



Unit 2 • Information and Communication Technology: local and modern technology

Give the marks for the points in the marking scheme; an answer in other words that says the same is right.

1 Key words

1. technology
2. local
3. modern
4. older
5. mass production
6. pani ghatta
7. ghaito
8. doko

K • 4

Each carries 0.5 mark.

2 Match the following

1. khal → d. to crush spices, garlic and chillies
2. janto → a. to grind grain into flour by hand
3. madani → f. to churn curd into butter and mohni
4. odan → c. an iron stand to hold a pot over the fire
5. dhiki → g. to pound paddy and take the husk off the rice
6. coal iron → e. to iron clothes, heated with burning charcoal

K • 3

Each carries 0.5 mark.

3 Look at the pictures

MARKING SCHEME

- ✓ Tools 1 to 4 named correctly (axe, sickle, kodalo, doko).
- ✓ Tools 5 to 7 named correctly (ghaito, tractor, wooden boat).
- ✓ 6 modern; all the others local.

K • 3

4 Multiple choice

i. b. tractor

K • 1

A tractor is made in a factory and runs on an engine. The sickle, plow and basket are made by local people from local materials.

ii. d. both a and c

U • 1

They are complex machines, made with scientific knowledge in factories, and they run on electricity. Both reasons are right.

iii. b. local technology

K • 1

They are made by local people with traditional skill, from local materials.

iv. d. all are correct

U • 1

The village blacksmith makes the kuto by heating iron in a charcoal fire and hammering it. It has a simple shape, is used in the traditional way, and is easy to handle. All four are true of it.

v. c. a madani

K • 1

A madani is made of wood by local hands and turned with a rope, using knowledge passed down for generations. The other three are made in factories and run on engines or electricity: modern technology.



5 Very short answers

- a. MARKING SCHEME K · 1
✓ The knowledge and skill used to make and use tools (or machines).
- b. MARKING SCHEME K · 1
✓ Flowing water.

6 Short answers

- a. MARKING SCHEME K · 2
✓ Any two local tools, e.g. plow, janto, dhiki, doko.
✓ Any two modern tools, e.g. tractor, refrigerator, computer.
- b. MARKING SCHEME U · 2
✓ Any one difference, e.g. traditional knowledge and local materials; scientific knowledge, made in factories.
✓ Any second difference, e.g. simple, worked by people or animals; complex, run by engines or electricity.
- c. MARKING SCHEME U · 2
✓ Any one reason, e.g. a tractor plows much faster, and deeper and more evenly.
✓ Any second reason, e.g. it needs fewer people and no oxen, or it can also pull a trailer, run a thresher or a pump.

7 Long answer

ANSWER

U · 4

- i. 1 janto (hand mill), 2 pani ghatta (water mill), 3 electric flour mill.
- ii. The janto and the pani ghatta are local technology; the electric mill is modern technology.
- iii. First people ground grain by turning the janto with their arm. Then flowing water was used to turn the same kind of stones in the pani ghatta, which grinds more with no human work. Then electric mills came, where a motor turns the grinder: they grind fastest and most, wherever there is electricity.

MARKING SCHEME

- ✓ i. Janto, pani ghatta and electric flour mill.
- ✓ ii. The janto and pani ghatta local, the electric mill modern.
- ✓ iii. The janto first, turned by a person's arm; then the pani ghatta, turned by flowing water.
- ✓ Then the electric mill, turned by a motor, grinding the most grain the fastest.

8 Think

ANSWER

HA · 2

Local tools need no electricity or fuel, so they work where there is no power and cause no pollution; they are cheap, made from local materials and repaired in the village; they suit steep hills where machines can't reach; they keep old skills and culture alive.

MARKING SCHEME

- ✓ Any one reason, e.g. they need no electricity or fuel and cause no pollution.
- ✓ Any second reason, e.g. they are cheap and repaired locally, suit steep hills, or keep skills and culture alive.



