Time: 2½ Hours

#### II Semester B.S.Ed. Examination, April/May 2007 (Integrated Semester Scheme) Special Education (Hearing Impairment) Audiology for Educators

Total Marks: 60

| :   | Instruction: Answer all questions,   |      |
|-----|--|------|
| I   | 1. a) Briefly describe the concept of impairment, disability and handicap.   | 4    |
|     | b) Describe in detail classification of hearing loss.  | 8    |
|     | 2. a) Explain the basic anatomy of hearing mechanism.  | 8    |
|     | b) State the functions of the middle ear.  | 4    |
| II  | 3.a) What information do you get from pure-tone audiometry?  | 8    |
|     | b) What is the role of bone conduction in hearing evaluation?  OR  | 4    |
|     | <ul><li>4. Differentiate the following tests naming two tests each.</li><li>a) Screening and diagnostic tests</li><li>b) Behavioral and objective tests.</li></ul> | 12   |
| III | <ol> <li>What is speech audiometry? Explain any two speech audiometric procedure.         Mention their advantages.         OR</li> </ol>                          | 12   |
|     | 6. In what way does speech audiometric evaluation aid in the rehabilitation of hearing impaired children ?   | 12   |
| V   | 7. a) Prepare a referral note for a 4 year old hearing impaired child seen by you.   | 8    |
|     | <ul> <li>b) Discuss the importance of case reports. Write a note on points to be considered in preparing case reports.</li> <li>OR</li> </ul>                      | 4    |
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|   | 8.  | ev | scuss the different types of information that are available from audiological aluation report. How does this information help in educational nabilitation? | 12 |
|---|-----|----|--|----|
| V | 9.  | a) | What is the role of a special teacher for hearing impaired in an integration set-up ?  | 8  |
|   |     | b) | How can she/he ensure co-operation from other teachers ?  OR   | 4. |
|   | 10. | a) | What is the need for a resource room in integrated education ?   | 4  |
|   |     | b) | What facilities should be there in a resource room ?   | 4  |
|   |     | c) | What will be the duties of a resource teacher?   | 4  |

### II Semester B.S.Ed. Examination, April/May 2007 (Integrated Semester Scheme) Special Education Hearing Impairment Aids and Appliances in Teaching Hearing Impaired

Time: 2½ Hours Max. Marks: 60 Instructions: Answer all questions. I. 1) a) What is meant by trouble shooting of hearing aids? As a teacher, why da you need such skills? 8 b) If the problem is that a hearing aid does not get switched on, then how do you make it operational? 4 OR 2) Draw the diagram of a typical hearing aid and label its components. What precautions do you take for the proper functioning of a hearing aid? 12 II. 3) Write in brief note on the need for ALDs in classroom. State the advantages and limitations of different **ALDs** used in classrooms. 12 OR 4) How do you educate parents regarding use, care and maintenance of an ALD that can be used at home and at school? 12 III. 5) a) What are the parts of a Cochlear implant? 4 b) Describe the working of a cochlear implant with a block diagram. 8 OR 6) a) Who are the candidates for cochlear implants? 8 b) Mention the advantages and disadvantages of cochlear implants. 4

| IV. 7) What devices are available to improve speech perception through visual and   |          |
|---|----------|
| tactile modalities? What are the merits and limitations of these devices?   | 12       |
| OR  |          |
| 8) What devices are available to improve articulation in children with hearing impairment in a classroom? Describe each of them.                                      | 12       |
| V. 9) How can you use computers to improve rhythm of speech? Describe an activito improve rhythm using a device.  | ty<br>12 |
| OR  |          |
| 10) What are the voice problems seen in a child with hearing impairment? How of you improve the quality of voice of school-going children with hearing impairment? 12 |          |

## II Semester B.S.Ed. Examination, April/May 2007 (Integrated Semester Scheme) Hearing Impairment Community Studies of Disability

| Duration: 2½ Hours Max. Mar |    |   | 0 |
|-----------------------------|----|---|---|
|                             |    | Instruction: Answer all questions.  |   |
| I.                          | a) | Define hearing impairment. Describe its epidemiology and classifications.   | 8 |
|                             | b) | Describe the communication problems seen in adults with hearing impairment.   | 4 |
|                             |    | OR  |   |
|                             | a) | Draw a neat diagram of human ear and label each part. Describe the physiology of hearing.   | 9 |
|                             | b) | Describe the role of hearing in speech and language development.  | 3 |
| II.                         | a) | Describe the indications for early identification of hearing problems in school   |   |
|                             |    | going children. What screening tests are available for this purpose ?   | 8 |
|                             | b) | Describe a checklist that can be used for early identification of hearing problems.   | 4 |
|                             |    | OR  |   |
|                             | a) | Discuss the role of the multi-disciplinary approach in prevention, identification and management of hearing impairment.                           | 4 |
|                             | b) | Describe any one of the diagnostic tests used for identifying hearing and communication problems in children. Explain with suitable examples, the |   |
|                             |    | interpretation of these test results.   | 8 |
| III.                        | a) | Describe the role of Panchayat in community based rehabilitation.   | 6 |
|                             | b) | Describe the various community services available for the disabled in India.  | 6 |
|                             |    | OR  |   |
|                             | a) | Describe the various schemes meant for the welfare of the disabled.   | 6 |
|                             | b) | Describe the role of health workers in community based rehabilitation.  | 6 |

| V a) Define empowerment. How can the community and parents empower disabled                 |     |
|---|-----|
| people ?  | 5   |
| b) Describe the role of self-help groups and other agencies in empowering disabled          |     |
| people.   | 7   |
| OR  |     |
| a) What measures can you take to empower disabled people in the community ?                 | 12  |
| V. a) Describe the effectiveness of different media for different target groups in relation | ιI  |
| to prevention and identification of hearing problems.                                       | 12, |
| a) Describe the role of media in community awareness programmes.                            | 6   |
| b) Describe the strategies that can be used for community awareness. 6                      |     |
| <u> </u>  |     |

