Introduction to Linguistics Exam 2010

Part 1 – Theory   [50 marks]
Answer ANY five (5) of the following questions   **(10 marks each)**

1. What is Dialectics? What are the 3 basic laws of dialectics?
2. What is Metaphysics? What is the goal of Dialectical Linguistics, as opposed to Descriptive Linguistics?
3. What are the 3 characteristics of all living structures? Describe the complexity of Language, explaining its 'interconnected' aspects.
4. How do we learn Language? How does it differ from animal 'languages'?
5. What is *generalization*? Describe the process, with reference to the principles of human understanding as defined by David Hume, and give an example.
6. What are the 2 most important points Vygotsky made in his *Analysis into Units*?
7. What is Grammaticalization? Give examples.
8. Discuss 'meaning as use'
9. Why do we sometimes find it difficult to put what we mean into words?
10. What is Ambiguity? Why is ambiguity inherent in Language?
11. State the purpose of G-nalysis
12. How does phonetics differ from phonology?
13. What are speech sounds?
14. What are organs of speech?
15. What are the 4 possible positions of vocal folds during speech?
16. Why is the tongue so vital in speech production that we sometimes refer to languages as 'tongues'?
17. Give 2 definitions of *phoneme*: which of the definitions do you prefer? Why?
18. What is a *minimal pair*? What is a *minimal set*?
19. What is an *allophone*? Give examples.
20. When are allophones said to be
    $\Rightarrow$ In *free variation*?
    $\Rightarrow$ In *complementary distribution*?

Part 2. Exercises

2.1 Practical Sentence Analysis (G-nalysis)   [50 marks]
G-nalyse **any five (5)** of the following sentences   **[10 marks each]**
Identify the SVC patterns, determine how they relate to each other, and diagram each sentence, stating which type it is (simple, compound, complex, or compound complex)

1. You will get it, if you really try.
2. A clause is a group of words that has sentence structure S/V/C.
3. An animal's ability to express himself vocally is no indication of his mental development.
4. From primitive generalisations, verbal thought rises to the most abstract concepts.
5. **The meaning of a word is its use in the language (Wittgenstein)**.
6. Each word is already a generalization (Vygotsky).

Do all 5 of the following exercises (10 marks each)

Exercise 1. Arosi, San Cristobal, Solomon Islands. Do [t] and [d] belong to the same phoneme or to separate phonemes? Why?

[gede]	pick at food	[arito]	sunshower
[tapuru]	cut hair	[dao]	lie down
[mamareda]	spread out	[udauda]	soft (of food)
[tao]	fine net	[uta]	rain
[huʔitaʔI]	turn over	[tewa]	tall
[ariheda]	kind of rope	[taiduru]	uncombed

Exercise 2 **Chuave** (Simbu Province, PNG) What is the phonemic status of [d] and [ð]? Are they 2 phonemes or allophones?

[giŋgoði]	snore	[tʰoyaði]	pour
[edɔŋgwa]	fire	[duði]	insane
[tʰoyadi]	pour	[dikeme]	it's over
[kaando]	look around	[eðɔŋgwa]	fire
[diro]	you 2 speak	[giŋgodi]	snore
[dudi]	mad	[dʊmba]	it is

Exercise 3 **Boiken** (East Sepik Province, PNG) What is the phonemic status of [n] and [ŋ]? Are they 2 phonemes or allophones?

[miŋ]	this	[xun]	star
[nanɛ]	we two	[mɛŋ]	foot
[nindi]	middle	[win]	blood
[xuŋ]	star	[xomin]	yellow
[mandzi]	rope	[ɯeɛn]	foot
[wiŋ]	blood	[wunɛ]	I
[tʊəndʊə]	men	[min]	this
[xomiŋ]	yellow	[nimbi]	hair

Exercise 4   The following sets of minimal pairs show that English /p/ and /b/
contrast in initial, medial, and final positions:

initial	medial	final
pit/bit	*rapid/rabid*	*cap/cab*

Find similar sets of minimal pairs for each pair of consonants given:

	initial	medial	final
/k/ – /g/			
/m/ – /n/			
/l/ – /r/			
/b/ – /v/			
/b/ – /m/			
/p/ – /f/			
/s/ – /ʃ/			
/tʃ/ – /dʒ/			
/s/ – /z/			

End of Exam!!!

