

**MANIPAL UNIVERSITY****FIRST YEAR B.A.S.L.P. DEGREE EXAMINATION – AUG/SEPT 2007****SUBJECT: BASIC HUMAN ANATOMY AND PHYSIOLOGY**

Wednesday, August 29, 2007

Time: 3 Hrs.

Max. Marks: 80

- ✍ **ANSWER SECTIONS – A AND B IN TWO SEPARATE ANSWER BOOKS.**
- ✍ **Draw diagrams and flow charts wherever appropriate.**

**SECTION – A: ANATOMY: 40 MARKS**

1. Describe the interior of the larynx. Give its blood supply and nerve supply.  
(6+4 = 10 marks)
  
2. Write briefly on:
  - 2A. Development of face and its anomalies.
  - 2B. Lateral wall of the nasal cavity.(5×2 = 10 marks)
  
3. Write short notes on:
  - 3A. Superior constrictor of pharynx.
  - 3B. Cochlea.
  - 3C. Spinal nerve.
  - 3D. Typical Synovial joint.
  - 3E. Oesophagus.(4×5 = 20 marks)

**SECTION – B: PHYSIOLOGY: 40 MARKS**

4. Write short notes on the following:
  - 4A. Classification and functions of sensory receptors.
  - 4B. Menstrual cycle.
  - 4C. Oxygen transport in blood.
  - 4D. Blood transfusion.
  - 4E. Role of baroreceptors in the regulation of blood pressure.(5×5 = 25 marks)
  
5. Answer the following questions:
  - 5A. Enumerate the hormones secreted by the adrenal gland. Mention why this gland is essential for life.
  - 5B. Name TWO locations where smooth muscles are found in the body and mention their functions.

- 5C. Define Glomerular Filtration Rate (GFR) and mention its normal value.
- 5D. Mention the cause of 'Diabetes mellitus'. Mention any two clinical features seen in patients suffering from uncontrolled diabetes mellitus.
- 5E. List FOUR functions of hypothalamus.

(2×5 = 10 marks)

6. State whether the following statements are TRUE or FALSE:

- 6A. Adrenocorticotrophic hormone is secreted by adrenal cortex.
- 6B. Most of the blood in the circulation resides in veins.
- 6C. Cornea is avascular.
- 6D. Hydrochloric acid is secreted by the parietal cells in the stomach.
- 6E. RBC count is more in females compared to males under normal conditions.

(1×5 = 5 marks)



**MANIPAL UNIVERSITY****FIRST YEAR B.A.S.L.P. DEGREE EXAMINATION – AUG/SEPT 2007****SUBJECT: BASIC ACOUSTICS AND ELECTRONICS (B.1.3.2)**

Thursday, August 30, 2007.

Time: 3 Hrs.

Max. Marks: 80

- ANSWER SECTIONS A & B IN TWO SEPARATE ANSWER BOOKS.  
Answer ALL questions. Draw diagrams and flow charts wherever appropriate.

**SECTION – A: BASIC ACOUSTICS : 40 MARKS**

1. Fill in the blanks:
  - 1A. Momentum leads restoring force of elasticity by \_\_\_\_\_
  - 1B. Refraction can be defined as a change in direction of sound wave propagation due to a change in \_\_\_\_\_ of propagation.
  - 1C. Beats are produced by the \_\_\_\_\_ of two waves of nearly equal \_\_\_\_\_.
  - 1D. As sound intensity increases by some factor, rms pressure increases only by the \_\_\_\_\_ of that factor.
  - 1E. The maximum displacement of a body is called \_\_\_\_\_.
  - 1F. For the square wave the spectral envelope has the slope of \_\_\_\_\_ dB per octave.
  - 1G. The energy storage component of impedance is \_\_\_\_\_ and is frequency \_\_\_\_\_.
  - 1H. Inertial force is \_\_\_\_\_ when the vibrating body is at equilibrium.
  - 1I. The nearer the frequency of the applied force to the \_\_\_\_\_ of the elastic system, the greater will be the resulting \_\_\_\_\_ of vibration.
  - 1J. As the sound intensity is halved, the level is \_\_\_\_\_ by 3dB.

(1×10 = 10 marks)

2. Answer any **TWO** of the following:

- 2A. State and explain Sabine's formula for reverberation time. State the assumptions made in the Sabine's formula. Write the Eyring's formula for reverberation time. Under what conditions Eyring's formula can be approximated to that of Sabine's formula?
- 2B. Explain dB IL and dB SPL. What is the relation between two?
- 2C.
  - i) Write a note on partials and overtones.
  - ii) Explain the triangular wave. What is the expression for relative amplitudes in decibels for each component frequency of a triangular wave and in what way this is different from the expression for relative amplitudes in decibels for saw tooth wave and a square wave?

(5×2 = 10 marks)

3. Answer any **FIVE** of the following:

- 3A. Explain inverse square law for the propagation of sound energy in a free unbounded medium. Write the equation for inverse square law.
- 3B. Define force, work and power and write their units in SI system. Calculate the pressure at a depth of 10m under water having density 1000kg/m<sup>3</sup>.

