Reg. No.										

MANIPAL UNIVERSITY

SIXTH SEMESTER B.A.S.L.P. DEGREE EXAMINATION – JUNE 2016

SUBJECT: B 6.3 BASIC STATISTICS

Wednesday, June 01, 2016

Time: 10:00-13:00 Hrs. Max. Marks: 80

✍ **Answer ALL the questions.**

1. Differentiate between nominal and ordinal variables with examples.

(4 marks)

2. **Classify the following into the four different scales of measurement**:

2A. Cell counts

2B. Blood group

2C. Pain score

2D. IQ

(4 marks)

3. **State true or false:**

3A. Pearson's correlation coefficient always takes values ≥ 0

3B. Incidence is not affected by the duration of disease

3C. Convenience sampling is a procedure that assures that each element in the population have equal chance of being included in the sample

3D. Health information system is sample based

(4 marks)

4. At rest pulse rates for 22 athletes at a meet are

68	60	78	70	63	68	66	57	74	65	57
66	73	67	68	56	74	64	67	77	72	64

4A. Compute mean, median and range of this data

4B. Construct a frequency distribution table along with relative frequencies for this data using class intervals 55 – 60, 60 – 65, 65 – 70 and so on.

4C. Draw a frequency polygon for the frequency table constructed above.

(6+5+4 = 15 marks)

5. Obtain interquartile range for the data regarding number of dental caries in twelve children less than ten years of age.

6	0	2	1	0	4	6	0	4	2	8	3

(8 marks)

6. Define coefficient of variation. Mean and standard deviation of pulse rate for a group of individuals is 76 and 3 beats per minute respectively. The mean and standard deviation of height is 64 and 2 inches respectively. Which of the two characteristics is more consistent?

(5 marks)

7. **Define the following:**

7A. Case fatality rate

7B. Total fertility rate

7C. Crude death rate

(2 marks × 3 = 6 marks)

8. The amount of weight gained during pregnancy was assessed and was found to be approximately normally distributed with a mean weight gain of 10 kgs and a standard deviation of 3kgs. Calculate the proportion of pregnant women who gained weight.

8A. At most 16 kgs

8B. Between 10 to 13 kgs

8C. At least 7 kgs

(3 marks × 3 = 9 marks)

9. **Write short notes on:**

9A. Inter rater reliability

9B. Descriptive epidemiology

9C. Systematic sampling

9D. Sample registration system

9E. Components of health information system

(5 marks × 5 = 25 marks)

Reg. No.										

MANIPAL UNIVERSITY

SIXTH SEMESTER B.A.S.L.P. DEGREE EXAMINATION – JUNE 2016

SUBJECT: SCIENTIFIC ENQUIRY IN AUDIOLOGY AND SPEECH LANGUAGE PATHOLOGY (B 6.4)

Friday, June 03, 2016

Time: 10.00-13.00 Hrs. Max. Marks: 80

✍ **Answer the following questions. Question 11 is compulsory.**

1A. Explain the bases of formulating a research hypothesis.

1B. Describe the types of hypothesis.

(6+6 = 12 marks)

OR

2. What is the need for scientific enquiry in the field of Speech-Language Pathology and Audiology?

(12 marks)

3. Why is it important to identify the types of data and their nature during research?

OR

4. What are the different behavioral measures used in the field of Speech-Language Pathology? Explain with examples.

(12 marks)

5A. Differentiate between simple and stratified random sampling methods.

5B. How is cluster sampling different from multistage sampling?

(6+6 = 12 marks)

OR

6. Discuss the importance of sampling in implementing a research study.

(12 marks)

7. What are the advantages and disadvantages of conducting a single case-study or case-series?

OR

8. What are the advantages of conducting a randomized controlled study over a case controlled study?

(12 marks)

9. Elaborate on the report writing style followed by professionals in the field of Audiology.

OR

10. What are the aspects to be considered while reporting a research?

(12 marks)

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

11A. Scientific status in Audiology

11B. Stating a research question

11C. Ordinal scale

11D. Independent vs. dependent variables

11E. Systematic random sampling

11F. Snowball sampling

11G. Evaluation research

11H. Weaknesses of Standard-group comparisons

11I. Professionalism

11J. Need for the study

(2 marks × 10 = 20 marks)

Reg. No.										

