This chapter elaborates different types of E-resources availability at agricultural educational institutes, Usage of E-resources by the research scholars and problems encountered by the research scholars while accessing the e-resources. Appropriate statistical and Analytical tools have been used to analyze empirical evidences obtained through research, keeping in view the objectives of the study. The results arrived at have been presented and discussed in the light of available theories, facts and findings in the area of investigation. The results have been clubbed into the following sections:

4.1 Socio-personal profile of the research scholars.
4.2 Various types of e-resources at selected agricultural educational Institutes.
4.3 Usage of e-resources by the research scholars.
4.4 Problems encountered by the research scholars while accessing the e-resources.
4.5 Relationship between usage of e-resources and problems encountered with selected independent variables.

4.1 SOCIO-PERSONAL PROFILE OF THE RESEARCH SCHOLARS

Table 4.1.1 Distribution of respondents according to socio-personal profile (n= 220)

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Variables</th>
<th>Categories</th>
<th>Institution/University</th>
<th>Total F(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>CSAUA</td>
<td>NDUAT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>1.</td>
<td>Gender</td>
<td>Male</td>
<td>47 (94)</td>
<td>43 (86)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>03 (6)</td>
<td>07 (14)</td>
</tr>
<tr>
<td>2.</td>
<td>Age (Years)</td>
<td>≤ 23 Years</td>
<td>17 (34)</td>
<td>1 (2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mean=25.47</td>
<td>24 to 27 Years</td>
<td>25 (50)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.D. = 2.05</td>
<td>≥ 28 Years</td>
<td>8 (16)</td>
</tr>
</tbody>
</table>
### Results and Discussion

#### 3. Medium of basic education

<table>
<thead>
<tr>
<th>Language</th>
<th>Hindi</th>
<th>English</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>26 (52)</td>
<td>18 (36)</td>
<td>60 (50.00)</td>
</tr>
<tr>
<td></td>
<td>24 (48)</td>
<td>29 (58)</td>
<td>44 (36.67)</td>
</tr>
<tr>
<td></td>
<td>0 (0)</td>
<td>3 (6)</td>
<td>16 (13.33)</td>
</tr>
<tr>
<td></td>
<td>19 (8.64)</td>
<td>47 (44.09)</td>
<td>50 (50.00)</td>
</tr>
</tbody>
</table>

#### 4. OGPA in Post Graduate

<table>
<thead>
<tr>
<th>Range</th>
<th>6-6.9</th>
<th>7-7.9</th>
<th>8-8.9</th>
<th>9-9.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>0 (0)</td>
<td>30 (60)</td>
<td>19 (38)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>%</td>
<td>2 (1.67)</td>
<td>24 (20)</td>
<td>81 (67.50)</td>
<td>13 (10.83)</td>
</tr>
<tr>
<td></td>
<td>5 (2.27)</td>
<td>96 (43.64)</td>
<td>105 (47.73)</td>
<td>14 (6.36)</td>
</tr>
</tbody>
</table>

#### 5. Family Background

<table>
<thead>
<tr>
<th>Type</th>
<th>Rural</th>
<th>Semi –urban</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>39 (58)</td>
<td>5 (10)</td>
<td>6 (12)</td>
</tr>
<tr>
<td>%</td>
<td>37 (74)</td>
<td>18 (15.00)</td>
<td>35 (29.17)</td>
</tr>
<tr>
<td></td>
<td>67 (55.83)</td>
<td>29 (13.18)</td>
<td>48 (21.82)</td>
</tr>
</tbody>
</table>

**Fig. 4.1 Distribution of respondents according to their Gender**
Results and Discussion

Fig. 4.2 Distribution of respondents according to their Age

Fig. 4.3 Distribution of respondents according to medium of basic education.

Fig. 4.4 Distribution of respondents according to their OGPA in Post Graduation
Table 4.1.1 reveals that majority (80.91 %) of the respondents were male while female constituted of 19.09 percent only. CSUAT constituted of 94 percent of male and 6 percent of female respondents. NDUAT constituted of 86 percent of male and 14 percent of female respondents while IAS,BHU constituted of 73.33 percent of male and 26.67 percent of female respondents.

Majority (62.73 %) of respondents belonged to the age group of 24 to 27 years followed by 28 years and above (19.55). Only 17.73 percent of the respondents belonged to the age group of less than 23 years. CSAUAT had majority (50 %) of the respondents in the age group of 24 to 27 years followed by age group of less than 23 years (34%) and age group of 28 years and above (16 %). NDUAT had majority (80 %) of the respondents in the age group of 24 to 27 years followed by age group of 28 years and above (18 %) and less than 23 years age group (2%). IAS,BHU had majority (60.83 %) of the respondents in the age group of 24 to 27 years followed by age group of 28 years and above (21.67 %) and less than 23 years age group (17.50%).

Majority (47.27 %) of the respondents had basic education in Hindi medium followed by English medium (47.27 %) and other languages (8.67 %). CSAUAT had majority (52 %) of the respondents who had basic education in Hindi language while 48 percent of the respondents had basic education in English medium. Majority (58 %) of the respondents from NDUAT had basic education in English language followed by Hindi language (36 %) and
other languages (6 %). Half of the respondents from IAS,BHU had their basic education in Hindi language followed by English language (36.67 %) and other languages (13.33 %).

Majority (47.73 %) of the respondents had OGPA in Post Graduation in the range of 8 to 8.89 followed by in the range of 7-7.9 (43.64 %) along with 2.27 percent in the range of 6 to 6.9 OGPA and 9 to 9.9 OGPA (6.36 %). In CSAUAT majority (60 %) of the respondents had OGPA in the range of 7 to 7.9 followed by in the range of 8 to 8.9 OGPA (38 %) and 9 to 9.9 OGPA (2 %). Majority (84 %) of the respondents had OGPA in the range of 7 to 7.9 while ten percent of the respondents had OGPA in the range of 8 to 8.9 followed by 6 to 6.9 OGPA (6 %). Majority (6750 %) of the respondents from IAS,BHU had OGPA in the range of 8 to 8.9 followed by 7 to 7.9 OGPA (20 %) and 9 to 9.9 OGPA (10.83 %). Only 1.67 percent of the respondents had OGPA in the range of 6 to 6.9.

Majority (65 %) of the respondents had rural family background followed by urban family background (21.82 %) and semi-urban family background (13.18 %). Majority (58 %) of the respondents from CSAUAT had rural family background followed by urban family background (12 %) and semi-urban family background (10 %). Majority (74 %) of the respondents from NDUAT had rural family background followed by urban family background (14 %) and semi-urban family background (12 %) while majority (55.83 %) of the respondents from IAS,BHU had rural family background followed by urban family background (29.17 %) and semi-urban family background (15 %).

<table>
<thead>
<tr>
<th>Department</th>
<th>Institution/University</th>
<th>Total F(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop physiology</td>
<td>CSAUAT: 8 (16)</td>
<td>8 (3.64)</td>
</tr>
<tr>
<td></td>
<td>NDUAT: 0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td></td>
<td>IAS, BHU: 0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td></td>
<td>Total: 8 (3.64)</td>
<td></td>
</tr>
<tr>
<td>GPB</td>
<td>CSAUAT: 7 (14)</td>
<td>37 (16.82)</td>
</tr>
<tr>
<td></td>
<td>NDUAT: 4 (8)</td>
<td>18 (8.18)</td>
</tr>
<tr>
<td></td>
<td>IAS, BHU: 26 (21.67)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total: 47 (21.67)</td>
<td></td>
</tr>
<tr>
<td>Plant Pathology (MPP)</td>
<td>CSAUAT: 5 (10)</td>
<td>18 (8.18)</td>
</tr>
<tr>
<td></td>
<td>NDUAT: 4 (8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IAS, BHU: 9 (7.5)</td>
<td>49 (22.27)</td>
</tr>
<tr>
<td></td>
<td>Total: 32 (14.53)</td>
<td></td>
</tr>
<tr>
<td>Agronomy</td>
<td>CSAUAT: 27 (54)</td>
<td>49 (22.27)</td>
</tr>
<tr>
<td></td>
<td>NDUAT: 5 (10)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IAS, BHU: 17 (14.17)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total: 49 (22.27)</td>
<td></td>
</tr>
<tr>
<td>Soil Conservation &amp; Water Management</td>
<td>CSAUAT: 06 (12)</td>
<td>6 (2.73)</td>
</tr>
<tr>
<td></td>
<td>NDUAT: 0 (0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IAS, BHU: 0 (0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total: 6 (2.73)</td>
<td></td>
</tr>
<tr>
<td>Department</td>
<td>N (Total)</td>
<td>N (M)</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------</td>
<td>-------</td>
</tr>
<tr>
<td>Agriculture Entomology (EAZ)</td>
<td>4 (8)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Soil Science &amp; Agric. Chemistry</td>
<td>4 (8)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Agricultural Biochemistry</td>
<td>1 (2)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Seed science &amp; Technology</td>
<td>3 (6)</td>
<td>6 (12)</td>
</tr>
<tr>
<td>Agricultural Economics</td>
<td>3 (6)</td>
<td>3 (6)</td>
</tr>
<tr>
<td>Plant Physiology</td>
<td>3 (6)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Agriculture Extension</td>
<td>1 (2)</td>
<td>5 (10)</td>
</tr>
<tr>
<td>Horticulture</td>
<td>0 (0)</td>
<td>21 (42)</td>
</tr>
<tr>
<td>Animal Husbandry and Dairying</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Farm Engineering</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Food Science &amp; Technology</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