# MANIPAL UNIVERSITY

**FIRST YEAR B.A.S.L.P. DEGREE EXAMINATION – AUG/SEPT 2007**

**SUBJECT: INTRODUCTION TO LINGUISTICS (B.1.3.3)**

Friday, August 31, 2007

Time: 3 Hrs.

Max. Marks: 80

☞ **For clarity provide examples, illustration, etc. where possible.**

1. What are the characteristics that are required of to call a discipline a science? Why is linguistics called a science?

**OR**

What are the various branches of linguistics? Explain them briefly.

(10 marks)

2. Explain the following:

- i) 'Language is a form, not a substance'.
- ii) 'Language is a system of systems'.
- iii) All languages change.

**OR**

What are the following? Give brief answers.

- i) I C Analysis.
- ii) Phrase structure Grammar.
- iii) Transformational Grammar.
- iv) T-adverb Proposing Rule.

(10 marks)

3. Draw a neat diagram of the tongue and its parts. Explain how it is used in producing the various speech sounds of English.

**OR**

What is a morpheme? What are the various forms of it? What do you understand about derivational and inflectional morphology?

(10 marks)

4. Explain the cardinal vowel system of Daniel Jones. What is the difference between the primary cardinals and the secondary cardinals? What are the vowels in English phonemic system?

**OR**

What is a syllable? What are its parts? What are the various kinds of syllables? How is it useful in deciding the stress pattern of a word?

(10 marks)

5. Write shorts on any **FIVE** of the following:

- 5A. polysemy
- 5B. lamina
- 5C. plosives
- 5D. child language
- 5E. rounded vowels
- 5F. soft palate
- 5G. monophthongs

(3×5 = 15 marks)

6. Explain the following pairs:

- 6A. Trills and taps.
- 6B. phrases and clauses.
- 6C. Orthographic word and morphological word.

(1×3 = 3 marks)

7. Identify the true/false statements:

- 7A. In the articulation of /s/ and /z/ there is only one difference.
- 7B. In the alphabetical order, the name of the letter after h is a diphthong
- 7C. While saying Thursday the stress falls on the first syllable.
- 7D. r in carry is a flap
- 7E. /ʃ/ and /ʒ/ are classified as affricates.
- 7F. The soft palate is also known as velum.
- 7G. 'The young boy will be running very fast'. The sentence is made of three phrases
- 7H. 'The hat which I bought was the wrong colour'. This is a complex sentence.
- 7I. The roof of the mouth can be divided as alveolar ridge, hard palate and soft palate
- 7J. /h/ does not end a word in English.

(1/4×10 = 2½ marks)

- 8A. The tip of the tongue is called \_\_\_\_\_.
- 8B. There are twenty-six consonant phonemes in English phonemic system.
- 8C. Hard palate and teeth are \_\_\_\_\_ articulators
- 8D. In a dialect accent refers to \_\_\_\_\_
- 8E. The shortest vowel phoneme is represented by the phonemic notation \_\_\_\_\_.
- 8F. An adjective clause has the quality of an \_\_\_\_\_
- 8G. In the English word few there are \_\_\_\_\_ phonemes.
- 8H. \_\_\_\_\_ decides the difference between the primary and the secondary cardinals.
- 8I. The part of the word added at the beginning of a morpheme is called \_\_\_\_\_ sentence.
- 8J. \_\_\_\_\_ sentence has no overt subject

(1×10 = 10 marks)

9. Match the following:

- |            |                       |
|------------|-----------------------|
| a. /p/     | dark!                 |
| b. shark   | brunch                |
| c. :       | inflectional morpheme |
| d. top     | bilabial stop         |
| e. tall    | Interjection          |
| f. oh!     | long vowel            |
| g. flower  | onset                 |
| h. blend   | bound morpheme        |
| i. tigress | triphthong            |
| j. likes   | diacritics            |

(1/2×10 = 5 marks)

10. Transcribe in phonemic symbols:

- 10A. danger
- 10B. shirt
- 10C. cherry
- 10D. bush
- 10E. liver
- 10F. locked
- 10G. sing
- 10H. duck
- 10I. bells

(1/2×9 = 4½ marks)



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## MANIPAL UNIVERSITY

FIRST YEAR B.A.S.L.P. DEGREE EXAMINATION – AUG/SEPT 2007

SUBJECT: PSYCHOLOGY RELATED TO SPEECH AND HEARING (B.1.3.4)

Saturday, September 01, 2007

Time: 3 Hours

Max. Marks: 80

✍ **Answer any EIGHT of the following. All questions carry equal marks.**

1. Explain the cognitive and psychodynamic models concerning the etiology of mental disorders.
2. Describe the following:
  - 2A. Stages of language development.
  - 2B. Anxiety disorders.
3. What is normality? Indicate the existing controversies in describing normality.
4. Explain the following:
  - 4A. Indian concept of mental illness.
  - 4B. Attachment.
5. Critically examine the stages of cognitive development as proposed by Piaget.
6. Compare the cardinal features of physical development during childhood and adolescence.
7. Describe the merits and demerits of observation method.
8. What is temperament? Explain any one of the theories of temperament.
9. Define conditioning. Explain the principles and clinical applications of classical conditioning.
10. Write short notes on any **TWO** of the following:
  - 10A. Assessment of intelligence.
  - 10B. Anxiety of disorders
  - 10C. Multi-axial classification.