MANIPAL UNIVERSITY

SIXTH SEMESTER B.A.S.L.P. DEGREE EXAMINATION – JUNE 2016

SUBJECT: NEUROGENIC LANGUAGE DISORDERS IN ADULTS (B 6.1)

Monday, June 06, 2016

Time: 10.00-13.00 Hrs. Max. Marks: 80

✍ **Answer the following questions:**

1A. Discuss the functions of frontal lobe.

1B. What is competency and performance in neurogenic language disorders.

OR

2A. Describe the connectionist model of language function.

2B. Highlight the functions of temporal lobe areas.

(8+4 = 12 marks)

3A. Describe any two classifications of Aphasia given by different authors.

3B. Elaborate on various associated motoric deficits observed among individuals with Aphasia.

(8+4 = 12 marks)

OR

4A. Write about the the linguistic and neuro behavioral features of Transcortical Mixed Aphasia.

4B. Differentiate between the concept of agrammatism and paragrammatism.

(6+6 = 12 marks)

5. Aphasia assessment should follow a combination of formal and informal methods. Discuss.

OR

6. Write about the quality of life assessment among individuals with Aphasia. Describe in detail any one tool for assessment of quality of life.

(12 marks)

7A. Write about the linguistic features observed in a bilingual individual with Aphasia.

7B. Highlight the key clinical features observed in individuals with Dementia.

OR

8A. List the salient linguistic deficiencies observed in individuals with Schizophasia.

8B. List any five significant differences between Dementia and typical Aphasia syndrome.

(6+6 = 12 marks)

9. Discuss the rationale of Melodic intonation therapy. Describe the steps of the technique along with various challenges clinicians may face during its implementation.

OR

10. What is AAC? Write about various aided and unaided AAC options available for individuals with neurogenic language disorders.

(12 marks)

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

11A. Arcuate Fasciculus

11B. Angular Gyrus

11C. Hemorrhagic stroke

11D. Define Agnosia

11E. Assessment of Facial nerve functions

11F. Purpose of Functional communication profile

11G. Aphasia in sign language users

11H. Define Dyslexia

11I. Team approach in Aphasia therapy

11J. Counseling caregivers of Individual with Aphasia

(2 marks × 10 = 20 marks)

Reg. No.										

MANIPAL UNIVERSITY

SIXTH SEMESTER B.A.S.L.P. DEGREE EXAMINATION – JUNE 2016

SUBJECT: NOISE MEASUREMENTS AND HEARING CONSERVATION (B 6.2)

Wednesday, June 08, 2016

Time: 10.00-13.00 Hrs. Max. Marks: 80

Answer the following questions:

1. Write about histopathological changes noted in auditory system due to noise exposure.

OR

2. Explain the influence of noise on performance of the industrial worker and also its influence on other organs.

(12 marks)

3. What are different types of pure tone audiometry that can be performed in individuals working in an industry? Explain the purpose and brief procedure of each test.

OR

4. What are the possible findings on various speech audiometry tests in an individual with NIHL

(12 marks)

5. Discuss the instruments required for noise measurements in an industry. Briefly discuss about conducting noise survey using these instruments.

(12 marks)

OR

6A. What are the components that are measured during vibration measurements?

6B. With a block diagram explain noise dosemeter.

(6+6 = 12 marks)

7A. Discuss different types of EPDs that are available.

7B. How do you evaluate the attenuation characteristics of EPD?

OR

8A. What the components of HCP given by OSHA?

8B. Discuss the role of record keeping in success of HCP.

(6+6 = 12 marks)

9. Discuss any two methods to calculate DRC.

(12 marks)

OR

10A. Explain Fletcher point eight formula.

10B. Write briefly about acts in India that address NIHL.

(6+6 = 12 marks)

11. **Write short notes on:**

11A. NC curves
11B. AI
11C. SNR
11D. Automatic audiometer
11E. Speech audiometry findings
11F. Types of vibration surveys
11G. Octave filter set
11H. Ear plugs
11I. DRC
11J. CHABA

(2 marks × 10 = 20 marks)