MANIPAL UNIVERSITY

FIRST SEMESTER B.A.S.L.P. DEGREE EXAMINATION – DECEMBER 2014

SUBJECT: BASIC MEDICAL SCIENCES RELATED TO SPEECH AND HEARING – PART I (B 1.4)
(ANATOMY AND PHYSIOLOGY)

Monday, December 15, 2014

Time: 10.00-11.30 Hours

Max. Marks: 40

✍ Answer Section A, Section B in separate answer books.
✍ Answer ALL questions. Draw diagrams wherever necessary.

SECTION – 'A' : ANATOMY : 20 MARKS

1. **Write briefly on:**

1A. Nasopharynx

1B. Describe a typical synovial joint with a neat labeled diagram.

(5 marks × 2 = 10 marks)

2. **Write short notes on:**

2A. Rima glottidis

2B. Structure of a cardiac muscle

2C. Spinal cord

2D. Floor of middle ear

2E. Trachea

(2 marks × 5 = 10 marks)

SECTION – 'B' : PHYSIOLOGY: 20 MARKS

3. **Essay questions:**

3A. Draw a neat labeled diagram of oxygen hemoglobin dissociation curve. Mention two factors which shift the curve to the right.

3B. In the form of a flow chart describe the sequence of events during excitation contraction coupling in skeletal muscle.

(5 marks × 2 = 10 marks)

4. **Write short answers for the following:**

4A. Draw a labeled diagram of the nerve action potential.

4B. Mention the normal hemoglobin concentration in males. List any two function of hemoglobin.

4C. Define cardiac cycle. Mention the normal duration of one cardiac cycle.

4D. Mention any two functions of middle ear.

4E. List any two differences between first and second heart sounds.

(2 marks × 5 = 10 marks)

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FIRST SEMESTER B.A.S.L.P. DEGREE EXAMINATION – DECEMBER 2014

SUBJECT: BASIC MEDICAL SCIENCES RELATED TO SPEECH AND HEARING – PART II (ENT) (B 1.4)

Wednesday, December 17, 2014

Time: 10.00-11.30 Hours

Max. Marks: 40

✍ Write answers that are brief, clear, relevant and legible.

✍ Illustrate your answer with diagram wherever appropriate.

SECTION – 'C' : ENT

✍ Answer any EIGHT of the following:

1. Otomycosis

2. Rhinolalia clausa

3. Otosclerosis - management

4. Intrinsic muscles of larynx

5. Secretory otitis media

6. Plummer Vinson syndrome

7. Screamer's nodule

8. Enumerate complications of ASOM

9. Adenoid hypertrophy

10. Laryngomalacia

(5 marks × 8 = 40 marks)

MANIPAL UNIVERSITY

FIRST SEMESTER B.A.S.L.P. DEGREE EXAMINATION – DECEMBER 2014

SUBJECT: INTRODUCTION TO HUMAN COMMUNICATION (B 1.1)

Friday, December 19, 2014

Time: 10.00-13.00 Hours   Max. Marks: 80

✍   **Answer ALL the questions.**

1A.   "Speech is an overlaid function" discuss your views.
1B.   Explain the settings where speech language pathologists can deliver their service.

<div align="center">OR</div>

2A.   Explain the interdependency between speech, language, communication and hearing.
2B.   Write a note on cognitive bases of communication.

<div align="right">(8+4 = 12 marks)</div>

3A.   Explain the structure of basal ganglia and its functions.
3B.   Describe the functions of thalamus and hypothalamus.

<div align="right">(6+6 = 12 marks)</div>

<div align="center">OR</div>

4A.   List the four different lobes and explain their important functions.
4B.   Write a note on corpus callosum.

<div align="right">(8+4 = 12 marks)</div>

5A.   Define respiration. Explain in detail the process of gas exchange.
5B.   Write a note on diaphragm.

<div align="center">OR</div>

6A.   Explain the structures of upper respiratory tract with its functions.
6B.   Write a note on Asphyxia.

<div align="right">(8+4 = 12 marks)</div>

7A.   Explain in detail development of voice.
7B.   Explain the structure of the vocal fold.

<div align="right">(8+4 = 12 marks)</div>

<div align="center">OR</div>

8A.   What are four different processes that can produce sound? Give an example for each case.
8B.   Explain a Helmholtz resonator. How does the frequency of a Helmholtz resonator change when its volume is doubled? When the radius of its neck is doubled?
8C.   Explain the Doppler effect. Write an expression for the apparent frequency of the sound,
   i)   when source is moving towards a stationary observer
   ii)   when the observer is moving towards a stationary source
8D.   Describe Simple harmonic motion

<div align="right">(3 marks × 4 = 12 marks)</div>

9A. Explain in detail the oral speech mechanism examination.

9B. Write a note on dental malocclusion.

<p style="text-align:center">OR</p>

10A. Explain the intrinsic muscles of the tongue with functions.

10B. Explain the structure of the mandible.