Fig. 4.6 Distribution of respondents according to their Department
Table 4.1.2 depicts that majority (22.27 %) of the respondents belonged to the Department of Agronomy followed by Department of Genetics and Plant Breeding (16.82 %), Department of Horticulture (13.18 %), Department of Agricultural Extension (8.64 %), Department of Plant Pathology (8.18 %), Department of Soil Science & Agricultural Chemistry (6.82 %), Department of Farm Engineering (4.55 %), Department of Seed Science & Technology (4.09 %), Department of Agricultural Economics (4.09 %), Department of Agricultural Entomology (4.09 %), Department of Crop Physiology (3.64 %), Department of Food Science & Technology (3.64 %), Department of Animal Husbandry and Dairying (3.64 %), Department of Soil Conservation & Water Management (2.73 %), Department of Plant Physiology (2.73 %) and Agricultural Biochemistry (0.91 %). In CSAUAT, majority (54 %) of the respondents belonged to the Department of Agronomy followed by Department of Crop Physiology (16 %), Department of Genetics and Plant Breeding (14 %), Department of Soil Conservation & Water Management (12 %), Department of Plant Pathology (10 %), Department of Agricultural Entomology (8 %), Department of Soil Science & Agricultural Chemistry (8 %), Department of Agricultural Economics (6 %), Department of Seed Science & Technology (6 %), Department of Plant Physiology (6 %), Department of Agricultural Extension (2 %), In NDUAT, majority (42 %) of the respondents belonged to the Department of Horticulture followed by Department of Seed Science & Technology (12 %), Department of Agronomy (10 %), Department of Agricultural Extension (10 %), Department of Genetics and Plant Breeding (8 %), Department of Plant Pathology (8 %), Department of Agricultural Economics (6 %), Department of Agricultural Entomology (2 %) and Department of Soil Science & Agricultural Chemistry (2 %), In IAS,BHU, majority (21.67 %) of the respondents belonged to the Department of Genetics and Plant Breeding followed by Department of Agronomy (14.17 %), Department of Agricultural Extension (10.83 %), Department of Soil Science & Agricultural Chemistry (9.17 %), Department of Farm Engineering (8.33 %), Department of Plant Pathology (7.5 %), Department of Horticulture (6.67 %), Department of Animal Husbandry and Dairying (6.67 %), Department of Food Science & Technology (6.67 %), Department of Agricultural Entomology (3.33 %), Department of Agricultural Economics (2.5 %) and Department of Plant Physiology (2.5 %)
4.2 AVAILABILITY OF VARIOUS TYPES OF E-RESOURCES AT SELECTED AGRICULTURAL EDUCATIONAL INSTITUTES

Table 4.2.1 Distribution of various types of E-resources available

<table>
<thead>
<tr>
<th>E-Resources</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscription Based E-Resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Web of Science</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Annual Reviews</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>AGRICOLA</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>CAB Abstracts</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Elsevier Science</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Nature</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Royal Society of Chemistry</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>American Chemical Society</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Science citation Index</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>SCI Finder</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Science Online</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Springer Link</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Library and Information Science Abstracts</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Cambridge University Press</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Blackwell Publishing</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Oxford University press</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Science Direct</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Taylor and Francis</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Wiley-Blackwell Publishing</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>Sage HSS Online Journals</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
</tbody>
</table>
Table 4.2.2 Number of students visited library during last three years

<table>
<thead>
<tr>
<th>Year</th>
<th>2013-14</th>
<th>2014-15</th>
<th>2015-16</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total students</td>
<td>Research scholars</td>
<td>Total students</td>
</tr>
<tr>
<td>NDUAT</td>
<td>2551</td>
<td>52</td>
<td>5270</td>
</tr>
<tr>
<td>CSAUAT</td>
<td>16380</td>
<td>2500</td>
<td>15400</td>
</tr>
<tr>
<td>IAS, BHU</td>
<td>10000</td>
<td>2000</td>
<td>11000</td>
</tr>
<tr>
<td>BHU Central Library</td>
<td>412000</td>
<td>30800</td>
<td>932000</td>
</tr>
</tbody>
</table>

Fig. 4.7 Distribution of respondents visited the library during last three years

Table 4.2.2 indicates that maximum number (43998) of research scholars visited the BHU Central Library in the year 2015-16 followed by the year 2014-15 (43900) and 2013-14 (30800). Second highest number (2600) of research scholars visited the CSAUAT library in the year 2015-16, followed by 2013-14 (2500) and 2014-15 (2300). Third highest number (2100) of research scholars visited the IAS,BHU library in the year 2015-16 while equal number (2000) of research scholars visited during the year 2013-14 and 2014-15. Fourth
highest number (106) of research scholars visited the NDUAT library in the year 2015-16 followed by 2014-15 (70) and 2013-14 (52).

Table 4.2.3 Services offered by the library

<table>
<thead>
<tr>
<th>Services</th>
<th>University/Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NDUAT</td>
</tr>
<tr>
<td>Circulation service</td>
<td>Yes</td>
</tr>
<tr>
<td>Documentation and information service</td>
<td>Yes</td>
</tr>
<tr>
<td>Internet search services</td>
<td>No</td>
</tr>
<tr>
<td>Training</td>
<td>Yes</td>
</tr>
<tr>
<td>Reference service</td>
<td>Yes</td>
</tr>
<tr>
<td>CD-ROM searching</td>
<td>Yes</td>
</tr>
<tr>
<td>Reprography</td>
<td>Yes</td>
</tr>
<tr>
<td>Translation</td>
<td>No</td>
</tr>
</tbody>
</table>

It is evident from Table 4.2.3 that the libraries of all the three universities had Circulation service, Documentation and information service, Training, Reference service, CD-ROM searching, Reprography services. All the three Universities had Internet search services except NDUAT. Libraries of none of the three universities had translation facilities.

Table 4.2.4 Library collections

<table>
<thead>
<tr>
<th>Collections</th>
<th>University/Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NDUAT</td>
</tr>
<tr>
<td>(A) Print resources</td>
<td></td>
</tr>
<tr>
<td>Books</td>
<td>65000</td>
</tr>
<tr>
<td>Current journals</td>
<td>35</td>
</tr>
<tr>
<td>Research reports</td>
<td>0</td>
</tr>
<tr>
<td>Theses/dissertation</td>
<td>300</td>
</tr>
</tbody>
</table>
It can be seen from Table 4.2.4 that under print resource collections, BHU Central Library had maximum (976411) collection of Books followed by NDUAT (65000), CSA (41855) and IAS,BHU (29971). Collection of current journals was found to be maximum (21661) in CSAUAT followed by BHU Central Library (447) and NDUAT (35). IAS,BHU had no current journals. The libraries of none of the universities had collections of research reports. The BHU Central Library had maximum (14748) number of Theses/ dissertations followed by CSAUAT (5484), NDUAT (300) and IAS, BHU (200). Only the BHU Central Library had manuscripts (7233) and bound volume journals (133792).

Only the BHU Central Library and CSA had online data base (10 and 02 respectively). Only BHU Central Library had collections of e-journals (11272). The BHU Central Library and library of IAS, BHU had collection of e-books (52560 and 38 respectively). The libraries of CSA and IAS, BHU had e-theses (2700 and 449 respectively).

Table 4.2.5 University/Institute library participation in e-resource consortia

<table>
<thead>
<tr>
<th>University/Institute Library</th>
<th>Participation in E-resource consortia</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDUAT</td>
<td>CeRA</td>
</tr>
<tr>
<td>CSAUAT</td>
<td>CeRA</td>
</tr>
<tr>
<td>IAS/CL, BHU</td>
<td>E-SHODHSINDHU</td>
</tr>
</tbody>
</table>

Table 4.2.5 reveals that the libraries of NDUAT and CSAUAT had participation in CeRA e-resource consortium while IAS/CL, BHU had participation in E-SHODHSINDHU consortium.
Table 4.2.6 Important agricultural online databases available in the Institute/University library

<table>
<thead>
<tr>
<th>Items</th>
<th>NDUAT</th>
<th>CSAUAT</th>
<th>IAS/CL, BHU</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB abstract</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>AGRICOLA</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>AGRIS</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>FAOSTAT</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

It is clear from Table 4.2.6 that all libraries of all the three universities had CAB abstract and AGRIS online database. AGRICOLA and FAOSTAT were available only in the library of BHU.