Model Answers

21. What is Dialectics? What are the 3 basic laws of dialectics?

Dialectics is a way of reasoning that views things in their interconnectedness, change, and evolution: (1) Everything is 'struggle of opposites'; (2) Quantity changes the Quality; (3) Change is spiral, it does not move in circles.

22. What is Metaphysics? What is the goal of Dialectical Linguistics?

Metaphysical reasoning views things as fixed objects, in isolation from the whole. Dialectical linguistics strives to understand Language in all its complexity, interconnectedness, change and evolution – 'live.'

23. What are the 3 characteristics of all living structures? Describe the complexity of Language, explaining its 'interconnected' aspects.

Living structures (1) function as a whole; (2) are constantly changing and (3) self-regulating. The whole is more than the sum of its parts: the psycho-physical, social and historical dualities of Language.

24. Explain the role of Language in our cognitive development (with reference to Piaget's 4 stages of cognitive development)

Language precedes logic: we learn to reason as a result of internalizing linguistic structures/ dualities. The human brain, according to Piaget, goes through 4 major stages of cognitive development:

1. The **Sensorimotor Stage** occurs between birth and age 2. Babies are born with no thinking structures; they develop them through 'soaking up' language and exploring their environment through their senses. At his stage, humans are incapable of coherent logical thought, even though most babies begin to speak their first words long before they are 2.
2. The **Pre-Operational Stage** (approx. 2 to 7 years of age). Children rapidly develop language skills and the underlying thinking structures. They develop personal traits and characters, but are yet incapable of mature reasoning.
3. The *Concrete* **Operational Stage:** ages approximately 7 to adolescence. Children begin to reason logically, but only on a concrete level; they cannot yet consider all of the logically possible outcomes.
4. The *Formal* **Operations Stage:** adolescence or above. The mind acquires the ability to think abstractly, hypothetically; it can now solve problems using the logic of combinations.

25. What is *generalization*? Describe the process, with reference to the principles of human understanding as defined by David Hume, and give an example.

Generalization is an act of thought. We think (make sense of things) by connecting ideas by Resemblance, Contiguity in space & time, and Cause/ Effect: what looks like a duck, walks like a duck, and quacks like a duck, IS a duck.

26. How does human language differ from animal 'languages'?

Human language is verbal thought; animal languages communicate only emotion (affect), not abstract thought.

27. What are the 2 most important points Vygotsky made in his *Analysis into Units*?

(1) Word-meaning is the smallest unit of Language; (2) Word meanings are not fixed – they develop, and evolve: 'it is not the meaning that changes, it is the way reality is generalized in the word that changes'

28. What is Grammaticalization? How does it occur? Give examples.

Grammaticalization is the process of change in the way the collective mind of the speech community reflects (generalizes) reality. Concrete words acquire more generalized, more abstract grammatical meaning:

> From primitive generalisations, verbal thought rises to the most abstract concepts. It is not merely the content of a word that changes, but the way in which reality is generalised and reflected in a word (Ibid., Ch. 7).

29. How do we create complex meaning? Discuss 'meaning as use'

We create complex meanings through the synthesis and analysis of word-meanings: (1)Synthesis into sentence structure – nexal patterns; (2) Analysis (modification, specification) of the major sentence constituents – Recursion.
The Whole is more than the sum of its parts: words acquire their true meaning only in the nexus of the proposition (= in use).

30. Why do we sometimes find it difficult to put what we mean into words?

Because the structure of thought is different from the structure of language: language is linear; thought is rooted in perception/ sensation, which unfolds in *'sphota'*

31. What is Ambiguity? Why is ambiguity inherent in Language?

Ambiguity is uncertainty of meaning; because we communicate complex meanings (sentences); the whole is more than the sum of its parts. We all make sense of the

complex wholes in our own heads, from our own perspectives, based on our individual experience & level of cognitive development.

