**Criterion 4 – Infrastructure and Learning Resources (100)**

**Key Indicator - 4.1 Physical Facilities (30)**

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| --- | --- | --- |
| **Metric No** |  | **Weightage** |
| **4.1.1** | **The institution has adequate facilities for teaching-learning, viz., classrooms, laboratories, computing equipment, etc.** | **5** |
| **QlM** | **Describe the adequacy of the facility for teaching-learning as per the minimum specified requirements by statutory bodies within a maximum 500 words**  The students and faculty are provided with the state-of-the-art teaching-learning aids and resources. The Institute has 20 smart classrooms spanning across two buildings and 5295.4733 Sq.mts which can accommodate more than 600 students. The classrooms have advanced audio-visual facilities with LCD projectors and computers. The students pursuing Diploma in Hearing, Language and Speech (DHLS) are placed in nine centers across the country are taught through virtual classrooms through video conferencing system with the real classes held at AIISH, Mysore. Also, there are two air-conditioned conference halls (400 seating capacity and 180 seating capacity) and a mini-seminar hall supported by latest technology having a seating capacity of 100 people. There are fifteen special clinics and twenty-four laboratories. The special clinics include augmentative and alternative communication (AAC), autism spectrum disorders (ASD), clinical for adult and elderly persons with language disorders (CAEPLD), fluency, implantable hearing device, learning disability, listening training (LT), motor speech disorders, neuropsychology, phonology, professional voice care (PVC), structural orofacial anomalies (U-SOFA), swallowing disorders, vertigo, voice clinic. The laboratories pertain to acoustic testing, speech physiology assessment using articulograph, audiology practical, central prosthetics, earmould lab, electrical, electrical brain imaging, electronics & instrumentation, electrophysiology, English language, epidemiology, fluency, forensic speech science and technology, hearing aid, human genetics, language science, neurophysiology, phonology, prosody, psychoacoustic, rehabilitation engineering, speech & language pathology, speech physiology, speech science and swallowing. The special clinics and labs are spread across the departments and provide education and research opportunities for the students and research scholars. Also, there is a Language Lab with 5,000 hours of practising materials for developing communication skills among the academic community.  Computers with internet access have been deployed in all the labs with a number of specialized software packages installed such as Aeroviews systems, Ultrasound imaging system, Ambulatory phonation monitor, Baraha 9.0, Captiva, Computerize speech lab (CSL), Dr. Speech, Electroglottography, Endovision system, E-Prime professional, eVEMP, Lingwaves, MATLAB 15, Nasometer, Neuroscan 64 channel EEG/ERP system, Nudi 4.0., Pulse Reflex Software, Pulse Sound & Vibration Analysis Software, RMS helios spirometer, Speech science lab (SSL), SPSS 21, Systematic analysis of language transcripts, Vaghmi (Diagnostics & Therapeutic), Videonystagmography, Work bench for semi-automatic speaker recognition etc. In addition, there is a dedicated Internet browsing centre with 150 mbps speed and a seating capacity of 30 for general purpose learning and research. All the full-time research scholars are provided with personal computers with internet access in the JRF room. Infrastructure facilities in respect of space, equipment, etc. are given top priority regarding fund allocation under plan grants.**File Description:*** Upload any additional information
* Paste link for additional information
 |  |
| **4.1.2** | **The institution has adequate facilities for sports, games (indoor, outdoor, gymnasium, yoga centre etc.,) and cultural activities** | **5** |
| **QlM** | **Describe the of adequacy facilities for sports, games and cultural activities which include specification about area/size, year of establishment and user rate within a maximum of 500 words**   The institute provides facilities for the students to involve themselves in extra-curricular activities and sports. The Panchavati campus of the institute, spread across an area of 5 acres, houses a sports complex, cricket field, volley ball court, auditorium, gymnasium and amphitheatre. The sports activities of the Institute are coordinated by the AIISH Gymkhana established in the year 2004. In the sports complex, the students have facilities for indoor games such as Carrom with a play area of 65.03 Sq.mts., Table Tennis with a play area of 65 Sq.mts., Badminton with a play area of 371.6 Sq.mts., Chess with a play area of 65.03 Sq.mts.  Also, there are facilities for outdoor games such as volleyball, football, throw ball and cricket and areas have been earmarked for all the outdoor games in the Institute playground which measures 2322.576 Sq. Mts. and the ground is well-maintained by the housekeeping and garden staff. The campus also has a well-equipped Gymnasium in 102.19 Sq.mts., with a trainer to keep the students physically fit by engaging in physical exercises. Annual sports competitions are being held for the students and staff in as many as ten items. Every year, special lectures and talks are arranged through the Gymkhana on topics related to health and hygiene, alternate approaches such as yoga and Ayurveda etc. Gymkhana also arranges various cultural programmes; the salient amongst these being the ‘AIISH Aawaaz’ which is an intercollegiate festival held every year with grandeur.  For conducting cultural programmes, an open-air stage measuring 30 x 35 ft, an Amphitheatre measuring 80 x 45 ft. and an indoor stage measuring 80 x 50 ft. are available in Panchavati campus which can accommodate a total of more than 2000 people. In addition, the Ladies and Gent’s hostels have their own recreation rooms with TV, newspapers and periodicals.**File Description** * Upload any additional information
* Paste link for additional information
 |  |
| **4.1.3** | **Percentage of classrooms and seminar halls with ICT – enabled facilities such as smart class, LMS, etc. *(current year data):*** 100 | **10** |
| **QnM** | 4.1.3.1: Number of classrooms and seminar halls with ICT facilities

