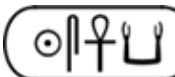
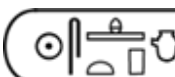
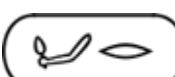


Problem 10. Egyptian (25 marks)

The Ancient Egyptian language is most known for one of its writing systems, the hieroglyphic script, which was deciphered in the 1820s after the discovery of the Rosetta stone. Although it is now long extinct, its descendant Coptic may have been spoken in some communities as late as the 19th century. One dialect of Coptic is even used as the liturgical language of the Coptic Christian churches, in a similar way to how Latin is used in the Catholic church. The ancient Egyptians were not Christians, instead having gods like **Ra** the sun god, and **Zeker** the god of death.

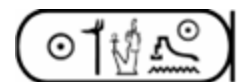
The Saqqara Tablet is a list of Egyptian pharaohs engraved over 3,000 years ago. Here are some Egyptian inscriptions from the tablet written in the hieroglyphic script:



- | | | |
|--|---|---|
| 1.  | 6.  | 11.  |
| 2.  | 7.  | 12.  |
| 3.  | 8.  | 13.  |
| 4.  | 9.  | 14.  |
| 5.  | 10.  | 15.  |

Scholars use two systems of rendering Egyptian inscriptions in the Latin alphabet. The system that reflects the hieroglyphic spelling is called *transliteration*. The system that is used to pronounce transliterations is called *Egyptological pronunciation*.

For example, the hieroglyphic inscription of the regnal of pharaoh Ramses the Great is given to the right. It has transliteration *r'-wsr-m'ṯt-r'ṯtp:n*, and Egyptological pronunciation **User Maat Ra, setep en Ra**.



Below are the names of the same fifteen pharaohs, given in both transliteration and Egyptological pronunciation. There are some gaps numbered (1-7) and some transliterations are not given. Note that *d*, *h*, *j*, *w*, *x*, *y*, *ʿ*, and *ʔ* are consonants. *Ø* denotes a hieroglyph that is not pronounced.

- | | | | |
|---|---------------|----------------------------|---------------|
| a. ____ (1) ____ | Neb ka Ra | i. _____ | Khufu |
| b. ____ (2) ____ -'nx-kʔ | Sankh ka Ra | j. h'-hw-____ (6) ____:y:Ø | Huni |
| c. r'-hʔpt-nb | Neb hapet Ra | k. r'-dd-dd-f | Djedef Ra |
| d. _____ | Sehetep ib Ra | l. r'-nbw-kʔ | Nebu ka Ra |
| e. b-b-Ø-j-j | Beby | m. _____ | Kheper ka Ra |
| f. ____ (3) ____ -nfr-f'r-____ (4) ____ | Seneferu | n. r'-x'-xpr | Kha kheper Ra |
| g. ____ (5) ____ | Djeser | o. dsr-____ (7) ____ | Djeser Teti |
| h. r'-x'-kʔ | Kha ka Ra | | |

[This problem continues on the next page.]

Q 10.1 Determine the correspondences between 1 - 15 and a - o.

Q 10.2 Fill in gaps (1 - 7). Note that some gaps may correspond to more than one hieroglyph.

Q 10.3 **Khufu** usually has a different inscription. What is that inscription? (Do not stack hieroglyphs on top of each other. Your hieroglyphs do not have to be perfect, so long as it is clear what is meant.)

Q 10.4 Give the transliterations of the following inscriptions. For 16 and 17, also give the Egyptological pronunciations.



Q 10.5  is read A B **Zeker**. What are A and B?

Problem 10. Egyptian Answers

For **Q10.1** write the corresponding letter under each item.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
c	b	d	m	l	n	h	k	i	f	j	a	o	g	e

10.2	1. $r^c / :nb / -k^3$ [3]	4. w [1]	6. n [1]
	2. $r^c / -s$ [2]	5. $d\bar{s}r / -r$ [2]	7. $t / :t / -j$ [3]
	3. s [1]		

10.3	
------	---

10.4	Transliteration	Egyptological pronunciations
	16. $r^c / -x^c / -nfr$ [3]	16. Kha nefer Ra
	17. $t / :t / -j$ [3]	17. Teti
10.5	18. $p / :p / -j / -j$ [4]	
	A. Nefer	B. ka

Maximum 62 pts.

Q 10.1 Max 30. 2 pts each.

Q 10.2 Max 13. 1 pt for each component separated by a bar / in the correct order. Each component must have the correct hyphens (-) and/or colons (:). They should not contain any bars.

If all correct components are given, and extra components are also given, deduct 1 pt. Only do this if all correct components are given. E.g. $-s^c$ scores 1 pt as an answer for 2 (for containing $-s$) but 0 pt as an answer for 3, as a point is deducted.

Pay close attention to bars under letters. E.g. $d\bar{s}r-r$ for 5 scores only 1 pt.

Do not penalise ' for '.

Q 10.3 Max 5. 5 pts if correct. Ignore whether or not the cartouche (oval+line) is drawn, award credit for the hieroglyphs inside. If not correct, award 1 pt per correct hieroglyph in the correct order. Do not penalise stacking hieroglyphs. Do not penalise poor drawings, so long as it is clear what was intended. Do not allow e.g., reeds for chicks, or water for the horned viper.

Q 10.4 Max 12. 1 pt for each component separated by a /, exactly as in 10.2. 1 pt for correct Egyptological pronunciation in 16 and 17.

Allow the transliteration in the second column and the Egyptological pronunciation in the first column, if done consistently.

Q 10.5 Max 2. 1 pt each.

Problem 10. Egyptian Commentary

The direction of writing is toward the vertical line at the end of the oval (which together with the line is known as a cartouche) and top to bottom. Hieroglyphs face away from the vertical line. Scribes moved the names of gods like **Ra** to the beginning of phrases in inscriptions (to show reverence).

Hieroglyphs can stand for words or consonant combinations. Sometimes they clarify the reading of previous hieroglyphs. In the transliteration, the mark - indicates separate hieroglyphs horizontally, and the mark : indicates separate hieroglyphs vertically.

Egyptological pronunciation: ' → **a**, ʾ → **a**, j,y → **i**, w → **u**, jj → **y**, d → **dj**, h → **h**, x → **kh**; otherwise X → **X**. Usually, CC → **CeC**, (C = consonant), although this is more irregular.

References and further reading:

- <https://pharaoh.se/ancient-egypt/kinglist/saqqara-canon/>
- <https://www.egyptianhieroglyphs.net/gardiners-sign-list/>