32. State the purpose of G-nalysis and describe the 2 steps of g-nalysis

Gnalysis attempts to understand how parts of the whole (sentence meaning) relate to each other – i.e., how words, phrases, and nexal patterns relate to each other within the whole of the sentence. Step 1: identification of all nexal patterns in the sentence; Step 2: discovering how words, phrases and clauses relate to each other by asking logical questions.

33. How does phonetics differ from phonology?

Phonetics is the study of <u>*speech sounds*</u>. Its aims are to describe and to explain these sounds. Phonetic description is based on *observable* facts about sounds: how they are produced, what they sound like, and what measurable physical properties they have.

Phonology, on the other hand, deals specifically with the sounds and *sound patterns* of individual languages.

While *phonetics* is the study of all human speech sounds, *phonology* is the study of a <u>subset</u> of the sounds human throats are capable of producing; it looks at how these characteristic speech sounds combine to create meaning in a particular language.

34. What are speech sounds? How do vowels differ from consonants?

Speech sounds are the constituents of words.
- ⇒ **Vowels** are sounds we make when our breath air passes freely through the vocal tract, and
- ⇒ **Consonants** are sounds we make when the air flow from the larynx meets some barrier on its way out.

35. What are organs of speech? Why is the tongue so vital in speech production that we sometimes refer to languages as 'tongues'?

The first prerequisite of speech is breath: it provides the *energy* needed for sound production. During the act of normal healthy breathing, air comes from the lungs up through the windpipe (*trachea*) and out either through the nose or through the mouth. In order to convert silent breath into speech, we must modify it at different points on its way out of the lungs, through the respiratory tract and through the mouth and nose. These points are called *organs of speech*:

- ⇒ The vocal cords (vocal folds)
- ⇒ The lips
- ⇒ The tongue
- ⇒ The roof of the mouth

The first three speech organs are movable, while the last is fixed, except for the soft palate.

The tongue is the most flexible and mobile speech organ - it is so vital in speech production that we sometimes refer to languages as 'tongues.' It is practically <u>four</u> speech organs in one: (1) the tip of the tongue, (2) the blade, (3) the front and (4) the back.

The tongue takes part in the formation of all English sounds except /m/, /p/, /b/ and to some extent /a:/.

36. How do we classify vowels? Consonants?

Consonants and vowels have their own *features* / *characteristics* that we use to classify them. When talking about **consonants,** we can define

⇒ **Where** the obstruction takes place (***Place of Articulation***) and
⇒ **What *form*** of obstruction causes the sound (***Manner of Articulation***).
⇒ We can also describe consonants based on whether or not the vocal cords vibrate during the enunciation process (**voiced / voiceless** or **lenis**/ **fortis** consonants).

It is not so in the case of **vowels**: since there is no contact between the articulators, we cannot talk of any *place of articulation* during their production. Vowel sound quality is assessed in terms of Tone & Stress (Pitch, Loudness, & Length); it depends on the shape of the oral resonating chamber which changes with tongue movement while articulating vowel sounds. The Cardinal Vowel Diagram indicates:

⇒ The tongue position in the mouth (front/central/back) and
⇒ Which part of the tongue is raised the highest.

37. What are the 4 possible positions of vocal folds during speech?

The vocal folds can take <u>four (4) different positions:</u>

(1) *Open glottis*: In this position the vocal folds are wide apart and the breath stream passes between them without being modified in any way. This is the position of the vocal folds during normal breathing. This is also the position they are in when we pronounce certain sounds which are said to be *voiceless,* such as /p/, /f/, /s/, etc.

(2) *Closed glottis*: In this position the vocal folds are tightly closed, with the lung air pent up below it. This is the position of the vocal folds when we are holding our breath and also it is the first stage of a cough. If the folds are suddenly released, the breath stream rushes out, making an explosive sound called the ***glottal stop*** **[ʔ].** Although this sound is very common in many varieties of BE pronunciation, no letter of the English alphabet represents it and therefore we are not conscious of its existence. In standard English speech this sound precedes the energetic articulation

of a vowel, especially when a long vowel appears in initial stress position, e.g. ['aːmfʊl], ['ɔːfʊl].

(3) *Position for whisper*: In this position the vocal cords are still tightly closed except at one point where a little gap is left. When we speak with the vocal cords in this position, the breath forces itself through the small gap with audible friction. The greater the force of the breath stream, the louder the whisper.