Table 4.2.7 Internet Bandwidth, Mode of connectivity & Type of Network

<table>
<thead>
<tr>
<th>University/Institute</th>
<th>NDUAT</th>
<th>CSAUAT</th>
<th>IAS/CL, BHU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet Bandwidth</td>
<td>1 GBPS</td>
<td>1 GBPS</td>
<td>5 GBPS</td>
</tr>
<tr>
<td>Mode of connectivity</td>
<td>AKMU</td>
<td>AKMU</td>
<td>Broadband</td>
</tr>
<tr>
<td>i) LAN</td>
<td>-</td>
<td>Fiber net</td>
<td>Fiber net</td>
</tr>
<tr>
<td>ii) Wireless</td>
<td>Wi-Fi</td>
<td>Wi-Fi</td>
<td>Wi-Fi</td>
</tr>
</tbody>
</table>

Table 4.2.7 reveals that the library of IAS, BHU had maximum Internet Bandwidth of 5 GBPS followed by NDUAT and CSAUAT with internet bandwidth of 1 GBPS. The libraries of NDUAT and CSAUAT used AKMU mode of connectivity while IAS/CL, BHU used Broadband network. The CSAUAT and IAS/CL, BHU used Fiber net LAN and all the libraries had wi-fi facility.
Table 4.2.8 Providing Online Access to Library Collection

<table>
<thead>
<tr>
<th>Provide access</th>
<th>University/Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NDUAT</td>
</tr>
<tr>
<td>Inside library only</td>
<td>No</td>
</tr>
<tr>
<td>Inside the university/institute campus</td>
<td>No</td>
</tr>
<tr>
<td>Outside the institute/university campus</td>
<td>No</td>
</tr>
</tbody>
</table>

It is clear from Table 4.2.8 that BHU Central Library provided online access to library inside the library only while the CSAUAT and BHU CL provided the online access to library collection both inside and outside the university/institute campus.

Table 4.2.9 Providing user training to access e-resources

<table>
<thead>
<tr>
<th>Training</th>
<th>University/Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NDUAT</td>
</tr>
<tr>
<td>Computer handling</td>
<td>No</td>
</tr>
<tr>
<td>e-resources access</td>
<td>No</td>
</tr>
<tr>
<td>Internet access</td>
<td>No</td>
</tr>
</tbody>
</table>

It can be depicted from Table 4.2.9 that except NDUAT all the three libraries namely CSA, IAS,BHU and BHU CL provided training to access computer handling, e-resource access and internet access.
Results and Discussion

4.3 Usage of e-resources by the research scholars

4.3.1 Library visit

Table 4.3.1 Distribution of respondents according to visit the institute/university library

<table>
<thead>
<tr>
<th>Library visit</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S/CL B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Yes</td>
<td>49 (98)</td>
<td>44 (88)</td>
<td>118 (98.33)</td>
<td>211 (95.91)</td>
</tr>
<tr>
<td>No</td>
<td>01 (2)</td>
<td>06 (12)</td>
<td>02 (1.67)</td>
<td>09 (4.09)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>

Fig. 4.8 Distribution of respondents according to their visit to library

Table 4.3.1 reveals that majority (95.91 %) of the respondents visited the library while only 4.09 percent of the respondents did not visit the library. About 98.33 % of the respondents of IAS/CL BHU visited the library followed by CSAUAT (98 %) and NDUAT (88 %).
### 4.3.2 Purpose of visiting the library

#### Table 4.3.2 Distribution of respondents according to purpose of visiting the library

<table>
<thead>
<tr>
<th>Purpose</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td></td>
</tr>
<tr>
<td>Study and Reference</td>
<td>49</td>
<td>44</td>
<td>118</td>
<td>211</td>
</tr>
<tr>
<td></td>
<td>(98)</td>
<td>(88)</td>
<td>(98.33)</td>
<td>(95.91)</td>
</tr>
<tr>
<td>Issuing/returning of books</td>
<td>49</td>
<td>5</td>
<td>77</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>(98)</td>
<td>(10)</td>
<td>(64.17)</td>
<td>(59.55)</td>
</tr>
<tr>
<td>Reprography (photo state)</td>
<td>4</td>
<td>1</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>(8)</td>
<td>(2)</td>
<td>(12.5)</td>
<td>(9.09)</td>
</tr>
<tr>
<td>Accessing E-resources</td>
<td>17</td>
<td>1</td>
<td>77</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>(34)</td>
<td>(2)</td>
<td>(64.17)</td>
<td>(43.18)</td>
</tr>
<tr>
<td>Consulting periodicals/ journals</td>
<td>31</td>
<td>49</td>
<td>81</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>(62)</td>
<td>(98)</td>
<td>(67.5)</td>
<td>(73.18)</td>
</tr>
</tbody>
</table>

Fig. 4.9 Distribution of respondents according to their purpose of visit to library
It is evident from Table 4.3.2 that majority (95.91 %) of the respondents visited the library for study and reference followed by consulting periodicals/journals (73.18 %), issuing/returning books (59.55 %), accessing e-resources (43.18 %) and reprography (9.09 %). Equal majority (98 %) of the respondents of CSAUAT visited the library for study and reference and for issuing/returning books followed by consulting periodicals/journals (62 %), accessing e-resources (34 %) and reprography (8 %) while majority (98 %) of the respondents from NDUAT visited the library for consulting periodicals/journals followed by Study and Reference (98 %), Issuing/returning of books (10 %), Reprography (2 %) and for accessing E-resources (2 %). Majority (98.33 %) of respondents from IAS, BHU visited the library for study and referencing followed by consulting periodicals/journals (67.50 %), issuing/returning books (64.17 %), accessing e-resources (64.17 %) and for reprography (12.50 %).

4.3.3 Satisfaction level

Table 4.3.3 Distribution of respondents according to level of satisfaction with library services (n= 220)

<table>
<thead>
<tr>
<th>Satisfaction level</th>
<th>Institution/University</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSA</td>
</tr>
<tr>
<td></td>
<td>F(%)</td>
</tr>
<tr>
<td>Very much satisfied</td>
<td>11 (22)</td>
</tr>
<tr>
<td>Satisfied</td>
<td>35 (70)</td>
</tr>
<tr>
<td>Not Satisfied</td>
<td>04 (8)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
</tr>
</tbody>
</table>
Results and Discussion

Fig. 4.10 Distribution of respondents according to their level of satisfaction with library services

Table 4.3.3 reveals that majority (62.73 %) of the respondents were satisfied with the library services followed by not satisfied (19.09 %) and very much satisfied (18.18 %). Majority (70 %) of the respondents from CSA indicated their satisfaction with the library services followed by very much satisfied (22 %) and not satisfied (8 %). In NDUAT, majority (68 %) of the respondents were not satisfied with the library services followed by satisfied (26 %) and very much satisfied (6 %). Majority of the respondents from BHU indicated their satisfaction with the library services followed by very much satisfied (21.67 %) while only 19.09 percent of the respondents indicated dissatisfaction with library services.

4.3.4 Use of internet service

Table 4.3.4 Distribution of respondents according to use of internet service

<table>
<thead>
<tr>
<th>Use</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Yes</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
<tr>
<td>No</td>
<td>00 (0)</td>
<td>00 (0)</td>
<td>00 (0)</td>
<td>00 (0)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>
It is evident from Table 4.3.4 that cent percent of the respondents from all the three universities used the internet service.

4.3.5 Use of search engine for research/study

Table 4.3.5 Distribution of respondents according to use of search engine for research/study

<table>
<thead>
<tr>
<th>Search engine</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td></td>
</tr>
<tr>
<td>Ask jeeves</td>
<td>11 (22)</td>
<td>5 (10)</td>
<td>4 (3.33)</td>
<td>20 (9.09)</td>
</tr>
<tr>
<td>Infoseek</td>
<td>1 (2)</td>
<td>1 (2)</td>
<td>0 (0)</td>
<td>2 (0.91)</td>
</tr>
<tr>
<td>MSN</td>
<td>24 (48)</td>
<td>8 (16)</td>
<td>15 (12.5)</td>
<td>47 (21.36)</td>
</tr>
<tr>
<td>Google</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
<tr>
<td>Yahoo</td>
<td>47 (94)</td>
<td>48 (96)</td>
<td>90 (75)</td>
<td>185 (84.09)</td>
</tr>
</tbody>
</table>
It is clear from Table 4.3.5 that cent percent of the respondents used Google search engine for research/study followed by Yahoo (84.09 %), Bing (48.18 %), Rediffmail (43.64 %), MSN (21.36 %), Ask jeeves (9.09 %), Excite (1.82 %) and Infoseek (0.91 %). Cent percent of the respondents from CSAUAT used Google search engine followed by Yahoo (94 %), Rediffmail (60 %), MSN (48 %), Bing (40 %), Ask jeeves (22 %), Excite (4 %) and Infoseek (2 %). Cent percent of the respondents from NDUAT used Google followed by Yahoo (96 %), Bing (24 %), Rediffmail (16 %), MSN (16 %), Ask jeeves (10 %), Excite (2 %) and Infoseek (2 %). Cent percent of the respondents from IAS,BHU used Google followed by Yahoo (75%), Bing (61.67 %), Rediffmail (48.33 %), MSN (12.50 %), Ask jeeves (3.33 %), Excite (0.83%) while none of the respondents used Infoseek.
4.3.6 Library webpage visit

Table 4.3.6 Distribution of respondents according to library webpage visit (n = 220)

<table>
<thead>
<tr>
<th>Visit the library webpage</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>29 (58)</td>
<td>06 (12)</td>
<td>104 (86.67)</td>
<td>139 (63.18)</td>
</tr>
<tr>
<td>No</td>
<td>21 (42)</td>
<td>44 (88)</td>
<td>16 (13.33)</td>
<td>81 (36.81)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>