|  |  |  |
| --- | --- | --- |
| **Number of classrooms with LCD facilities** | **Number of classrooms with wifi/LAN facilities** | **Number of seminar halls with ICT facilities** |
| 22 | 22 | 3 |

Formula:$$\frac{\begin{array}{c} Number of classrooms and seminar halls with\\ICT facilities\end{array}}{\begin{array}{c}Total number of classrooms/seminar halls\\ in the institution\end{array}}×100$$**File Description** * Upload any additional information
* Paste link for additional information
* Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template) (List attached)
 | **10** |
| **4.1.4** | **Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years (INR in Lakhs):** 68.28 | **10** |
| **QnM** | 4.1.4.1. Budget allocation for infrastructure augmentation, excluding salary year wise during last five years (INR in lakhs)

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| --- | --- | --- | --- | --- | --- |
| **Year** | **2017-18** | **2016-17** | **2015-16** | **2014-15** | **2013-14** |
| **INR in Lakhs** | 4186.00 | 3180.00 | 1754.42 | 7004.00 | 6260.40 |

 Grant-in-aid (Capital) Formula:$$Percentage per year=\frac{\begin{array}{c}Budget allocation for infrastructure\\augmentation excluding salary \end{array}}{Total expenditure excluding salary}X100$$$$Average percentage=\frac{\sum\_{}^{}Percentage per year}{5}$$

|  |  |  |
| --- | --- | --- |
| Category (Amount in lakhs) | Year |  |
| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| Budget allocated for infrastructure augmentation | 4186.00 | 3180.00 | 1754.42 | 7004.00 | 6260.40 |
| Budget utilized for infrastructure development | 496.95 | 2371.52 | 3344.65 | 2360.04 | 1915.59 |
| Percentage | 11.87 | 74.58 | 190.64 | 33.70 | 30.60 | 341.39 |

341.39 = 68.28% 5**File Description:*** Upload any additional information
* Upload audited utilization statements
* Upload Details of budget allocation, excluding salary during the last five years (Data Template) (List attached)
 |  |
|  | **Key Indicator - 4.2 Library as a Learning Resource (20)** |  |
| **Metric****No.** |  | **Weightage** |
| **4.2.1** | **The library is automated using Integrated Library Management System (ILMS)** | 5 |
| **QlM** | **Data Requirement for last five years: Upload a description of library** The Library and Information Centre, AIISH is the leading and unique learning resource centre on communication disorders in the country which is enriched with one of the world's best collection of speech and hearing information sources. It provides traditional and technology-based information services and caters to the information needs of speech and hearing professionals in the institute as well as those across the nation. The Library and Information Centre is fully automated using an Integrated Library Management System (ILMS) software, Book Magic, Version 1 in the year 2011.**Library Collection**The library collection includes both print and electronic resources such as books, journals, bibliographic and full-text databases as detailed below.

|  |  |
| --- | --- |
| Print books | 21,902 nos. |
| E-books | 176 nos. (Institute subscription)31,35,000 plus (NLIST) |
| Print Journals + Bound Volumes | 4,000 plus |
| E-journals | 117 nos. ((Direct Subscription)242 nos. ERMED journals6,000 plus (NLIST) |
| Standards | 74 nos. |
| Print Theses, Dissertations & Funded Research Projects | 1893 nos. |
| Electronic Theses, Dissertations Funded Research Projects | 1954 nos. |
| AIISH Publications-Serials | 04 nos. |
| AIISH Publications-Non-Serials | 133 nos. |
| CD-ROMs | 442 nos. |
| Electronic Databases | 05 nos. |
| Rare books | 187 nos. |

