **slow / stop working**.

Language Work – Exercise 6 (Phrasal Verbs)

1. break into

2. hand over

3. tracked down

4. hack into

5. log on

6. go about

7. phone up

8. throw away

9. grown up

10. breaking into / hacking into

11. keep ahead

Exercise 7 – Replace verbs with phrasal verbs

1. Don't **throw away** your credit card receipts.

2. Trying to **break into** systems is illegal.

3. Typical hacker has not **grown up**.

4. Best way to start is to **get into** a password.

5. If someone **phones up**, don't give the password.

6. Hackers **shut down** Hotmail.

7. Hackers **ran up** a £1m bill.

8. Hard part was to **work out / find out** the site design.

9. **Write down** the ID number.

10. **Look up** manufacturers' sites first.

Exercise 8 – Word Study Classification

A : Viruses	B : Data Protection	C : Communication	D : Internet	E : WWW
Trojan, logic bomb	passwords, firewalls, backups, encryption, anti-virus	pagers, router, bandwidth, GPS	ISP, Usenet, IRC, FTP	URL, browser, domain name, hyperlink, XML

Writing Task 10 – News Article

Young Hacker Arrested

A 19-year-old hacker was arrested after breaking into a company's database and accessing private files. Police tracked him online and seized his equipment. He admitted hacking for fun and now faces charges. Security experts remind companies to update systems regularly.