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ROLL NO.: B - 34
BATCH: B2

NLP PRACTICAL 1

Word Analysis

Aim: A word can be simple or complex. For example, the word 'cat' is simple because one cannot further decompose the word into smaller parts. On the other hand, the word 'cats' is complex, because the word is made up of two parts: root 'cat' and the plural suffix '-s'.

Screenshots:

in progress

Word Analysis

Select a Language which you know better

English

Select a word from the below dropbox and do a morphological analysis on that word

sofa

Select the Correct morphological analysis for the above word using dropboxes (NOTE : na = not applicable)

WORD	sofa	
ROOT	sofa	✓
CATEGORY	noun	✓
GENDER	na	✓
NUMBER	singular	✓
PERSON	na	✓
CASE	na	✓
TENSE	na	✓
<div>Check</div>	Right answer!!!	

The word is sofa- root word is Sofa , it is a noun and gender is not present , which is singular with no case and belongs to no person and has no tense defined.

Select a Language which you know better

English

Select a word from the below dropbox and do a morphological analysis on that word

beating

Select the Correct morphological analysis for the above word using dropboxes (NOTE : na = not applicable)

WORD	beating	
ROOT	beat	✓
CATEGORY	noun	✓
GENDER	male	✓
NUMBER	plural	✓
PERSON	second	✓
CASE	na	✓
TENSE	na	✓
Check	Right answer!!!	

The word is beating - root word is beat, it is a noun, and gender is male , which is plural with no case and belongs to the second person and has no tense defined.

Select a Language which you know better

English

Select a word from the below dropbox and do a morphological analysis on that word

earns

Select the Correct morphological analysis for the above word using dropboxes (NOTE : na = not applicable)

WORD	earns	
ROOT	earn	✓
CATEGORY	verb	✓
GENDER	male	✓
NUMBER	singular	✓
PERSON	third	✓
CASE	na	✓
TENSE	simple-present	✓
Check	Right answer!!!	

The word is earns - root word is earn, it is a verb, and gender is male present, which is singular with no case and belongs to the third person and is in the simple present tense.

Select a Language which you know better

Hindi

Select a word from the below dropbox and do a morphological analysis on that word

पुस्तके

Select the Correct morphological analysis for the above word using dropboxes (NOTE : na = not applicable)

WORD	पुस्तके	
ROOT	पुस्तक	✓
CATEGORY	noun	✓
GENDER	female	✓
NUMBER	plural	✓
PERSON	na	✓
CASE	direct	✓
TENSE	na	✓
Check	Right answer!!!	

The word is पुस्तके - root word is पुस्तक, it is a noun, and gender is female, which is plural with no case and belongs to no person and has no tense defined.

India Initiative

Select a Language which you know better

Hindi

Select a word from the below dropbox and do a morphological analysis on that word

सोऊंगा

Select the Correct morphological analysis for the above word using dropboxes (NOTE : na = not applicable)

WORD	सोऊंगा	
ROOT	सो	✓
CATEGORY	verb	✓
GENDER	male	✓
NUMBER	singular	✓
PERSON	first	✓
CASE	na	✓
TENSE	simple-future	✓
Check	Right answer!!!	

The word is सोऊंगा - root word is सो, it is a verb, and gender is male, which is singular with no case and belongs to the first person and is in the simple future tense.

Assignment :

1. Choose a typical masculine noun, ending in 'A', from your language. Write down its various forms along with various features and their values associated with them.

Answer: Actor

2. English has a suffix -en whose use is illustrated in the following lists:

List A	List B
Red	Redden
Mad	Madden
Soft	Soften
Wide	Widen
Sharp	Sharpen

In regard to these data, answer the following questions:

A. What part of speech does the suffix -en attach to? That is, what is the part of speech of the words in list A?

Answer: The suffix -en attaches to adjectives and sometimes to noun . The words in List A are adjectives.

B. When the suffix -en is attached to a word, what part of speech is the resulting word? Give some specific morphological properties of one of the words in list B, in order to justify your answer.

Answer: When the suffix -en is attached to a word, the resulting word becomes a verb. For example, soften (from soft) is a verb and can take verbal morphological properties such as tense (softened), aspect (is softening), and mood (soften the blow).

3. Take one verb from your mother tongue, gloss it (i.e., give the English meaning) and conjugate it in all tenses and aspects and persons.