**Information Services Offered**The Library and Information Centre offers both traditional and electronic information services to its clientele. The major ones are:* Book Lending
* Bibliographic Management based on EndNote
* Remote Access Information Service based on EZProxy
* ISBN Service
* Plagiarism Detection Service based on Turnitin
* NLIST (National Library and Information Services Infrastructure for Scholarly Content) Service sponsored by the MHRD, Govt. of India
* ERMED (Educational Resources in Medicine) Service sponsored by the MHFW, Govt. of India
* Scholarly Writing Support Service based on Grammarly

**Infrastructure and Technology** The infrastructure and technological facilities of the Centre include the following:* Fully Automated Library Operations using Book Magic, Integrated Library Management System **(ILMS)** software, Version 1, automated in the year 2011.
* Stand-alone building with a plinth area of 26,000 sq.ft
* Reading spaces and carrels for accommodating more than 200 simultaneous users
* Institutional Digital Repository
* Language Laboratory
* Computer Centre with 30 systems & high-speed Internet Connectivity
* Own web portal registered with ERNET, India
* Fully automated in-house operations with an Integrated Library Management System
* Electromagnetic Security System
* Automatic Gate Register

**Research and Training**The Library and Information Centre is actively involved in research and training on information management in communication disorders. * Completed Funded Research Projects: Design and Development of Web-based Platform for the Institute Journals
* Ongoing Funded Research Projects: (1) Database on Communication Disorders published in India

(2) Design, development and validation of open source platform for AIISH digital repository and online public access catalogueIt offers an Open Elective Course on **Information Management in Speech, Language and Hearing** for the M.Sc. Programme of the University of Mysore, Mysuru. Also, conducts orientation and training programmes on various topics on Information Management.**Future Plans*** Upgradation of the Computer Centre
* Development of a National Repository on Disability

**File Description:*** Upload any additional information
* Paste link for Additional Information (Library and Information Centre Website: <http://www.aiish.ac.in/>)
 |  |
| **4.2.2** | **Collection of rare books, manuscripts, special reports or any other knowledge resource for library enrichment** | **2** |
| **QlM** | Data Requirement for last five years:Provide the description of library enrichment which includes • Name of the book/ manuscript • Name of the publisher • Name of the author • Number of copies • Year of publishingThe Library and Information Centre has a collection of rare books/ reports on health sciences with special reference to speech and hearing. (List attached)**File Description:*** Upload any additional information
* Paste link for additional information

 |  |
| **4.2.3****QnM** | Does the institution have the following:  1.e – journals  2.e-ShodhSindhu  3.Shodhganga membership  4.e-books  5.DatabasesOptions:  A. Any 4 of the above  B. Any 3 of the above  C. Any 2 of the above Opt One D. Any 1 of the above  E. None of the above **Any 4 of the above** **File Description:*** Upload any additional information
* Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership etc (Data Template)

 (Details of memberships & Details of subscriptions attached) | **3** |
| **4.2.4** | **Average annual expenditure for purchase of books and journals during the last five years =** 113.166 | **5** |
| **QnM** | 4.2.4.1 Annual expenditure of purchase of books and journals year wise during last five years (INR in Lakhs)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **2017-18** | **2016-17** | **2015-16** | **2014-15** | **2013-14** |
| **INR in Lakhs** | 114.93 | 108.03 | 135.38 | 95.48 | 97.01 |

**Note:** Separate ledger account for Books and Journals are not maintained/available Formula: $$\frac{1}{5}X\sum\_{i=1}^{5}Expd\_{i}$$Where: = Expenditure in rupees on purchase of books and journals in i th year1/5 ((1+114.93) + (2+108.03) + (3+135.38) + (4+95.48) + (5+97.01)1/5 (565.83)113.166**File Description (Upload)*** Any additional information
* Audited statements of accounts
* Details of annual expenditure for purchase of books and journals during the last five years (Data Template)