It can be seen from Table 4.3.6 that majority (63.18 %) of the respondents visited the library web page while 36.81 percent of the respondents did not visit the library web page. Majority (58 %) of the respondents from CSAUAT visited the library web page while 42 percent did not visit the library web page. Majority (88 %) of the respondents from NDUAT did not visited the library web page and just 12 percent visited the library web page. Majority (86.67%) of the respondents from IAS,BHU visited the library web page followed by just 13.33 percent of the respondents who did not visit the library web page.
### 4.3.7 Opinion about the organization of information on the library web page/portal

#### Table 4.3.7 Distribution of respondents according to opinion about the organization of information on the library web page /portal  
\( n = 220 \)

<table>
<thead>
<tr>
<th>Organization of information</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Excellent</td>
<td>06 (12)</td>
<td>02 (4)</td>
<td>13 (10.83)</td>
<td>21 (9.55)</td>
</tr>
<tr>
<td>Good</td>
<td>24 (48)</td>
<td>05 (10)</td>
<td>67 (55.83)</td>
<td>96 (43.64)</td>
</tr>
<tr>
<td>Average</td>
<td>07 (14)</td>
<td>05 (10)</td>
<td>28 (23.33)</td>
<td>40 (18.18)</td>
</tr>
<tr>
<td>Poor</td>
<td>11 (22)</td>
<td>00 (0)</td>
<td>00 (0)</td>
<td>11 (5)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>02 (4)</td>
<td>38 (76)</td>
<td>12 (10)</td>
<td>52 (23.64)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>

![Fig. 4.14 Distribution of respondents according to opinion about the organization of information on the library web page /portal](image-url)

Fig. 4.14 Distribution of respondents according to opinion about the organization of information on the library web page /portal
Table 4.3.7 reveals that majority (43.64 %) of the respondents opined good about the organization of information on library web page/portal followed by don’t know (23.64 %), average (18.18 %), excellent (9.55 %) and poor (5 %). Majority (48 %) of the respondents from CSAUAT opined good about the organization of information on library web page/portal followed by poor (22 %), average (14 %), excellent (12 %) and don’t know (4 %). In NDUAT, Majority (76 %) of the respondents don’t know about the organization of information on library web page/portal followed by equal proportion of respondents with opinion of average and good (10 %) only 4 percent of the respondents indicated excellent opinion about the organization of information on library web page/portal. Majority (43.64 %) of the respondents from IAS, BHU opined good about the organization of information on library web page/portal followed by average (23.33 %), excellent (10.83 %) and don’t know (10 %). None of the respondents opined poor about the organization of information on library web page/portal.

4.3.8 Knowledge about E-resources

Table 4.3.8 Distribution of respondents according to knowledge about E-resources

<table>
<thead>
<tr>
<th>Know that E-books, E-journals, databases, consortium etc. are known as E-resources</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Yes</td>
<td>43 (86)</td>
<td>42 (84)</td>
<td>120 (100)</td>
<td>205 (93.18)</td>
</tr>
<tr>
<td>No</td>
<td>07 (14)</td>
<td>08 (16)</td>
<td>00 (0)</td>
<td>15 (6.82)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>
It is clear from Table 4.3.8 that majority (93.18%) of the respondents had knowledge about e-resources while only 6.82 percent of the respondents indicated their ignorance with the knowledge of e-resources. Majority (86%) of the respondents form CSAUAT had knowledge about e-resources while only 14 percent indicated no knowledge of e-resources. In NDUAT, majority (84%) of the respondents indicated knowledge about e-resources followed by no knowledge (16%). Cent percent of the respondents from IAS,BHU had knowledge about e-reouces.

### 4.3.9 Uses of E-resources

**Table 4.3.9 Distribution of respondents according to uses of the E-resources (n= 220)**

<table>
<thead>
<tr>
<th>Use</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>43 (86)</td>
<td>23 (46)</td>
<td>117 (97.5)</td>
<td>183 (83.18)</td>
</tr>
<tr>
<td>No</td>
<td>07 (14)</td>
<td>27 (54)</td>
<td>03 (2.5)</td>
<td>37 (16.82)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>

Fig. 4.15 Distribution of respondents according to knowledge about e-resources
Table 4.3.9 shows that majority (83.18 %) of the respondents were using the e-resources while only 16.82 percent were not using e-resources. Majority (86%) of the respondents from CSAUAT were using the e-resources while only 14 percent were not using e-resources. Majority (54%) of the respondents from NDUAT were not using the e-resources while 46 percent were using e-resources. Majority (97.50%) of the respondents from IAS,BHU were using the e-resources while only 2.5 percent were not using e-resources.

4.3.10 Awareness about Institute/university subscribed E-resources

Table 4.3.10 Distribution of respondents according to awareness about Institute/university subscribed E-resources

<table>
<thead>
<tr>
<th>Awareness</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>33 (66)</td>
<td>21 (42)</td>
<td>86 (71.67)</td>
<td>140 (63.64)</td>
</tr>
<tr>
<td>No</td>
<td>17 (34)</td>
<td>29 (58)</td>
<td>34 (28.33)</td>
<td>80 (36.36)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>

Fig. 4.16 Distribution of respondents according to uses of e-resources
Results and Discussion

It is evident from Table 4.3.10 that majority (63.64%) of the respondents were aware of the e-resources subscribed by their Institute/University while 36.36 percent of the respondents were not having awareness of the same. In CSAUAT, that majority (66%) of the respondents were aware of the e-resources subscribed by their Institute/University while 34 percent of the respondents were not having awareness of the same. Majority (58%) of the respondents from NDUAT were aware of the e-resources subscribed by their Institute/University while 42 percent of the respondents were not having awareness of the same. In IAS,BHU, majority (71.67%) of the respondents were aware of the e-resources subscribed by their Institute/University while 28.33 percent of the respondents were not having awareness of the same.

Fig. 4.17 Distribution of respondents according to awareness about Institute/university subscribed E-resources
4.3.11 Sources of awareness about E-resources

Table 4.3.11 Distribution of respondents according to sources of awareness about E-Resources (n= 220)

<table>
<thead>
<tr>
<th>Source</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute/ University library website</td>
<td>29 (58)</td>
<td>0 (0)</td>
<td>107 (89.17)</td>
<td>136 (61.82)</td>
</tr>
<tr>
<td>Information brochure of library, library notice &amp; training</td>
<td>24 (48)</td>
<td>31 (62)</td>
<td>13 (10.83)</td>
<td>68 (30.91)</td>
</tr>
<tr>
<td>Friends</td>
<td>28 (56)</td>
<td>49 (98)</td>
<td>120 (100)</td>
<td>197 (89.55)</td>
</tr>
<tr>
<td>Newspaper or other advertising contents</td>
<td>13 (26)</td>
<td>18 (36)</td>
<td>0 (0)</td>
<td>31 (14.09)</td>
</tr>
</tbody>
</table>

Table 4.3.11 shows that majority (89.55 %) of the respondents indicated friends as their source of awareness about e-resources followed by Institute/University website (61.82 %), Information brochure of library, library notice & training (30.91 %) and newspapers or
other advertising contents (14.09 %). Majority (58 %) of the respondents from CSAUAT indicated Institute/University library website as their source of awareness about e-resources followed by friends (56 %), Information brochure of library, library notice & training (48 %) and newspapers or other advertising contents (26 %) while majority (98 %) of the respondents from NDUAT indicated Friends as their source of awareness about e-resources followed by Information brochure of library, library notice & training (62 %) and newspapers or other advertising contents (36 %). Cent percent of the respondents from IAS, BHU indicated Friends as their source of awareness about e-resources followed by Institute/University library website (89.17 %), Information brochure of library, library notice & training (10.83%). None of the respondents from IAS,BHU indicated newspapers or other advertising contents as their source of awareness about e-resources.