9 Activity: Local and modern technology in your town

(not marked)

WHAT STUDENTS SHOULD FIND

Cooking: chulo with firewood, odan; gas stove, induction cooker. Ironing: coal iron; electric iron. Plowing: kuto, kodalo, plow with oxen; tractor, power tiller. Cool water: ghaito; refrigerator. Crossing a river: wooden boat, tuin, bamboo bridge; steel suspension bridge. Message: a person on foot or a letter; mobile phone, email.

Marks by level	Knowledge	Understanding	Application	Higher ability	Total
Marks	17	10	0	2	29





Unit 2 • Information and Communication Technology: mobile phones and computers

Give the marks for the points in the marking scheme; an answer in other words that says the same is right.

1 Key words

1. computare
2. hardware
3. software
4. CPU
5. storage
6. columns
7. cell
8. multimedia

K • 4

Each carries 0.5 mark.

2 Label the diagram

- | | |
|---------------|-----------|
| 1. INPUT | 3. CPU |
| 2. PROCESSING | 4. OUTPUT |

K • 2

Each carries 0.5 mark.

3 True or false

MARKING SCHEME

K • 2

- ✓ i. true; ii. false.
- ✓ iii. true; iv. false.

4 Multiple choice

- i. a. the eyes

K • 1

Looking at a bright screen up close for a long time strains the eyes and dries them out. (A bent neck and back can also hurt, but the eyes suffer most.)

- ii. b. input, processing and output

K • 1

Data goes in (input), is worked on (processing), and the result comes out (output): IPO.

- iii. c. the cell in the second column and the fifth row

U • 1

The letter is the column (B is the second) and the number is the row (5).

- iv. b. F5

K • 1

F5 starts the slide show from the beginning. Esc ends it, Ctrl + S saves the file, and Tab moves between boxes.

- v. b. in both the old place and the new place

U • 1

Copy leaves the original where it is. Cut is the one that removes it from the old place.

5 Very short answers

- a. MARKING SCHEME

K • 1

- ✓ Any two of hard disk, pen drive, CD, DVD, Blu-ray disc, cloud storage.

- b. MARKING SCHEME

A • 1

- ✓ C4.



- c. MARKING SCHEME K · 1
✓ Ctrl + C.

6 Short answers

- a. MARKING SCHEME U · 2
✓ Any one difference, e.g. hardware can be seen and touched; software can't.
✓ Any second difference, e.g. hardware can do nothing without software, or examples of each.
- b. MARKING SCHEME U · 2
✓ Yes, they are all computers.
✓ They all take input, process it in a CPU, give output and store data (only their size and design differ).
- c. MARKING SCHEME K · 2
✓ Any one precaution, e.g. take breaks (the 20-20-20 rule).
✓ Any second precaution, e.g. not at bedtime, while eating or while charging; good light, big letters; sit straight.

7 Long answer

ANSWER

U · 4

Input devices give data and instructions to the computer: keyboard, mouse, microphone, scanner. Processing is done by the CPU (Central Processing Unit), a chip inside the system unit. Output devices give the results to the user: monitor, speaker, printer. Storage devices keep data and programs for later use: hard disk, pen drive, CD, DVD, cloud storage.

MARKING SCHEME

- ✓ Input devices give data and instructions to the computer, e.g. keyboard, mouse, microphone.
- ✓ Processing is done by the CPU (a chip inside the system unit), which works on the data.
- ✓ Output devices give the results to the user, e.g. monitor, speaker, printer.
- ✓ Storage devices keep data and programs for later, e.g. hard disk, pen drive, CD.

8 Think

ANSWER

HA · 2

The names move into alphabetical order but the marks stay where they were, so every student gets someone else's marks. He should select the whole table (both columns) before sorting, so that each row stays together.

MARKING SCHEME

- ✓ The names move but the marks don't, so the marks no longer match the names.
- ✓ Select the whole table (or expand the selection) before sorting, so each row stays together.

9 Activity: Input, output or storage?

(not marked)

WHAT STUDENTS SHOULD FIND

Input: keyboard, mouse, microphone. Output: monitor, speaker, printer. Storage: pen drive, hard disk. A touchscreen (or a headset with a microphone) is both input and output.

Marks by level	Knowledge	Understanding	Application	Higher ability	Total
Marks	15	10	1	2	28