(4) *Position for voicing*: In this position, the vocal folds are fairly close together, but not touching. As the air pushes between them, they open and suddenly close again. This happens repeatedly at a great speed, resulting in *vibration*. The effect of this vibration is a wave of sound that emerges from the larynx and out through the mouth and nose. When it enters the hearer's ear, it is recognised as voice. Voice does not mean speech. Speech is talking. If we are not using the vocal cords as in whisper, we still have speech but no voice. Voicing is the position the vocal cords take up in the pronunciation of all voiced sounds.

38. Give 2 definitions of *phoneme*: which of the definitions do you prefer? Why?

The Phoneme is:
- ⇒ the smallest unit of sound which may distinguish two words
- ⇒ the *contrastive* sound segment which both the speaker and the hearer perceive to be the same.

Phonemes are not physical sounds, they are *perceptions* of sounds. These mental images are like footprints of sounds, forming moulds that several similar sounds can fit into - that is why we can understand each other, even though our pronunciation differs.

39. What is a *minimal pair*? What is a *minimal set*? Give examples of each.

Minimal Pairs are two words
- ⇒ with *different meanings*
- ⇒ with *identical phonetic features*, except for a difference in *one phoneme* in exactly *the same position* in the word (*initial, medial*, or *final*).

For example, *p*it & *f*it; f*i*t & f*a*t; pi*ck* & pi*g*, etc. (note that the pairs of words are different only in one sound <u>in the same position</u> (initial, medial, or final).

Minimal sets: several minimal pairs make a minimal set:

      pit, fit, git, shit, bit, sit, lit, wit, or

      fit, fate, fat, foot, fought, feet, fart, etc.

Analysis of *minimal pairs* helps us identify the phonemes or the characteristic sounds of any language.

40. What is an *allophone*? When are allophones said to be (a) in *free variation*? (b) In *complementary distribution*? Give examples.

Allophones are the actual sounds we hear – they are variations of phonemes resulting from the influence of neighbouring phonemes in connected speech, or from the individual speaker's way of talking. Allophones are still perceived to be the same contrastive sound by both speaker and receiver; they do not cause communication problems, unless they deviate too much from the standard phoneme and begin to sound like another: co*p*y – co*ff*ee, etc.

Allophones are said to be:
⇒ In *free variation* when they occur randomly. No two sounds can ever be exactly the same, no matter how you try. When sounds vary randomly without changing the meaning of the word, they are in *free variation*.
⇒ In ***complementary distribution*** when the difference is caused by the neighbouring sounds. If sound varies in a specific phonetic environment, then the allophones are in *complementary distribution*, since one set of environments complements another.

41. Why do sounds influence each other in connected speech? Describe different kinds of assimilation (progressive and regressive), with examples of each.

Many factors affect sounds in running speech, most of them resulting from the physical limitations of our organs of speech: our tongues, lips and soft palates are not fast, or flexible enough, to cope with the flow of speech! They cannot move quickly enough to get from one position to another in order to articulate the next sound *precisely*. Many sound changes are due to the influence of one sound upon another, causing the other sound to become more like the 'influencing' sound itself. If a sound change results in more *shared phonetic features between two sounds*, this results in ***assimilation.*** **There are 3 main types of assimilation:**

1. **Assimilation of Place**: /**t**/ → /**p**/ in *ratbag* ['ræp‚bæg]*, good boy* ['gʊp‚bɔi]*,* or *oatmeal* ['əʊpmiːl], etc. This is because the alveolar plosive /t/ is simplified into the /p/ sound, which is closer to the bilabial plosive /b/ and to the bilabial nasal /m/.

2. **Assimilation of Manner**: occurs when two different manners of articulation influence each other to form a different manner of articulation: *Indian* ['indʒən] and *soldier* ['səʊldʒə]. This is because the plosive /d/ combines with the approximant /j / to form an affricate.