(List attached) |  |
| **4.2.5****QnM** | **Availability of remote access to e-resources of the library:** Yes**File Description: (Upload)*** Any Additional Information
* Details of remote access to e-resources of the library (Data Template) (Details attached)
 | 1 |
| **4.2.6** | **Percentage per day usage of library by teachers and students (2017-18):** 10.93 | 4 |
| **QnM** | 4.2.6.1. Number of teachers and students using library per day over last one year: 54Formula:$$\frac{\begin{array}{c}Number of teachers and students\\ using library per day\end{array}}{\begin{array}{c}Total number of teachers and students \end{array}}X 100$$$$\frac{54.26}{\begin{array}{c}496\end{array}}X 100$$$$10.93$$**File Description(Upload)*** Any additional information
* Details of library usage by teachers and students (Data Template) (Details attached)
 |   |
|  | **Key Indicator – 4.3 IT Infrastructure (30)** |  |
| **Metric No.** |  | Weightage |
| **4.3.1** | **Institution frequently updates its IT facilities including Wi-Fi** | **10** |
| **QlM** | **Describe IT facilities including Wi-Fi with date and nature of updation within a minimum of 500 characters and maximum of 500 words.** The institute has a dedicated 1:1 fiber optic internet bandwidth of 135 Mbps which is provided to 317 computers in the campus and Wi-Fi facility at the Ladies and Gents hostels. The institute has a server based LAN with star topology with 1Gbps speed. The Library houses a browsing centre with 23 systems and all classrooms are equipped with computers and state of the art AV systems. The Institute has MPLS VPN Gold connectivity of 5 Mbps with its seven remote centres (Ajmer, Bhagalpur, Cuttack, Delhi, Lucknow, Mumbai & Shimla) through which classes are conducted for the DHLS program through video conferencing. Lectures for the B.ASLP program are delivered by experienced faculty through MPLS VPN Gold connectivity of 5 Mbps with Imphal, Puducherry and Jabalpur. **File Description** * Upload any additional information
* Paste link for additional information

  |  |
| **4.3.2** | **Student - Computer ratio *(2017-18):*** 4.41:1 | **10** |
| **QnM** | Data Requirement: Number of students : Number of Computers

|  |  |
| --- | --- |
| **Number of computers for students in working condition** | **Total Number of students** |
| 99 | 437 |

Student – computer ratio437/99 = 4.414.41:1**File Description** * Upload any additional information
* Student – computer ratio
 |  |
| **4.3.3** | **Available bandwidth of internet connection in the Institution (Leased line)**  | 9 |
| **QnM** | Options: A. ≥50 MBPS B. 35-50 MBPS C. 20-35 MBPS Opt One  D. 5-20 MBPS E. <5 MBPS **A. ≥50 MBPS** Data Requirement: • Available internet bandwidth

|  |  |  |
| --- | --- | --- |
| **Number of computers with access to internet** | **Bandwidth of leased line connection** | **LAN configuration and speed** |
| 317 | 135 Mbps | Star Network with 1Gbps backbone |

**File Description*** Upload any additional Information
* Details of available bandwidth of internet connection in the Institution (Attached)
 |  |
| **4.3.4** | **Facilities for e-content development such as Media centre, Recording facility, Lecture Capturing System(LCS)** | **1** |
| **QnM** | Yes |  |
|  | **File Description** * Upload any additional information
* Links of photographs
* Facilities for e-content development such as Media Centre, Recording facility, LCS (Data Templates) (List attached)
 |  |
|  | **Key Indicator - 4.4 Maintenance of Campus Infrastructure (20)** |  |
| **Metric****No.** |  | **Weightage** |
| **4.4.1** | **Average expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years *(INR in Lakhs)*** 74.98% | **10** |
| **QnM** | **4.4.1.1. Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year wise during the last five years (INR in lakhs)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **2017-18** | **2016-17** | **2015-16** | **2014-15** | **2013-14** |
| **INR in Lakhs** | 1518.99 | 1791.69 | 1886.13 | 1803.94 | 1457.22 |

Data Requirement year wise: • Non salary expenditure incurred • Expenditure incurred on maintenance of campus infrastructureFormula:$$Percentage per year=\frac{\begin{array}{c}Expenditure on maintenance of \\physical and academic\\support facilities excluding salary component\end{array}}{\begin{array}{c}Total expenditure excluding \\salary component\end{array}}X100$$$$Average percentage=\frac{\sum\_{}^{}Percentage per year}{5}$$**File Description:*** Upload any additional information
* Audited statements of accounts.
* Details about assigned budget and expenditure on physical facilities and academic facilities (Data Templates) (Details attached)
 |  |
|  |

|  |  |  |
| --- | --- | --- |
| Category (Amount in lakhs) | Years |  |
| 2017-18 | 2016-17 | 2015-16 | 2014-15 | 2013-14 |
| Assigned budget on academic support facilities (excluding salary for human resources) | \* |  |  |  |  |
| Expenditure on academic support facilities (excluding salary for human resources) | \* |  |  |  |  |
| Assigned budget on physical facilities (excluding salary for human resources) | 2200.00 | 2400.00 | 1626.82 | 3609.00 | 2233.00 |
| Expenditure on physical facilities (excluding salary for human resources) | 1518.99 | 1791.69 | 1886.13 | 1803.94 | 1457.22 |
| Percentage | 69.05 | 74.65 | 115.94 | 49.98 | 65.26 | 374.88 |