### 4.3.12 Usefulness of E-resources

#### Table 4.3.12 Distribution of respondents according to Usefulness of E-resources (n=220)

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparing for Lectures/Speeches/Presentations</td>
<td>VMU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34 (68)</td>
<td>47 (94)</td>
<td>46 (38.3)</td>
<td>127 (57.73)</td>
</tr>
<tr>
<td></td>
<td>12 (24)</td>
<td>3 (6)</td>
<td>65 (54.17)</td>
<td>80 (36.36)</td>
</tr>
<tr>
<td></td>
<td>4 (8)</td>
<td>0 (0)</td>
<td>9 (7.5)</td>
<td>13 (5.91)</td>
</tr>
<tr>
<td></td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
<tr>
<td>Writing Articles/Research paper</td>
<td>VMU</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>38 (76)</td>
<td>36 (72)</td>
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## Results and Discussion

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<td>50</td>
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<tr>
<td>U</td>
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<td>50</td>
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<tr>
<td>NU</td>
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<td>2</td>
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<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>50</td>
<td>120</td>
<td>220</td>
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</tbody>
</table>

<table>
<thead>
<tr>
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<th>NU</th>
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</tr>
</thead>
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<td><strong>Leisure/Relaxation/Time Pass</strong></td>
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<td>NU</td>
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<tr>
<td>Total</td>
<td>50</td>
<td>50</td>
<td>120</td>
<td>220</td>
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<table>
<thead>
<tr>
<th></th>
<th>VMU</th>
<th>U</th>
<th>NU</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To Keep abreast with the latest Development</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VMU</td>
<td>16</td>
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<td>U</td>
<td>19</td>
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<td>50</td>
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<tr>
<td>NU</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>50</td>
<td>120</td>
<td>220</td>
</tr>
</tbody>
</table>

**Note:** VMU = Very Much Useful, U = Useful, NU = Not Useful
Table 4.3.12 reveals that majority (57.73%) of the respondents indicated e-resources as very much useful for preparing Lectures/Speeches/ Presentations followed by useful (36.36%) and not useful (5.91%). Majority (68%) of the respondents from CSAUAT indicated e-resources as very much useful for preparing Lectures/Speeches/ Presentations followed by useful (24%) and not useful (8%) while majority (94%) of the respondents from NDUAT indicated e-resources as very much useful for preparing Lectures/Speeches/ Presentations followed by useful (6%) with none of the respondents who indicated it as not useful. Majority (54.17%) of the respondents from IAS,BHU indicated e-resources as useful for preparing Lectures/Speeches/ Presentations followed by very much useful (38.3%) and not useful (7.5%).

Majority (70.45%) of the respondents indicated e-resources as very much useful for writing articles/research papers followed by useful (29.55%). Majority (76%) of the respondents from CSAUAT indicated e-resources as very much useful for writing articles/research papers followed by useful (24%) while majority (72%) of the respondents from NDUAT indicated e-resources as very much useful for writing articles/research papers followed by useful (28%). Majority (67.5%) of the respondents from IAS,BHU indicated e-resources as very much useful for preparing writing articles/research papers followed by useful (32.5%).

Majority (47.43%) of the respondents indicated e-resources as useful for preparing research project followed by very much useful (36.36%) and not useful (15.91%). Majority (46%) of the respondents from CSAUAT indicated e-resources as very much useful for preparing research project followed by useful (36%) and not useful (18%) while majority (52%) of the respondents from NDUAT indicated e-resources as not useful for preparing research project followed by useful (34%) with none of the respondents who indicated it as not useful. Majority (58.33%) of the respondents from IAS,BHU indicated e-resources as useful for preparing research project followed by very much useful (41.67%) with none of the respondents who indicated it as not useful.

Equal (49.55%) strength of the respondents indicated e-resources as useful and very much useful for writing books/assignments followed not useful (0.91%). Majority (58%) of the respondents from CSAUAT indicated e-resources as very much useful for writing books/assignments followed by useful (42%) and with none of the respondents who
indicated it as not useful while majority (56 %) of the respondents from NDUAT indicated e-resources as useful for writing books/assignments followed by very much useful (42 %) and not useful (4 %). Equal strength (50 %) of the respondents from IAS,BHU indicated e-resources as useful and very much useful for writing books/assignments with none of the respondents who indicated it as not useful.

Majority (71.36 %) of the respondents indicated e-resources as useful for examination preparation followed by very much useful (27.72 %) and not useful (0.91 %). Majority (54 %) of the respondents from CSAUAT indicated e-resources as very much useful for examination preparation followed by useful (44 %) and not useful (2 %) while majority (68 %) of the respondents from NDUAT indicated e-resources as useful for examination preparation followed by very much useful (32 %) with none of the respondents who indicated it as not useful. Majority (84.17 %) of the respondents from IAS,BHU indicated e-resources as useful for examination preparation followed by very much useful (27.72 %) and not useful (0.91 %).

Majority (63.64 %) of the respondents indicated e-resources as useful for accessing/knowing general information followed by very much useful (34.55 %) and not useful (1.82 %). Majority (56 %) of the respondents from CSAUAT indicated e-resources as very much useful for accessing/knowing general information followed by useful (40 %) and not useful (4 %) while majority (54%) of the respondents from NDUAT indicated e-resources as useful for accessing/knowing general information followed by very much useful (42 %) and not useful (4 %). Majority (58.33 %) of the respondents from IAS,BHU indicated e-resources as useful for accessing/knowing general information followed by very much useful (41.67 %) with none of the respondents who indicated it as not useful.

Majority (60 %) of the respondents indicated e-resources as useful for leisure/relaxation/time pass followed by not useful (30.45 %) and very much useful (9.55 %). Majority (38%) of the respondents from CSAUAT indicated e-resources as useful for leisure/relaxation/time pass followed by not useful (34 %) and very much useful (28%) while majority (66 %) of the respondents from NDUAT indicated e-resources as useful for leisure/relaxation/time pass followed by not useful (24%) and very much useful (10 %). Majority (66.67 %) of the respondents from IAS,BHU indicated e-resources as useful for leisure/relaxation/time pass followed by not useful (31.67 %) and very much useful (1.67 %).
Majority (61.82 %) of the respondents indicated e-resources as useful for keeping abreast with the latest development followed by very much useful (27.73 %) and not useful (10.45 %). Majority (62%) of the respondents from CSAUAT indicated e-resources as useful for keeping abreast with the latest development followed by very much useful (32 %) and not useful (6 %) while majority (58 %) of the respondents from NDUAT indicated e-resources as useful for keeping abreast with the latest development followed by very much useful (38%) and not useful (4 %). Majority (63.33 %) of the respondents from IAS,BHU indicated e-resources as useful for keeping abreast with the latest development followed by very much useful (21.67 %) and not useful (15 %).

4.3.13 Reasons for using E-resources

Table 4.3.13 Distribution of respondents according to reasons for using E-resources (n=220)

<table>
<thead>
<tr>
<th>Reasons</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td></td>
</tr>
<tr>
<td>Quick in searching</td>
<td>40(80)</td>
<td>50(100)</td>
<td>120(100)</td>
<td>210(95.45)</td>
</tr>
<tr>
<td>Easy accessibility</td>
<td>49(98)</td>
<td>34(68)</td>
<td>111(92.5)</td>
<td>194(88.18)</td>
</tr>
<tr>
<td>Easy downloading</td>
<td>22(44)</td>
<td>16(32)</td>
<td>21(17.5)</td>
<td>59(26.82)</td>
</tr>
<tr>
<td>Universal accessibility</td>
<td>28(56)</td>
<td>33(66)</td>
<td>89(74.17)</td>
<td>150(68.18)</td>
</tr>
<tr>
<td>Multiple access</td>
<td>11(22)</td>
<td>17(34)</td>
<td>19(15.83)</td>
<td>47(21.36)</td>
</tr>
</tbody>
</table>
It is evident from Table 4.3.13 that majority (95.45 %) of the respondents indicated quick searching as the main reason for using e-resources followed by easy accessibility (88.18 %), universal accessibility (68.18 %), easy downloading (26.82 %) and multiple access (21.36 %). Majority (98%) of the respondents from CSAUAT indicated easy accessibility as the main reason for using e-resources followed by Quick in searching (80%), Universal accessibility (56 %), Easy downloading (44 %) and multiple access (22 %) while cent percent of the respondents from NDUAT indicated Quick in searching as the main reason for using e-resources followed by easy accessibility (68 %), Universal accessibility (66 %),) multiple access (34%) and Easy downloading (32 %). Cent percent of the respondents from NDUAT indicated Quick in searching as the main reason for using e-resources followed by easy accessibility (92.5 %), Universal accessibility (74.17 %),) Easy downloading (17.50 %)and multiple access (15.83 %).
4.3.14 Frequency of using E-resources

Table 4.3.14 Distribution of respondents according to frequency of Using the E-resources

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<thead>
<tr>
<th>Frequency</th>
<th>Institution</th>
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<tr>
<td></td>
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<td>NDUAT</td>
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<tr>
<td>Daily</td>
<td>31 (62)</td>
<td>40 (80)</td>
</tr>
<tr>
<td></td>
<td>120 (54.55)</td>
<td></td>
</tr>
<tr>
<td>2-3 times in week</td>
<td>7 (14)</td>
<td>2 (4)</td>
</tr>
<tr>
<td></td>
<td>68 (30.91)</td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>8 (16)</td>
<td>2 (4)</td>
</tr>
<tr>
<td></td>
<td>11 (5)</td>
<td></td>
</tr>
<tr>
<td>Occasionally</td>
<td>4 (8)</td>
<td>6 (12)</td>
</tr>
<tr>
<td></td>
<td>21 (9.55)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
</tr>
<tr>
<td></td>
<td>220 (100)</td>
<td></td>
</tr>
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</table>

Fig. 4.20 Distribution of respondents according to frequency of using the E-resources

Table 4.3.14 shows that majority (54.55 %) of the respondents used the e-resources frequently followed by 2-3 times in a week (30.91 %), occasionally (9.55 %) and weekly (5 %). Majority (62 %) of the respondents from CSAUAT used the e-resources daily followed by weekly (16 %), 2-3 times in a week (14 %) and occasionally (8 %) while majority (80 %) of the respondents from NDUAT used the e-resources daily followed by occasionally (12 %),
2-3 times in a week (4 %) and weekly (4 %). Majority (49.17 %) of the respondents from IAS,BHU used the e-resources 2-3 times in a week followed by daily (40.83 %), occasionally (9.17 %) and weekly (0.83 %).