Answer: I'll use a verb from Hindi: लिखना (likhna), which means "to write" in English. Below is the conjugation for all tenses, aspects, and persons:

Present Tense

- First person singular:
 - Hindi: मैं लिखता हूँ / मैं लिखती हूँ (Main likhta hoon / Main likhti hoon)
 - English: I write
- Second person singular:
 - Hindi: तू लिखता है / तू लिखती है (Tu likhta hai / Tu likhti hai)
 - English: You write
- Third person singular:
 - Hindi: वह लिखता है / वह लिखती है (Woh likhta hai / Woh likhti hai)
 - English: He/She writes
- First person plural:
 - Hindi: हम लिखते हैं (Hum likhte hain)
 - English: We write
- Second person plural:
 - Hindi: तुम लिखते हो (Tum likhte ho)
 - English: You all write
- Third person plural:
 - Hindi: वे लिखते हैं (Woh likhte hain)
 - English: They write

Past Tense

- First person singular:
 - Hindi: मैंने लिखा (Maine likha)
 - English: I wrote
- Second person singular:
 - Hindi: तूने लिखा (Tune likha)
 - English: You wrote
- Third person singular:
 - Hindi: उसने लिखा (Usne likha)
 - English: He/She wrote
- First person plural:
 - Hindi: हमने लिखा (Humne likha)

- English: We wrote
- Second person plural:
 - Hindi: तुमने लिखा (Tumne likha)
 - English: You all wrote
- Third person plural:
 - Hindi: उन्होंने लिखा (Unhone likha)
 - English: They wrote

Future Tense

- First person singular:
 - Hindi: मैं लिखूँगा / मैं लिखूँगी (Main likhunga / Main likhungi)
 - English: I will write
- Second person singular:
 - Hindi: तू लिखेगा / तू लिखेगी (Tu likhega / Tu likhegi)
 - English: You will write
- Third person singular:
 - Hindi: वह लिखेगा / वह लिखेगी (Woh likhega / Woh likhegi)
 - English: He/She will write
- First person plural:
 - Hindi: हम लिखेंगे (Hum likhenge)
 - English: We will write
- Second person plural:
 - Hindi: तुम लिखोगे (Tum likhoge)
 - English: You all will write
- Third person plural:
 - Hindi: वे लिखेंगे (Woh likhenge)
 - English: They will write

4. Refer to the following data and answer the question below:

List 1: taller, shorter, higher, lower, smarter

List 2: mower, teacher, sailor, caller, operator

List 3: never, cover, finger, river

Do the words ending with 'er'/'or' have some common features?

Answer:

Yes, the words ending with '**er**' or '**or**' in the given lists have distinct features.

List 1: These are comparative adjectives

List 2: These are agentive nouns

List 3: These are base words that happen to end in 'er' or 'or'

Common Features:

- In List 1 and List 2, 'er'/'or' is a meaningful suffix that adds specific grammatical or semantic value
- In List 3, 'er'/'or' is simply part of the root word and does not function as a suffix.

5. Identify root and suffix in the following words:

kissed

stronger

Goodness

teacher

achievement

Answer :

Kissed

- Root: Kiss
- Suffix: -ed

Stronger

- Root: Strong
- Suffix: -er

Goodness

- Root: Good
- Suffix: -ness

Teacher

- Root: Teach
- Suffix: -er

Achievement

- Root: Achieve
- Suffix: -ment

Word Generation

Aim: A word can be simple or complex. For example, the word 'cat' is simple because one cannot further decompose the word into smaller parts. On the other hand, the word 'cats' is complex, because the word is made up of two parts: root 'cat' and the plural suffix '-s'.

Screenshots:

1. watching

The screenshot shows a web interface for word generation. At the top, there is a logo for 'Virtual Labs' and the title 'Word Generation'. Below this is a language dropdown menu set to 'English'. A table with columns for ROOT, CATEGORY, GENDER, NUMBER, PERSON, CASE, and TENSE is displayed. The table contains the following data:


ROOT	CATEGORY	GENDER	NUMBER	PERSON	CASE	TENSE
watch	verb	male	singular	third	na	present-continuous

Below the table, there is a dropdown menu showing 'watching' and a 'Check' button. The text 'Right answer!!!' is displayed in green.

In this simulation, we have generated the word **watching** from the root word - **watch** by selecting the appropriate features:

1. Category: verb
2. Gender: male
3. Number: singular
4. Person: third
5. Case: na (neither direct or oblique)
6. Tense: present-continuous

2. travels



Word Generation

English ▼

Select root and features

ROOT	CATEGORY	GENDER	NUMBER	PERSON	CASE	TENSE
travel ▼	verb ▼	female ▼	singular ▼	third ▼	na ▼	simple-present ▼

travels ▼


Check

Right answer!!!