3. **Assimilation of Voice**: have to ['hæftə] (voiced fricative followed by a voiceless consonant)

Assimilation of place will, of course, affect the manner of articulation, so these different types of assimilation usually occur together. *Assimilation* can be

⇒ **Partial,** when the changed sound retains at least one of its original features (p*artial regressive assimilation* examples: **in**divisible [ˌindiˈvizəbl], **im**balance [imˈbæləns], **in**credible [iŋˈkredəbl], **in**admissible [ˌinədˈmisəbl], etc.

or

⇒ **Total**, when the two sounds end up identical (a *geminate*, or phonetically double sound; you can see many examples of *total regressive assimilation* in Modern English word formation, where the last prefix consonant becomes totally like the following sound:

abbreviate	**ag**gressive	**ap**peal	**at**tend
account	**al**leviate	**ar**rive	
affect	**an**nual	**as**sent	

But: **ad**mire, **ad**just, **ad**jacent, **ad**vance, etc. All the highlighted prefixes are adaptations of prefix '**ad-**' meaning 'to, toward.' The *d* in **ad-** always changes to the sound of any following consonant, except m, j, and v .
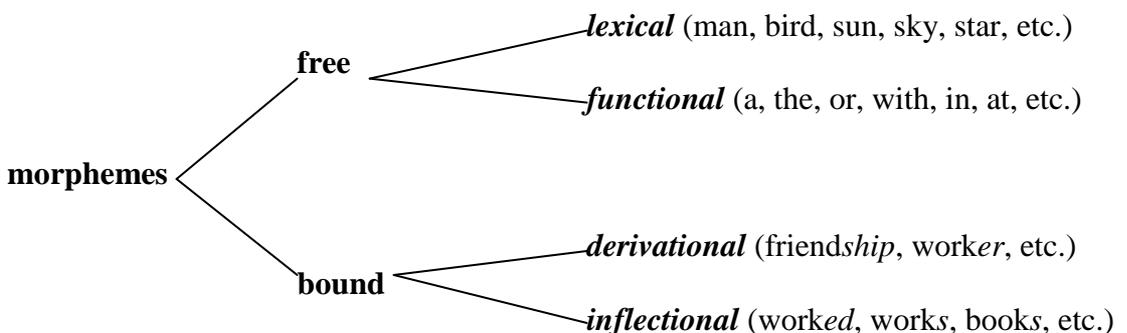
The *direction* of assimilation can be

⇒ *Regressive* – operating backwards, i.e., when the *preceding* sound is changed (A < B), or
⇒ *Progressive* – operating forwards, when the *following* sound becomes more like the preceding one (A > B)

42. What are morphemes? Draw the diagram of the classification of morphemes, explaining the difference between the different categories. Give examples.

Morphemes are the smallest units of meaning in a language. They are different from words, because they **are *not necessarily free***; many of them cannot stand on their own, and only acquire their meaning when fused with other morphemes (i.e., the –*s* morpheme, which can mean the plural of a noun or the 3rd person singular form of the verb:

1 apple	2 apple*s* (book*s*, thought*s*, etc.)
I read	She read*s*, look*s*, think*s*, etc.

Morphemes fall into two main groups – **free** and **bound**:

lexical (man, bird, sun, sky, star, etc.)

free

functional (a, the, or, with, in, at, etc.)

morphemes

derivational (friend*ship*, work*er*, etc.)

bound

inflectional (work*ed*, work*s*, book*s*, etc.)

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Free morphemes can be

1. *Lexical:* those that by themselves represent independent concrete concepts (lexical morphemes are called an 'open' class of words, because we coin new words all the time, to refer to new concepts, i.e., blog, download, PMV, etc.)

or

2. *Functional:* function words, like auxiliary and modal verbs, conjunctions, prepositions, pronouns, and articles. Because we almost never add new functional morphemes to the language, we call them a 'closed' class of words.

Bound morphemes may be

1. *Derivational* (if they create a new word) or
2. *Inflectional* (if they create just another syntactic form of the same word).

Therefore,

1. **An inflectional morpheme never changes the grammatical category of a word.** For example, both *old* and *older* are adjectives. The *–er* inflection simply creates a different version of the adjective (comparative degree).
2. **Derivational morphemes can change the grammatical category of a word.** The verb r*ead* becomes the noun *reader* if we add the derivational morpheme *-er*. So, the suffix form *–er* may be an *inflectional* morpheme in adjectives (kind – *kinder*), and *derivational* in nouns (run – *runner*). These bound morphemes may look like identical twins (*-er* : *-er*), but that doesn't mean that they act the same.