<div style="text-align:right">(8+4 = 12 marks)</div>

11. **Explain in not more than 2-3 sentences.**

11A. Verbal communication

11B. Linguistic performance

11C. Circle of Willi's

11D. Ventricles

11E. Upper respiratory tract

11F. Rate of respiration

11G. Cricothyroid muscle

11H. Overtones

11I. Micrognathia

11J. Orbicularis oris muscle

<div style="text-align:right">(2 marks × 10 = 20 marks)</div>

<div style="text-align:center">꒚꒛꒜꒝꒞</div>

MANIPAL UNIVERSITY

FIRST SEMESTER B.A.S.L.P. DEGREE EXAMINATION – DECEMBER 2014
SUBJECT: INTRODUCTION TO HEARING AND HEARING SCIENCES (B 1.2)

Monday, December 22, 2014

Time: 10.00-13.00 Hours

Max. Marks: 80

✍ **Answer ALL the questions.**

1A. Explain the procedure to obtain MAF and write contribution of MAF in binaural hearing.
1B. Explain head shadow and pinna shadow effect.

(6+6 = 12 marks)

OR

2A. Explain the origin, growth and development of audiology since World War II.
2B. Localization vs. lateralization.

(8+4 = 12 marks)

3A. Explain any two theories of hearing through air conduction.
3B. Briefly explain the anatomy of auditory pathway with neat diagram.

(6+6 = 12 marks)

OR

4A. Briefly describe the anatomy of Vestibular system.
4B. Discuss middle ear transformer action.

(4+8 = 12 marks)

5A. Explain equal loudness contours.
5B. Briefly describe different dimensions and applications of dB scale.

(4+8 = 12 marks)

OR

6A. Derive 50dB IL + 50dBIL=53dBIL. Explain the steps.
6B. Write the standard reference values for dBIL and dBSPL.

(10+2 = 12 marks)

7A. Discuss the acquired causes of hearing loss affecting inner ear.
7B. Describe the audiological findings in conductive hearing loss.

(6+6 = 12 marks)

OR

8A. Write on various genetic causes of hearing loss.
8B. Describe audiological findings in otosclerosis.

(8+4 = 12 marks)

9A. Describe principle, procedure and interpretation of Schwabach tuning fork test. List its merits and demerits.

9B. Explain compression mode of bone conduction theory.

(6+6 = 12 marks)

OR

10A. Write an essay on inertial mode of bone conduction theory.

10B. Write a note on audiometric versions of tuning fork test.

(4+8 = 12 marks)

11. **Write short notes on following:**

11A. Pitch scales

11B. Organ of corti supporting cells in cochlea

11C. Raymond carhart

11D. Contribution of external ear in hearing

11E. Perilymph

11F. Just noticeable difference

11G. Rinne Test

11H. Hughson Westlake procedure

11I. Industrial Audiology

11J. Complex tone vs puretone

(2 marks × 10 = 20 marks)

MANIPAL UNIVERSITY

FIRST SEMESTER B.A.S.L.P. DEGREE EXAMINATION – DECEMBER 2014
SUBJECT: SPEECH-LANGUAGE DIAGNOSTICS AND THERAPEUTICS (B 1.3)

Wednesday, December 24, 2014

Time: 10.00-13.00 Hours   Max. Marks: 80

✍ **Answer ALL the questions.**

1A. Describe the goals of diagnosis with illustrations.

1B. List the essential factors that should be included in Client history.

OR

2A. Discuss the principles involved in diagnosis.

2B. Describe the usefulness of taking a client history.

(6+6 = 12 marks)

3A. Describe the Central language component of Speech Language Processing Model.

3B. Highlight the characteristics of a good diagnostician.

OR

4A. Differentiate the following: Norm referenced and Client referenced interpretation.

4B. "Team approach is essential for diagnosis in communication disorders". Justify.

(6+6 = 12 marks)

5A. Describe "Client directed approach" in speech and language therapy and quote in brief the important aspects involved in it.

5B. What are the essential aspect of an ideal speechtherapy setup?

OR

6A. Describe "Individual therapy" and quote in brief the advantages for the same.

6B. Describe the following with examples: Long term goal, Short term goal.

(8+4 = 12 marks)

7A. With a suitable example write a note on "Token Economy".

7B. With suitable examples elaborate on "Positive reinforcements".

OR

8A. With suitable example elaborate on "variable ratio schedule of reinforcement".

8B. Write a note on "Eclectic approach" for speech and language therapy.

(6+6 = 12 marks)

B 1.3   Page 1 of 2

9A. What is "Counseling"? Describe in detail what you will counsel the parent or care giver of a child diagnosed with a communication disorder.

9B. List the components of a referral report for a child with communication disorder? Comment.

(6+6 = 12 marks)

OR

10A. How do you measure therapy outcomes? Discuss the importance of evaluating therapy outcome.

10B. What are the ethical issues that should be considered during speech and language therapy?

(8+4 = 12 marks)

11. **Write short notes on:**

11A. Diagnosis

11B. Team approach

11C. Group therapy

11D. Selection of target behaviors

11E. Parent counseling

11F. Disability

11G. Self report

11H. Speech therapy set up

11I. Disadvantages of client directed approach

11J. Importance of diagnostic reports

(2 marks × 10 = 20 marks)