Grade 8 Computing

Unit 9 · Data, Privacy and You

WORKSHEET

Full marks 36

Name _____ Class _____ Roll no. ____ Date _____ Marks _____ / 36

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.

advertising ID	**cherry-picking**	**consent**	**coordinates**	**data brokers**	**inferred data**
metadata	**personal data**	**re-identification**	**sensitive personal data**		

Any data that can be linked to one particular person is _____. What an app worked out about you without asking, such as "likes cricket", is _____. Your health, religion, caste, fingerprints and family's money are _____, which needs the most care. Data about a message or a photo, such as who sent it, when and from where, is its _____. A photo's place is saved as two numbers, its _____. Companies that put together data about people from many apps and websites, and sell it, are _____. Agreeing to what happens to your data, when you were told clearly and could say no, is _____. Finding out who is in data with the names taken out, by combining it with what else is known, is _____.

2 How did the app get it? [3]

For each piece of data a video app has about you, write whether you **gave** it, it was **recorded** as you used the app, or it was **guessed**. Each carries 0.5 mark.

Data the app has about you	Given, recorded or guessed?
the date of birth you typed when you signed up	
how long you watched each video	
"probably about to buy a phone"	
where your phone was when you opened the app	
the profile photo you posted	
"likes cricket", worked out from the videos you watched	

3 Multiple choice [5]

Choose the correct option for each of the following questions.

i. Which of these is **metadata** about a phone call? [1]

a. what was said in the call
b. the caller's voice
c. the time of the call and how long it lasted
d. the song playing in the background

ii. A video app decides you are "probably interested in going abroad" from the videos you watch. This is: **[1]**

a. data you gave
b. data recorded from you
c. inferred data
d. not personal data

iii. A survey is shared with the names removed, but each row keeps the student's class, birth date and ward. What is the main risk? **[1]**

a. The survey is too short.
b. Someone who knows those facts about a student can find that student's row, and read their answers.
c. The data can't be put in a chart.
d. There is no risk without names.

iv. Under Nepal's Privacy Act, 2075, data collected with a person's consent may be used: **[1]**

a. for anything the collector likes
b. only for the purpose it was collected for, except where the law demands it
c. only by the government
d. only for ten years

v. A bar chart of a shop's sales starts its axis at Rs 9,000 and shows only the three best months of the year. What two tricks does it use? **[1]**

a. a pie chart and a running total
b. a zoomed-in axis and cherry-picking
c. per-person counting and stretching
d. none: it is honest

4 True or false **[3]**

Write True or False after each sentence.

i. A photo sent as a file by email usually keeps the place where it was taken. ☐

ii. Once the names are taken out, data is always anonymous. ☐

iii. A wrong guess an app has made about you is still personal data. ☐

iv. Tapping "I agree" to a long privacy policy is always real consent. ☐

v. Under Nepal's Privacy Act, the private matters of a person under 18 may be shared only if a parent or guardian agrees. ☐

vi. A chart of a running total shows how much each month had on its own. ☐

5 Calculations **[5]**

Show your working.

a. Town A had 40 road accidents last year; Town B had 15. Town A has 80,000 people; Town B has 20,000. Which town's roads are more dangerous for the people who live there? Show your working. **[3]**

Answer: _____

b. A poster shows a gas cylinder for last year's price, Rs 2,000, and beside it a cylinder drawn 1.5 times as tall and 1.5 times as wide, for this year's price, Rs 3,000. How many times did the price go up? How many times as big does the second cylinder look? **[2]**

Answer: _____

6 Read the chart [3]

Write short answers to the following question.

A shop's poster shows its sales as a bar chart: Rs 50,000 in Baisakh, 52,000 in Jestha, 51,000 in Asar and 54,000 in Shrawan. The chart's axis starts at Rs 49,000.

i. How many times as tall as the Baisakh bar does the Shrawan bar look?
ii. By how many percent did sales really rise from Baisakh to Shrawan?
iii. How should the honest chart be drawn?

7 Short answers [7]

Write short answers to the following questions.

a. Rina has sent many of her phone's photos, as files, to a website. Each still has the date, the time and the coordinates where it was taken. What could a stranger learn about Rina from these details alone? What should Rina do? **[3]**

b. What is real consent? Write its four parts, and say why tapping "I agree" to a long privacy policy is often not real consent. **[4]**

8 Long answer [4]

Write a long answer to the following question.

A school wants to share a table of its students' exam results with researchers. The table has each student's name, date of birth, ward, class and marks. Explain why removing only the names isn't enough, and suggest how to make it safer.

9 Think [2]

Think, then answer.

A city wants to know where to add bus routes. A phone company offers it maps of where phones travel each morning, with no names or numbers, only counts for each ward. Should the city accept? What would make you more, or less, comfortable with it?

10 Activity: Where were your photos taken? (not marked)

On your phone, or a family phone with its owner beside you, open the details (?) of three photos. Write whether each has a place saved. Don't write down the numbers. Then turn off the camera's location, take a new photo, and check that it has no place.

Photo of	Taken at home, or somewhere else?	Has a place saved? (Yes or No)	Sent to anyone? How?
a new photo, after turning the location off			—