43. What is allomorphy? Why does it occur? Give examples.

Allomorphy is a variation/ alternation in the forms of morphemes; it occurs, because morphemes are made up of sounds which influence each other in connected speech (assimilation). Therefore, our speech sounds form strings of *allomorphs* (variant forms of morphemes), which we still *perceive* to be the same morpheme, i.e.:

He play**s** [z], she watch**es** [iz]**,** and it all make**s** [s] sense.

44. State different word formation processes, with examples.

⇒ Derivation: friend – friendship; happy – happiness, run – runner, etc.
⇒ Compounding: flyover, expressway, maybe, thunderstorm, blackout, therefore, forehead, weekend, eyeball, birthday, gridlock, toothbrush, etc.
⇒ Blending: blog, modem, brunch, glitzy, motel, smog, etc.
⇒ Clipping: fax, mobe/ mobey, ad, kilo, cab, perm, flu, plane, phone, synch, lab, etc.
⇒ Backformation: donation → donate; option → opt; enthusiasm → enthuse; babysitter → to babysit; psychology → to psych sb. up, obsession → to obsess, etc.
⇒ Conversion: to friend / defriend (on FB), to bottle, text, level, bottom, floor, etc.

⇒ Acronyms: LOL, ttyl, OMG, SMS, IMO, ATM, PIN, B2B, B2C, etc.
⇒ Analogy: Obamanation, lazoid, depeditate, marketoid, tweenager, underwhelm, etc.
⇒ Coinage: Xerox, dingbats, hoover, webinar, to skype, to facebook, etc.
⇒ Reduplication: long2, lik2x, singsing, toktok, TA2, mu-mu, gaga, go-go, etc.
⇒ Multiple processes: must-have, TP: sangs, saps, salm,
⇒ Borrowing: algebra, zebra, bilum, chili, potato, tomato, *alcohol* (Arabic), *boss* (Dutch), *robot* (Czech), *yoghurt* (Turkish), etc.

Part 2 – Practical [20 mks]

2.1 Practical Sentence Analysis (G-nalysis)   [16 marks]

1. Meaning is the path from the thought to the word.

2. A clause is a group of words that has sentence structure S/V/C.

3. From primitive generalisations, verbal thought rises to the most abstract concepts.

4. Man wants the stick, the ape wants the fruit.

5. The tool requires abstraction from the situation; the tool is connected with meaning.

6. Synthesis and analysis presuppose each other, as inhalation presupposes exhalation.

7. The animal does not detach itself from the situation, is not consciously aware of it.

8. Meaning is what lies between the thought and the word.

9. The dream shines with reflected light, just like the moon.

10. The whole is more than the sum of its parts.

2.2 Phonology Exercises   [4 marks]

Exercise 1   **Chuave** (Simbu Province, PNG) What is the phonemic status of [d] and [ð]? Are they 2 phonemes or allophones? Why?

[giŋgoði]	snore	[tʰoyaði]	pour
[edɔŋgwa]	fire	[duði]	insane
[tʰoyadi]	pour	[dikeme]	it's over
[kaando]	look around	[eðɔŋgwa]	fire
[diro]	you 2 speak	[giŋgodi]	snore
[dudi]	mad	[dʊmba]	it is

They are allophones, because they occur in free variation and do not change the meaning of the pairs of words.

Exercise 2 **Boiken** (East Sepik Province, PNG) What is the phonemic status of [n] and [ŋ]? Are they 2 phonemes or allophones? Why?

[miŋ]	this	[xun]	star
[nɑnɛ]	we two	[mɛŋ]	foot
[nindi]	middle	[win]	blood
[xuŋ]	star	[xomin]	yellow
[mɑndzi]	rope	[mɛn]	foot
[wiŋ]	blood	[wunɛ]	I
[tʊəndʊə]	men	[min]	this
[xomiŋ]	yellow	[nimbi]	hair

They are allophones, because they occur in free variation and do not change the meaning of the pairs of words.