\* The expenditure/assigned budget are shown as per the allotment and actual expenditure of Grant-in-aid (General) year-wise as there is no separate/splitted allotment/expenditure for the above.Average Percentage = ∑ Percentage per year 374.88 = 74.98% 5 5 |  |
| **4.4.2** | **There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.**Upload policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities on the website within a maximum of 1000 words**File Description:*** Upload any additional information
* Paste link for additional information
 | **10** |
| **QlM** |  The Institute is an ISO 9001-2015 Standard certified organizationand the maintenance and utilization of the physical, academic and support facilities are carried out in accordance with the needs of the Standard**.** The infrastructure facilities are being augmented periodically in order to meet the growing needs of the students. Sufficient funds are being allocated for the purpose by the Ministry of Health and Family Welfare, Govt. of India. The major constructions works completed during the last five years include Type II and III quarters for the staff, new academic building and new audiology block. The institute has been recognized as “Centre of Excellence” in the area of communication disorders and as a part of this, construction of 5 research centres and 5 clinical centres and 5 other centres are in progress. Also, construction of a museum on speech and hearing has been initiated.**Maintenance of Physical Environment:** The physical environment of the Institute is maintained by 36 housekeeping personnel led by a supervisor hired on contract through outsourcing which will be overseen by the Caretaker. The Caretaker is also responsible for carrying out theminor civil repairs works including sanitation and carpentry. The garden maintenance is carried out by 16 garden staff under the supervision of the Assistant Horticulture Officer. All the maintenance staffs are working under the Engineering Section.**Maintenance of Equipment**: The Department of Electronics maintains and upkeeps the electrical, electronic and IT infrastructure facilities and equipment of the institution. The Electronic Engineers, Computer Engineers and Technical officers of the Department maintains the personal computer systems, networking gadgets and server computers, manage the electrical fittings and fixtures and similar items. Special and dedicated biomedical equipment, equipment which require spares that are not available in the market are maintained by awarding annual maintenance contract to the respective manufacturers/dealers. **Hearing Aid:** The department of Electronics has a dedicated hearing aid repair section. It holds workshops frequently to attend to repairs of hearing aids, electrical repairs, repairs of computers and other general needs of the persons with communication disorders. All hearing aids that are issued to the clients from the institute are subjected to quality check as per the norms prescribed by ANSI / IEC standards. Electrophysiological measures for hearing aids are carried out in the department of Electronics. Acoustic treatment for audiological test rooms, recording rooms, psychoacoustic laboratory in the department of Audiology and two Neuroscan rooms one each located in the Department of Audiology and Department of Speech-Language Sciences.**Calibration**: The equipment used for evaluation of hearing in the Department of Audiology are subjected to biological calibration as per prescribed norms before their use on a day to day basis. Objective calibration of audiological equipment and equipment used for noise measurement is carried out as and when the need arises and on an average such calibration is carried out not less than 6 months/one year. Some of the equipment used to measure different parameters of speech in the Department of Speech-Language Sciences, Speech-Language Pathology and Department of Clinical Services are calibrated as per the prescribed norms of the manufacturer. For example, the Articulograph AG 500 equipment in the department of Speech-Language Pathology is calibrated before obtaining the data from every participant. Besides the calibration of the audiological equipment in the institute, the Department of Electronics also undertakes calibration of equipment of other centres and institute based on request and on payment. **Maintenance of Civil Structures**: The institute has an engineering section comprising of an Assistant Executive Engineer on deputation basis, regular staff occupying the positions of Assistant Engineer, Junior Engineer, and Care Taker to attend to and carry out the minor new construction works and repair / maintenance of civil structures.**Upkeep and Maintenance of Sensitive Equipment** The power generation by DG Set and distribution in the campus is taken care of by the Department of Electronics with the help of Electrical Maintenance team consisting of electricians. The elevators operating in different buildings of the institution are maintained by awarding the AMC to the concerned manufacturer of the elevators. AMC also exist other necessary equipment. **Website Maintenance**: The website is maintained through Annual Maintenance Contract with the firm which developed the site under the supervision of the Department of Electronics.  |  |