In this simulation, we have generated the word **travels** from the root word - **travel** by selecting the appropriate features:

1. Category: verb
2. Gender: female
3. Number: singular
4. Person: third
5. Case: na (neither direct or oblique)
6. Tense: simple-present

3. enjoying



Word Generation

English ▼

Select root and features

ROOT	CATEGORY	GENDER	NUMBER	PERSON	CASE	TENSE
enjoy ▼	verb ▼	male ▼	plural ▼	third ▼	na ▼	present-continuous ▼

enjoying ▼


Check

Right answer!!!

In this simulation, we have generated the word **enjoying** from the root word - **enjoy** by selecting the appropriate features:

1. Category: verb
2. Gender: male
3. Number: plural
4. Person: third
5. Case: na (neither direct or oblique)
6. Tense: present-continuous

4. पढ़ती



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Word Generation

Hindi ▼

Select root and features

ROOT	CATEGORY	GENDER	NUMBER	PERSON	CASE	TENSE
पढ़ ▼	verb ▼	female ▼	singular ▼	first ▼	na ▼	simple-present ▼


पढ़ती ▼

Right answer!!!

In this simulation, we have generated the word पढ़ती from the root word - पढ़ by selecting the appropriate features:

1. Category: verb
2. Gender: female
3. Number: singular
4. Person: first
5. Case: na (neither direct or oblique)
6. Tense: simple-present

5. देखना



Word Generation

Hindi

Select root and features

ROOT	CATEGORY	GENDER	NUMBER	PERSON	CASE	TENSE
देख	verb	male	singular	third	na	simple-present

देखना

Check

Right answer!!!

In this simulation, we have generated the word देखना from the root word - देख by selecting the appropriate features:

7. Category: verb
8. Gender: male
9. Number: singular
10. Person: third
11. Case: na (neither direct or oblique)
12. Tense: simple-present

Assignment:

1. Generate words for the following features:

English:

root: boy category: noun number: singular

root: child category: noun number: plural

root: play category: verb gender: male number: singular person: first tense: simple-present

root: play category: verb gender: male number: singular person: third tense: simple-present

Hindi:

root: पुस्तक(pustak) category: noun gender: female number: singular case: direct

root: बाग(bAg) category: noun gender: male number: singular case: oblique

root: खेल(khel) category: verb gender: female number: plural person: third tense: present-perfect

root: पढ़(paD) category: verb gender: female number: singular person: first tense: simple-future

Answer:

English:

1. boy (noun, singular)
2. children (noun, plural)
3. play (verb, male, singular, first person, simple-present)
4. plays (verb, male, singular, third person, simple-present)

Hindi:

1. पुस्तक (noun, female, singular, direct case)
2. बाग (noun, male, singular, oblique case)
3. खेलें (verb, female, plural, third person, present-perfect)
4. पढ़ूँगी (verb, female, singular, first person, simple-future)

Morphology

Aim: Morphology is the study of the way words are built up from smaller meaning bearing units i.e., morphemes. A morpheme is the smallest meaningful linguistic unit.

Screenshots:

Morphology

Select a Root Word

नदी

Fill the add delete table here:

Delete	Add	Number	Case	Correction
नदी	नदी	sing	dr	✓
नदी	नदीया	plu	dr	✓
नदी	नदी	sing	ob	✓
नदी	नदीया	plu	ob	✓

Submit

Correct Answer!

For Example for लड़का:

Delete	Add	Number	Case
लड़का	लड़का	sing	dr
लड़का	लड़काए	plu	dr
लड़का	लड़का	sing	ob
लड़का	लड़काए	plu	ob

In this simulation we have selected a root word which is in hindi नदी .By adding and deleting the matras or variants in english to the root word along with it's singular and plural form and the cases we are able to analyze a word.

Morphology

Select a Root Word

आदमी

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आदमी	आदमी	sing	dr	✓
आदमी	आदमी	plu	dr	✓
आदमी	आदमी	sing	ob	✓
आदमी	आदमी	plu	ob	✓

Submit

Correct Answer!

For Example for लड़का:

Delete	Add	Number	Case
लड़का	लड़का	sing	dr
लड़का	लड़काए	plu	dr
लड़का	लड़का	sing	ob
लड़का	लड़काए	plu	ob

In this simulation we have selected a root word which is in hindi आदमी . By adding and deleting the matras or variants in english to the root word along with it's singular and plural form and the cases we are able to analyze a word.

Morphology

Select a Root Word

लता

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आ	आ	sing	dr	✓
आ	आए	plu	dr	✓
आ	आ	sing	ob	✓
आ	आओ	plu	ob	✓

For Example for लड़का:

Delete	Add	Number	Case
आ	आ	sing	dr
आ	ए	plu	dr
आ	ए	sing	ob
आ	ओ	plu	ob

Submit

Correct Answer!