4.3.15 Information seeking (which source you consult for information for research/study)

Table 4.3.15 Distribution of respondents according to Information sources (n=220)

<table>
<thead>
<tr>
<th>Information source</th>
<th>CSAUAT F(%)</th>
<th>NDUAT F(%)</th>
<th>I.A.S, B.H.U F(%)</th>
<th>Total F(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E News Papers</td>
<td>42 (84)</td>
<td>49 (98)</td>
<td>114 (95)</td>
<td>205 (93.18)</td>
</tr>
<tr>
<td>Current Electronic journals</td>
<td>43 (86)</td>
<td>46 (92)</td>
<td>112 (93.33)</td>
<td>201 (91.36)</td>
</tr>
<tr>
<td>Back volumes of electronic journals</td>
<td>35 (70)</td>
<td>21 (42)</td>
<td>88 (73.33)</td>
<td>144 (65.45)</td>
</tr>
<tr>
<td>On-line database</td>
<td>39 (78)</td>
<td>47 (94)</td>
<td>107 (89.17)</td>
<td>193 (87.73)</td>
</tr>
<tr>
<td>Electronic books</td>
<td>30 (60)</td>
<td>11 (22)</td>
<td>58 (48.33)</td>
<td>99 (45)</td>
</tr>
<tr>
<td>Online Conference Proceedings</td>
<td>24 (48)</td>
<td>15 (30)</td>
<td>38 (31.67)</td>
<td>77 (35)</td>
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<tr>
<td>Social Networking sites</td>
<td>45 (90)</td>
<td>44 (88)</td>
<td>94 (78.33)</td>
<td>183 (83.18)</td>
</tr>
<tr>
<td>Blogs</td>
<td>10 (20)</td>
<td>2 (4)</td>
<td>19 (15.83)</td>
<td>31 (14.09)</td>
</tr>
<tr>
<td>Institutional Repository</td>
<td>12 (24)</td>
<td>4 (8)</td>
<td>24 (20)</td>
<td>40 (18.18)</td>
</tr>
<tr>
<td>Open Source Literature</td>
<td>11 (22)</td>
<td>32 (64)</td>
<td>66 (55)</td>
<td>109 (49.55)</td>
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</tbody>
</table>
Results and Discussion

<table>
<thead>
<tr>
<th>Information Source</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
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</thead>
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<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Current Electronic journals</td>
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<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Back volumes of electronic journals</td>
<td>31</td>
<td>31</td>
<td>31</td>
<td>95</td>
</tr>
<tr>
<td>CD ROM/DVD</td>
<td>46</td>
<td>46</td>
<td>46</td>
<td>138</td>
</tr>
<tr>
<td>Website</td>
<td>43</td>
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<td>159</td>
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<td>5</td>
<td>0</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>Online Conference Proceedings</td>
<td>3</td>
<td>27</td>
<td>19</td>
<td>59</td>
</tr>
<tr>
<td>Institutional Repository</td>
<td>3</td>
<td>27</td>
<td>19</td>
<td>59</td>
</tr>
<tr>
<td>Open Source Literature</td>
<td>3</td>
<td>27</td>
<td>19</td>
<td>59</td>
</tr>
<tr>
<td>Subject Gateways</td>
<td>3</td>
<td>27</td>
<td>19</td>
<td>59</td>
</tr>
<tr>
<td>Website</td>
<td>61</td>
<td>61</td>
<td>61</td>
<td>183</td>
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<td>ETDs</td>
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<td>14</td>
<td>14</td>
<td>42</td>
</tr>
<tr>
<td>CD ROM/DVD</td>
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<td>19</td>
<td>19</td>
<td>47</td>
</tr>
</tbody>
</table>

Fig. 4.21 Distribution of respondents according to information source

It is evident from Table 4.3.15 that majority (93.18 %) of the respondents consulted E News Papers for information related to research/study followed by Current Electronic journals (91.36 %), On-line database (87.73 %), Social Networking sites (83.18 %), Website (67.72 %), Back volumes of electronic journals (65.45 %), Open Source Literature (49.55 %), Electronic books (45 %), Online Conference Proceedings (35 %), CD ROM/DVD (22.27 %), Subject Gateways (20.91 %), Institutional Repository (18.18 %), Blogs (14.09 %) and ETDs (8.64 %). Majority (90 %) of the respondents from CSAUAT consulted Social Networking site for information related to research/study followed by Current Electronic journals (86 %), Website (86 %), E News Papers (84 %), On-line database (78 %), Back volumes of electronic journals (72 %), Social Networking sites (71 %), Institutional Repository (62 %), Online Conference Proceedings (50 %), CD ROM/DVD (44 %), Subject Gateways (25 %), Electronic books (20 %) and ETDs (14 %).
journals (70 %), Electronic books (60 %), Online Conference Proceedings (48 %), Institutional Repository (24 %), Open Source Literature (22 %), Blogs (20 %), Subject Gateways (18 %), ETDs (10 %) and CD ROM/DVD (6 %). Majority (98 %) of the respondents from NDUAT consulted E News Papers for information related to research/study followed by On-line database (94 %), Current Electronic journals (92 %), Website (90 %), Social Networking sites (88 %), Open Source Literature (64 %), CD ROM/DVD (54 %), Back volumes of electronic journals (42 %), Online Conference Proceedings (30 %), Electronic books (22 %), Subject Gateways (12 %), Institutional Repository (8 %), Blogs (4 %) while none of the respondents consulted ETDs. Majority (95 %) of the respondents from IAS, BHU consulted E News Papers for information related to research/study followed by Current Electronic journals (93.33 %), On-line database (89.17 %), Social Networking sites (78.33 %), Back volumes of electronic journals (73.33 %), Open Source Literature (55 %), Website (50.83 %), Electronic books (48.33 %), Subject Gateways (25.83 %), Online Conference Proceedings (31.67 %), Institutional Repository (20 %), Blogs (15.83 %), CD ROM/DVD (15.83 %) and ETDs (11.67 %).

4.3.16 Knowledge about subscribed consortium

Table 4.3.16 Distribution of respondents according to knowledge about subscribed 
Consortium

<table>
<thead>
<tr>
<th>Library have any subscribed consortium</th>
<th>CSA</th>
<th>NDUAT</th>
<th>BHU</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>33  (66)</td>
<td>5    (10)</td>
<td>102 (85)</td>
<td>140 (63.64)</td>
</tr>
<tr>
<td>No</td>
<td>17 (34)</td>
<td>45   (90)</td>
<td>18  (15)</td>
<td>80  (36.36)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50   (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>
Results and Discussion

Table 4.3.16 reveals that majority (63.64 %) of the respondents had knowledge about the subscribed consortium of their library followed by 36.36 per cent of the respondents who were not having the knowledge about the same. Majority (66 %) of the respondents from CSAUAT had knowledge about subscribed consortium of their library while 34 percent showed ignorance about the same. Majority (90 %) of the respondents from NDUAT had no knowledge about subscribed consortium of their library while 10 percent indicated knowledge about the same. Majority (85 %) of the respondents from IAS,BHU had knowledge about subscribed consortium of their library while 15 percent indicated ignorance about the same.

4.3.17 Use of subscription based E-resources

Table 4.3.17 Distribution of respondents according to use of the subscription based E-resources for study and research (n=220)

<table>
<thead>
<tr>
<th>Use</th>
<th>Institution/University</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSA</td>
<td>NDUAT</td>
</tr>
<tr>
<td>Yes</td>
<td>33 (66)</td>
<td>10 (20)</td>
</tr>
<tr>
<td>No</td>
<td>17 (34)</td>
<td>40 (80)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
</tr>
</tbody>
</table>

Fig. 4.22 Distribution of respondents according to knowledge about subscribed consortium
It is clear from Table 4.3.17 that majority (67.27 %) of the respondents used subscription based e-resources for their study and research while 32.73 percent of the respondents did not use it for the same. Majority (66 %) of the respondents from CSAUAT used subscription based e-resources for their study and research while 34 percent did not use for the same. In NDUAT, majority (80 %) of the respondents did not use subscription based e-resources for their study and research followed by just 20 percent of the respondents who used it for the same. Majority (87.5 %) of the respondents from IAS,BHU used subscription based e-resources for their study and research while 12.5 percent did not use it for the same.