# II Semester B.S.Ed. Examination, April/May 2007 (Integrated Semester Scheme) Special Education Hearing Impairment Computer Application in the Education of Hearing Impaired

Time: 2½ Hours Max. Marks: 60

Instruction: Answer all five questions.

| I. 1)  | a) Write in brief the different types of memory devices used in computers.   | 6 |
|--------|--|---|
|        | b) Mention the uses of internet in the telerehabilitation of hearing impaired.                                       | 6 |
|        | OR   |   |
| 2)     | a) What is an application software? Discuss the role of application software   |   |
|        | in the education of hearing impaired.  | 8 |
|        | b) Write an explanatory note on :  | 4 |
|        | i) Flow charts ii) Operating system.   |   |
| II. 3) | a) Explain how digital devices can be effectively used in the education of hearing impaired. Give suitable examples. | 8 |
|        | b) Discuss the advantages of digital signal processing over analog signal  |   |
|        | processing, referring to hearing aid as an example.  | 4 |
|        | OR   |   |
| 4)     | a) Define frequency modulation. How do you make use of FM technology in a classroom for the hearing impaired ?       | 8 |
|        | b) Compare between digital and analog communication system.  | 4 |
|        |  |   |

| III. | 5)  | a) Explain briefly the different methods of speech synthesis. Illustrate the educational applications of synthetic speech.   | 10 |
|------|-----|--|----|
|      |     | b) What is voice response system?  | 2  |
|      |     | OR   |    |
|      | 6)  | a) Write an explanatory note on speaker recognition system.  | 4  |
|      |     | b) Explain how voice recognition system can be used for the benefit of hearing impaired children.  | 8  |
| IV.  | 7)  | Describe any three software packages used in speech and language teaching.   | 12 |
|      |     | OR   |    |
|      | 8)  | a) Explain briefly the programming of hearing aids using computers.  | 6  |
|      |     | b) Discuss the advantages of using computers in teaching speech and language to hearing impaired children.   | 6  |
| V.   | 9)  | Explain how computers can be used to teach a lesson on 'Atomic structure' to high school children with hearing impairment in inclusive school.                             | 12 |
|      | 10) | a) Mention the usefulness of computers in carrying out statistical and research activities.  | 4  |
|      | c   | b) "Computers are a great support for effective instructional process in the education of children with hearing impairment in Indian Context" comment on this statement. 8 |    |
|      |     |  |    |

## II Semester B.S.Ed. Examination, April/May 2007 (Integrated Semester Scheme) Hearing Impairment - Special Education Methodology in Aural Rehabilitation

| Tim  | e : | 2   | ½Hours Max. Marks   | s: 60 |
|------|-----|-----|---|-------|
|      |     |     |   |       |
| I.   | 1)  | a)  | Discuss the factors that lead to success in inclusive education.                      | 8     |
|      |     | b)  | Write a brief note on segregated education.   | 4     |
|      |     |     | OR  |       |
|      | 2)  | a)  | Briefly explain the various levels of inclusive education .                           | (6+6) |
|      |     | b)  | Define inclusive education. State its relevance in education of the hearing impaired. | ıg    |
| II.  | 3)  | a)  | Who. are the candidates for resource room services ?                                  | 6     |
|      |     | b)  | How do you set up a resource room in a normal school?                                 | 6     |
|      |     |     | OR  |       |
|      | 4)  | De  | scribe the duties and responsibilities of a resource teacher in a resource            |       |
|      |     | roo | om for the hearing impaired.  | 12    |
| III. | 5)  | a)  | Define unisensory and multisensory approaches.  | 4     |
|      |     | b)  | Critically evaluate the unisensory approach in rehabilitation of children             | -     |
|      |     |     | with hearing impairment.  | 8     |
|      |     |     | OR  |       |
|      | 6)  | a)  | Describe the various multisensory approaches.   | (6+6) |
|      |     | b)  | Discuss the advantages and disadvantages of each.                                     | 4     |

| IV. 7) | a) | "Role of auditory training in the rehabilitation of hearing impairment                          |   |
|--------|----|---|---|
|        |    | is crucial". Comment.   | 6 |
|        | b) | Briefly describe Erber's method of auditory training.   | 6 |
|        |    | OR  |   |
| 8)     | a) | What precautions need to be taken in a session for auditory training?                           | 6 |
|        | b) | What factors affect the outcome of auditory training?   | 6 |
| V. 9)  | a) | Write a note on synthetic method of speech - reading.   | 4 |
|        | b) | "Sender as well as receiver characteristics affect performance of speech reading". Discuss.  OR | 8 |
| 10)    |    | a) Who are the candidates for speech reading ?  | 4 |
|        | b) | Write an essay on communication strategies for the hearing impaired.                            | 8 |