In this simulation we have selected a root word which is in hindi लता .By adding and deleting the matras or variants in english to the root word along with it's singular and plural form and the cases we are able to analyze a word.

Morphology

Select a Root Word

लड़की

Fill the add delete table here:

Delete	Add	Number	Case	Correction
इ	इ	sing	dr	✓
इ	इयो	plu	dr	✓
इ	इ	sing	ob	✓
इ	इयो	plu	ob	✓

For Example for लड़का:

Delete	Add	Number	Case
आ	आ	sing	dr
आ	ए	plu	dr
आ	ए	sing	ob
आ	ओ	plu	ob

Submit

Correct Answer!

In this simulation we have selected a root word which is in hindi लड़की .By adding and deleting the matras or variants in english to the root word along with it's singular and plural form and the cases we are able to analyze a word.

Morphology

Select a Root Word

कूली

Fill the add delete table here:

Delete	Add	Number	Case	Correction
है	है	sing	dr	✓
है	है	plu	dr	✓
है	है	sing	ob	✓
है	हैया	plu	ob	✓

For Example for लड़का:

Delete	Add	Number	Case
आ	आ	sing	dr
आ	ए	plu	dr
आ	ए	sing	ob
आ	औ	plu	ob

Submit

Correct Answer!

In this simulation we have selected a root word which is in hindi कूली. By adding and deleting the matras or variants in english to the root word along with it's singular and plural form and the cases we are able to analyze a word.

Assignment :

1. Select words from this which belong to the same paradigm: मनुष्य(manuShya), पक्षी(pakshii), शिशु(shishu), गुरु(guruu), नर(nar).

Answer:

The words मनुष्य (manuShya), पक्षी (pakshii), शिशु (shishu), and नर (nar) share the same paradigm as masculine singular nouns referring to living beings. गुरु (guruu), while often masculine, stands apart because it can refer to both genders and has unique grammatical declensions.

So, मनुष्य, पक्षी, शिशु, and नर fit better into the same group.

2. Construct the paradigm table for the above words.

Answer:

Case (Vibhakti)	मनुष्य (manuShya)	पक्षी (pakshii)	शिशु (shishu)	गुरु (guruu)	नर (nar)
1. Nominative (प्रथमा)	मनुष्यः (manuShyah)	पक्षीः (pakshīḥ)	शिशुः (shishuh)	गुरुः (guruh)	नरः (narah)
2. Accusative (द्वितीया)	मनुष्यम् (manuShyam)	पक्षिनम् (pakshinam)	शिशुम् (shishum)	गुरुम् (gurum)	नरम् (naram)
3. Instrumental (तृतीया)	मनुष्येण (manuShyena)	पक्षिणा (pakshiṇā)	शिशुना (shishunā)	गुरुणा (guruṇā)	नरेण (narena)
4. Dative (चतुर्थी)	मनुष्याय (manuShyāya)	पक्षिणे (pakshiṇe)	शिशवे (shishave)	गुरवे (gurave)	नराय (narāya)
5. Ablative (पञ्चमी)	मनुष्यात् (manuShyāt)	पक्षिणः (pakshiṇaḥ)	शिशोः (shishoh)	गुरोः (guroḥ)	नरात् (narāt)
6. Genitive (षष्ठी)	मनुष्यस्य (manuShyasya)	पक्षिणः (pakshiṇaḥ)	शिशोः (shishoh)	गुरोः (guroḥ)	नरस्य (narasya)
7. Locative (सप्तमी)	मनुष्ये (manuShye)	पक्षिणि (pakshiṇi)	शिशौ (shishau)	गुरौ (gurau)	नरे (nare)
8. Vocative (संबोधन)	हे मनुष्य (he manuShya)	हे पक्षिन् (he pakshin)	हे शिशो (he shisho)	हे गुरो (he guro)	हे नर (he nara)

3. Observe the following words from Bengali. Identify all the morphemes and their corresponding meanings.

kori '(I)do'

maari '(I) hit'

korchille '(You) were doing'

maar '(You) hit'

Answer:

kori ('I do'):

- kor- (root meaning 'do')
- -i (1st person singular present tense marker)

maari ('I hit'):

- maar- (root meaning 'hit')
- -i (1st person singular present tense marker)

korchille ('You were doing'):

- kor- (root meaning 'do')
- -ch- (continuous aspect marker)
- -il- (past tense marker)
- -e (2nd person marker)

maar ('You hit'):

- maar- (root meaning 'hit')
- ∅ (zero morpheme indicating 2nd person imperative)