Table 4.3.18 Distribution of respondents according to use of Subscription based E-resources (n=220)

<table>
<thead>
<tr>
<th>Subscription based E-Resources</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web of Science</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>48 (40)</td>
<td>40 (18.18)</td>
</tr>
<tr>
<td>Annual Reviews</td>
<td>19 (38)</td>
<td>12 (24)</td>
<td>62 (51.67)</td>
<td>93 (42.27)</td>
</tr>
<tr>
<td>AGRICOLA</td>
<td>18 (36)</td>
<td>0 (0)</td>
<td>49 (40.83)</td>
<td>67 (30.45)</td>
</tr>
<tr>
<td>CAB Abstracts</td>
<td>13 (26)</td>
<td>04 (8)</td>
<td>38 (31.67)</td>
<td>55 (25.00)</td>
</tr>
<tr>
<td>Publisher</td>
<td>Total</td>
<td>Indexed</td>
<td>Journal Papers</td>
<td>Access</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------</td>
<td>---------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>Elsevier Science</td>
<td>26</td>
<td>0</td>
<td>54</td>
<td>80</td>
</tr>
<tr>
<td>Nature</td>
<td>0</td>
<td>0</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Royal Society of Chemistry</td>
<td>0</td>
<td>0</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>American Chemical Society</td>
<td>0</td>
<td>0</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Science citation Index</td>
<td>0</td>
<td>0</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>SCI Finder</td>
<td>6</td>
<td>(12)</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>Science Online</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Springer Link</td>
<td>17</td>
<td>(34)</td>
<td>9</td>
<td>58</td>
</tr>
<tr>
<td>Library and Information Science Abstracts</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>51</td>
</tr>
<tr>
<td>Cambridge University Press</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Blackwell Publishing</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Oxford University Press</td>
<td>2</td>
<td>(4)</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Science Direct</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>62</td>
</tr>
<tr>
<td>Taylor and Francis</td>
<td>19</td>
<td>(38)</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>Wiley-Blackwell Publishing</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>Sage HSS Online Journals</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>51</td>
</tr>
<tr>
<td>FSTA</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>47</td>
</tr>
<tr>
<td>JSTOR</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>52</td>
</tr>
<tr>
<td>Emerald</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>64</td>
</tr>
<tr>
<td>Indian Journals</td>
<td>23</td>
<td>(46)</td>
<td>31</td>
<td>72</td>
</tr>
<tr>
<td>CeRA</td>
<td>28</td>
<td>(56)</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>E-ShodhSindhu</td>
<td>0</td>
<td>(0)</td>
<td>0</td>
<td>91</td>
</tr>
</tbody>
</table>
It is evident from Table 4.3.18 that majority (57.27 %) of the respondents used Indian Journal followed by Annual Reviews (42.27 %), Taylor and Francis (41.36 %), E-ShodhSindhu (41.36 %), Springer Link (38.18 %), Elsevier Science (36.36 %), CeRA (31.82 %), AGRICOLA (30.45 %) Emerald (29.09 %), Science citation Index (28.64 %), Science Direct (28.18 %), CAB Abstracts (25 %), JSTOR (23.64 %), Library and Information Science Abstracts (LISA) (23.18 %), Sage HSS Online Journals (23.18 %), FSTA (21.36 %), Cambridge University Press (20 %), Web of Science (18.18 %), Royal Society of Chemistry (18.18 %), Nature (17.73 %), Wiley-Blackwell Publishing (15 %), American Chemical Society (14.09 %), SCI Finder (12.27 %), Cambridge University Press (8.64 %), Oxford University press (5 %), Blackwell Publishing (3.18 %), Science Online (2.72 %). Majority (56 %) of the respondents from CSAUAT used CeRA followed by Elsevier Science (52%), Indian Journals (46%), Annual Reviews (38%), Taylor and Francis (38%) AGRICOLA (36%), Springer Link (34 %), CAB Abstracts (26%), SCI Finder (12%) and Oxford University press (4%) only. Also majority (80 %) of the respondents from NDUAT used CeRA followed by Indian Journals (62 %), Taylor and Francis (48%), Springer Link (18 %), Annual Reviews (24%) CAB Abstracts (8%) and SCI Finder (4%) only. Majority (75.83 %) of the respondents from IAS, BHU used E-ShodhSindhu followed by Indian Journals (57.62 %), Emerald (53.33 %), American Science citation Index (52.50%), Annual Reviews (51.67%), Science Direct (51.67%), Springer Link (48.33 %), JSTOR (43.33 %), Sage HSS Online Journals (42.50 %), Library and Information Science Abstracts (LISA) (42.5 %),
Elsevier Science (45%), AGRICOLA (40.83 %), Web of Science (40 %), FSTA (39.17 %),
Cambridge University Press (36.67 %), Royal Society of Chemistry (33.33%), Nature
(32.5%), CAB Abstracts (31.67%), Wiley-Blackwell Publishing (27.50 %), Chemical Society
(25.83%), Taylor and Francis (21.82 %), Cambridge University Press (15.83 %), SCI Finder
(15.83%), Oxford University press (7.5%), Blackwell Publishing (5.8%), Science Online
(4%) while no one used CeRA

4.3.19 Use of university/institute subscribed E-resources

Table 4.3.19 Distribution of respondents according to use of university/institute
subscribed E-resources

<table>
<thead>
<tr>
<th>Use</th>
<th>Institution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSAUAT F(%)</td>
<td>NDUAT F(%)</td>
</tr>
<tr>
<td>Yes</td>
<td>27 (54)</td>
<td>3 (6)</td>
</tr>
<tr>
<td>No</td>
<td>23 (46)</td>
<td>47 (94)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
</tr>
</tbody>
</table>

Fig. 4.25 Distribution of respondents according to use of university/institute subscribed E-resources
Table 4.3.19 shows that majority (54.09 %) of the respondents did not use e-resources subscribed by their University/Institute while 45.91 percent of the respondents used the e-resources subscribed by their University/Institute. Majority (54 %) of the respondents from CSAUAT used e-resources subscribed by their University/Institute while 46 percent of the respondents did not use the e-resources subscribed by their University/Institute. Majority (94 %) of the respondents from NDUAT did not use e-resources subscribed by their University/Institute while just 6 percent of the respondents used the e-resources subscribed by their University/Institute. In IAS,BHU, majority (59.17 %) of the respondents used e-resources subscribed by their University/Institute while 40.83 percent of the respondents did not use the e-resources subscribed by their University/Institute

4.3.20 Use of open access E-resources

Table 4.3.20 Distribution of respondents according to Use of open access E-resources

<table>
<thead>
<tr>
<th>Use</th>
<th>University/Institution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSA</td>
<td>NDUAT</td>
</tr>
<tr>
<td>Yes</td>
<td>45 (90)</td>
<td>45 (90)</td>
</tr>
<tr>
<td>No</td>
<td>5 (10)</td>
<td>5 (10)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
</tr>
</tbody>
</table>

Fig. 4.26 Distribution of respondents according to Use of open access E-resources
Table 4.3.20 indicates that majority (92.73%) of the respondents used the open access E-resources available on the internet while 7.27 per cent of the respondent didn’t use the open access E-resources available on the internet. Majority (90%) of the respondents from CSAUAT used the open access E-resources available on the internet while 10 per cent of the respondent didn’t use the open access E-resources available on the internet. Majority (90%) of the respondents from NDUAT used the open access E-resources available on the internet while 10 per cent of the respondent didn’t use the open access E-resources available on the internet. Majority (95%) of the respondents from IAS,BHU used the open access E-resources available on the internet while just 5 per cent of the respondent didn’t use the open access E-resources available on the internet.

Table 4.3.21 Distribution of respondents according to use of open access E-resources (n=220)

<table>
<thead>
<tr>
<th>Open access E-resources</th>
<th>CSAUAT F(%)</th>
<th>NDUAT F(%)</th>
<th>I.A.S, B.H.U F(%)</th>
<th>Total F(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRIS</td>
<td>32 (64)</td>
<td>30 (60)</td>
<td>75 (62.5)</td>
<td>137 (62.27)</td>
</tr>
<tr>
<td>DOAJ</td>
<td>31 (62)</td>
<td>30 (60)</td>
<td>31 (25.83)</td>
<td>92 (41.81)</td>
</tr>
<tr>
<td>Science.gov</td>
<td>11 (22)</td>
<td>4 (8)</td>
<td>33 (27.5)</td>
<td>48 (21.82)</td>
</tr>
<tr>
<td>Science Open</td>
<td>16 (32)</td>
<td>6 (12)</td>
<td>71 (59.17)</td>
<td>93 (42.27)</td>
</tr>
<tr>
<td>WorldWideScience</td>
<td>17 (34)</td>
<td>5 (10)</td>
<td>36 (30)</td>
<td>58 (26.36)</td>
</tr>
<tr>
<td>Open J-Gate</td>
<td>31 (62)</td>
<td>36 (72)</td>
<td>45 (37.5)</td>
<td>112 (50.91)</td>
</tr>
<tr>
<td>OAlster</td>
<td>5 (10)</td>
<td>4 (8)</td>
<td>10 (8.33)</td>
<td>19 (8.64)</td>
</tr>
<tr>
<td>Google Scholar</td>
<td>39 (78)</td>
<td>40 (80)</td>
<td>104 (86.67)</td>
<td>183 (83.18)</td>
</tr>
<tr>
<td>FreeFullPDF</td>
<td>24 (48)</td>
<td>13 (26)</td>
<td>44 (36.67)</td>
<td>81 (36.82)</td>
</tr>
<tr>
<td>re:search</td>
<td>5 (10)</td>
<td>7 (14)</td>
<td>28 (23.33)</td>
<td>40 (18.18)</td>
</tr>
</tbody>
</table>
Results and Discussion

<table>
<thead>
<tr>
<th>ERIC</th>
<th>7</th>
<th>0</th>
<th>0</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(14)</td>
<td>(0)</td>
<td>(0)</td>
<td>(3.18)</td>
</tr>
</tbody>
</table>

