Unit 10 · Computing and the Law

WORKSHEET

Full marks 34

Name _____ Class _____ Roll no. ____ Date _____ Marks _____ / 34

1 Key words [4]

Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

Act	**copyleft**	**fair dealing**	**freeware**	**policy**	**proportionate**	**proxy**	**rationale**	**regulation**	**unauthorized access**

A law passed by Parliament is an _____. A government's plan, which on its own punishes nobody, is a _____. The reason a law exists, the harm it prevents or the right it protects, is its _____. A rule whose costs fit the harm it prevents is _____. Using a computer or data without the owner's permission is _____. The few fair uses of a work that Nepal's Copyright Act allows without asking, such as quoting parts with credit, are called _____. A license that asks you to share whatever you build from the code under the same license is a _____ license. A feature that stands in for another, such as a district standing in for a family's wealth, is a _____.

2 Multiple choice [5]

Choose the correct option for each of the following questions.

i. Mohan's company gave him permission to use its sales program. He uses it to copy the customers' phone numbers, which his job never needed, and sells them. Which section of the Act is the clearest fit for getting at the numbers? [1]

a. Section 46, damaging data
b. Section 45: using a computer beyond the permission given
c. Section 47, publishing banned material
d. None: he had permission to use the program

ii. Anu orders a red kurta from a listed online shop. A blue one arrives, unworn. What does the E-commerce Act give her? [1]

a. Nothing: she should have checked the photo more carefully.
b. A refund only if the shop's own policy allows returns.
c. The right to return it, and either another kurta of the same price or her whole payment back, tax included.
d. A fine paid to her by the shop.

iii. A tuition center puts a camera in the room where students change for their sports class "for safety", with a notice on the door. Is it allowed? [1]

a. Yes, because there is a notice.
b. Yes, because it is for safety.
c. No: cameras are never allowed in a changing room, notice or not.
d. Only if the students agree on the first day.

iv. Bina builds an app with a library under the GPL 3.0. She wants to sell the app. What must she do? [1]

a. Nothing: GPL code is free.

b. She can't sell it: GPL code may never be sold.

c. She may sell it, but she must give buyers the app's whole source code, under the GPL.

d. She must pay the library's author.

v. A bank's loan model was trained on ten years of the bank's past decisions. It never sees anyone's caste. Can it still be biased against a caste? [1]

a. No: it can't be biased about something it doesn't see.

b. Yes: if past decisions were unfair, it learns them, and features such as district or address can act as proxies.

c. Only if the programmer wrote that rule.

d. No: data-driven algorithms have no values.

3 True or false [3]

Write True or False after each sentence.

i. No law in Nepal may go against the Constitution. ☐

ii. Code you can read on a public website is free to copy into your own app. ☐

iii. Under Nepal's Copyright Act, code written for someone who pays for it belongs to the person who paid, unless an agreement says otherwise. ☐

iv. Nepal's Privacy Act makes a company tell its customers when their data leaks. ☐

v. An offense against a computer in Nepal can be tried in Nepal even if it was committed from abroad. ☐

vi. Nepal's National AI Policy can punish a company that misuses AI. ☐

4 Which law protects it? [3]

Write the Act, and the section if you know it, beside each case. Each carries 0.5 mark.

What happened	Which Act (and section)?
Sabin logs in to his sister's account with the password he saw her type.	
A worker who was sacked deletes the shop's customer records to cause it a loss.	
A brother forwards his sister's emails to his friends without asking her.	
A neighbor flies a drone over a house to see what happens in its courtyard.	
An online shop's page gives no name, address or PAN number.	
Someone takes money out of people's wallets with logins stolen through a fake page.	

5 What does it print? [3]

Write exactly what the program prints, in the box under it. Then answer ii.

A class checks the pieces of its app against their licenses. It plans to sell the app and keep its own code private.

```
pieces = {"chart library": "MIT", "temple photo": "CC BY-NC",
          "date check from a blog": "none", "map library": "GPL",
          "Nyatapola photo": "CC BY-SA"}
sell = True
open_code = False
for name, lic in pieces.items():
    if lic == "none":
        print(name + ": ask the author first")
    elif "NC" in lic and sell:
        print(name + ": not if we sell the app")
    elif lic == "GPL" and not open_code:
        print(name + ": only if we publish our code")
    else:
        print(name + ": allowed, keep its credit")
```

OUTPUT

ii. The class decides to give the app away free and publish its code under the GPL. Which pieces still can't be used, and why?

6 Short answer [3]

Write a short answer to the following question.

Sanjay finds a useful function on a blog. The blog has no license and no copyright notice. Can he use it in an app he will publish? What should he do?

7 Write a program [4]

Write the program in Python on the lines. Any program that gives the right result gets the marks.

A scholarship committee wants a score that counts need as well as marks. Each student is a tuple of name, marks, and family income a month in thousands of rupees:

```
students = [("Asha", 92, 58), ("Bikash", 88, 45), ("Chameli", 74, 12),
            ("Dawa", 70, 9), ("Gita", 61, 8)]
```

Write a program that gives each student a score: their marks, plus 2 points for every thousand rupees their family earns below 50 (nothing extra at 50 or more). Print each name and score, highest score first. It should start with `Dawa 152`.

8 Long answer [4]

Write a long answer to the following question.

Your friend says: “Nepal has a privacy law, so our data is as safe as in Europe.” Do you agree? Give three differences between Nepal’s Privacy Act and the EU’s GDPR, and say why each matters.

9 Algorithmic bias [3]

Write a short answer to the following question.

How can a data-driven algorithm be biased even though nobody programmed it to be unfair? Give two ways, with an example of each.

10 Think [2]

Think, then answer.

A company offers schools in Nepal an AI that marks students' practice papers and decides who is ready to sit the SEE. Which level of the EU's AI Act would it be in, and what would you want checked before a school used it?

11 Activity: Everything in your app has a license (not marked)

At a computer or phone, open the unit's page (the QR code) and find the activity **Everything in your app has a license**. Try each plan, with every piece used, and fill in the table. Then find a plan with nothing not allowed.

Price	Your app's code	How many not allowed?	Which pieces, and why?
Free	Private		
Free	Open (GPL)		
Sold	Private		
Sold	Open (GPL)		