Fig. 4.27 Distribution of respondents according to Use of open access E-resources

It is evident from Table 4.3.21 that majority (83.18 %) of the respondents used Google Scholar followed by AGRIS (62.27 %), Open J-Gate (50.91 %), Science Open (42.27 %), DOAJ (41.81 %), FreeFullPDF (36.82 %), WorldWideScience (26.36 %), Science gov (21.82 %), re:search (18.18 %), OAlster (8.64 %) and ERIC (3.18 %). Majority (78 %) of the respondents from CSAUAT used Google Scholar followed by AGRIS (64 %), DOAJ (62 %), Open J-Gate (62 %), FreeFullPDF (48 %), WorldWideScience (34 %), Science Open (32 %), Science gov (22 %), ERIC (14 %), OAlster (10 %) and re:search (10 %) while majority (80 %) of the respondents from NDUAT used Google Scholar followed by Open J-Gate (72 %), AGRIS (60 %), DOAJ (60 %), FreeFullPDF (26 %), re:search (14 %), Science Open (12 %), WorldWideScience (10 %), Science gov (8 %) and OAlster (8 %). Majority (86.67 %) of the respondents from IAS,BHU used Google Scholar followed by AGRIS (62 %), Science Open (59.17 %), Open J-Gate (37.5 %), FreeFullPDF (36.67 %), WorldWideScience (30 %), Science gov (27.5 %), DOAJ (25.83 %), re:search (23.33 %) and OAlster (8.33 %). None of the respondents from NDUAT and IAS,BHU used ERIC.
4.3.22 Use of Social Networking Sites for study/research

Table 4.3.22 Distribution of respondents according to Use of Social Networking Sites for study/research (n=220)

<table>
<thead>
<tr>
<th>Use</th>
<th>Institution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSA</td>
<td>NDUAT</td>
</tr>
<tr>
<td>Yes</td>
<td>45</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>(90)</td>
<td>(96)</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(10)</td>
<td>(4)</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>(100)</td>
<td>(100)</td>
</tr>
</tbody>
</table>

Fig. 4.28 Distribution of respondents according to Use of Social Networking Sites for study/research

Table 4.3.22 shows that majority (83.64 %) of the respondents used the social networking sites for study/research while 16.36 per cent of the respondent didn’t use the social networking sites for study/research. Majority (90 %) of the respondents from CSAUAT used the social networking sites for study/research while 10 per cent of the respondent didn’t use the social networking sites for study/research. Majority (96 %) of the respondents from NDUAT used the social networking sites for study/research while just 4 per cent of the respondent didn’t use the social networking sites for study/research. Majority (75.83 %) of the respondents from IAS,BHU used the social networking sites for study/research.
study/research while 24.17 per cent of the respondent didn’t use the social networking sites for study/research.

Table 4.3.23 Distribution of respondents according to Social Networking Sites Used for Study/research (n=220)

<table>
<thead>
<tr>
<th>Social networking sites</th>
<th>University/Institution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSAUAT</td>
<td>NDUAT</td>
</tr>
<tr>
<td>Facebook</td>
<td>39 (78)</td>
<td>42 (84)</td>
</tr>
<tr>
<td>Twitter</td>
<td>6 (12)</td>
<td>2 (4)</td>
</tr>
<tr>
<td>Whatsapp</td>
<td>30 (60)</td>
<td>42 (84)</td>
</tr>
<tr>
<td>Email</td>
<td>9 (18)</td>
<td>27 (54)</td>
</tr>
<tr>
<td>Linkedin</td>
<td>4 (8)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Academia edu</td>
<td>0 (0)</td>
<td>2 (4)</td>
</tr>
<tr>
<td>Research Gate</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Google +</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Instagram</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Wechat</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Slideshare</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

Fig. 4.29 Distribution of respondents according to Social Networking Sites Used for Study/research
Table 4.3.23 reveals that majority (75.45 %) of the respondents used Facebook for study/research followed by Whatsapp (47.73 %), E-mail (35 %), Twitter (11.36 %), Linkedin (8.64 %), Research Gate (4.09 %), Google + (2.73 %), Academia edu (1.82 %), Slideshar (0.91 %), Instagram (0.45 %) and Wechat (0.45 %). Majority (78 %) of the respondents from CSAUAT used Facebook for study/research followed by Whatsapp (60 %), E-mail (18 %) and Linkedin (8 %) while majority (84 %) of the respondents from NDUAT used Facebook and Whatsapp for study/research followed by E-mail (54 %) and Academia edu (4 %). Majority (70.83 %) of the respondents from IAS,BHU used Facebook for study/research followed by E-mail (34.17 %), Whatsapp (27.5 %), Twitter (14.17 %), Linkedin (12.5 %), Research Gate (7.5 %), Google + (5 %), Academia edu (1.67 %), Slideshar (1.67 %), Instagram (0.83 %) and Wechat (0.83 %).

4.3.24 Formats of E- resources used

Table 4.3.24 Distribution of respondents according to Formats of E- resources used

<table>
<thead>
<tr>
<th>Formats</th>
<th>CSAUAT (n=220)</th>
<th>NDUAT (n=220)</th>
<th>I.A.S, B.H.U (n=220)</th>
<th>Total (n=220)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>PDF</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
<tr>
<td>HTML</td>
<td>45 (90)</td>
<td>44 (88)</td>
<td>118 (98.33)</td>
<td>207 (94.091)</td>
</tr>
<tr>
<td>MS Word</td>
<td>47 (94)</td>
<td>50 (100)</td>
<td>114 (95)</td>
<td>211 (95.91)</td>
</tr>
</tbody>
</table>

Fig. 4.30 Distribution of respondents according to Formats of E- resources used
Table 4.3.24 indicates that cent percent of the respondents used PDF format of e-resources followed by MS Word format (95.91 %), HTML format (94.09 %) and SGML format (5 %). Cent percent of the respondents from CSAUAT used PDF format of e-resources followed by MS Word format (94 %) and HTML format (90 %). Cent percent of the respondents from NDUAT used PDF format and MS Word format of e-resources followed by HTML format (88%). Cent percent of the respondents from IAS,BHU used PDF format of e-resources followed by HTML format (98.33 %) and MS Word format (95 %)

4.3.25 Preferred Medium for information collection

Table 4.3.25 Distribution of respondents according to Preferred Medium for information collection (n=220)

<table>
<thead>
<tr>
<th>Preferred Medium</th>
<th>CSAUAT (F(%))</th>
<th>NDUAT (F(%))</th>
<th>I.A.S, B.H.U (F(%))</th>
<th>Total (F(%))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print</td>
<td>21 (42)</td>
<td>16 (32)</td>
<td>40 (33.33)</td>
<td>77 (35)</td>
</tr>
<tr>
<td>Electronic</td>
<td>29 (58)</td>
<td>34 (68)</td>
<td>80 (66.67)</td>
<td>143 (65)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>

It is clear from Table 4.3.25 that majority (65 %) of the respondents preferred electronic medium for collecting information while 35 percent preferred electronic medium
for collecting information. Majority (58 %) of the respondents from CSAUAT preferred electronic medium over print medium (42 %) for collecting information while majority (68 %) of the respondents from NDUAT preferred electronic medium over print medium (32 %) for collecting information. Also in IAS,BHU, majority (66.67 %) of the respondents preferred electronic medium over print medium for collecting information.

4.3.26 Perceived relevance of Institute/University subscribed E-resources for study and research

Table 4.3.26 Distribution of respondents according to perceived relevance of Institute/University subscribed E-resources for Study and Research (n=220)

<table>
<thead>
<tr>
<th>Relevant</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Yes</td>
<td>39</td>
<td>9</td>
<td>109</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td>(78)</td>
<td>(18)</td>
<td>(90.83)</td>
<td>(71.36)</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
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<td>63</td>
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<td></td>
<td>(22)</td>
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<td>(9.16)</td>
<td>(28.64)</td>
</tr>
<tr>
<td>Total</td>
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<td>50</td>
<td>120</td>
<td>220</td>
</tr>
<tr>
<td></td>
<td>(100)</td>
<td>(100)</td>
<td>(100)</td>
<td>(100)</td>
</tr>
</tbody>
</table>

Fig. 4.32 Distribution of respondents according to perceived relevance of Institute/University subscribed E-resources for Study and Research
Table 4.3.26 reveals that majority (71.36 %) of the respondents perceived the e-resources subscribed by their Institute/University relevant for study and research while 28.64 percent perceived the e-resources subscribed by their Institute/University irrelevant for study and research. Majority (78 %) of the respondents from CSAUAT perceived the e-resources subscribed by their Institute/University relevant for study and research while 22 percent respondents perceived the e-resources subscribed by their Institute/University irrelevant for study and research. Majority (82 %) of the respondents from NDUAT perceived the e-resources subscribed by their Institute/University irrelevant for study and research while 18 percent respondents perceived the e-resources subscribed by their Institute/University relevant for study and research. Majority (90.83 %) of the respondents from IAS,BHU perceived the e-resources subscribed by their Institute/University relevant for study and research while just 9.16 percent respondents perceived the e-resources subscribed by their Institute/University irrelevant for study and research.

4.3.27 Recommendation for subscribing E-resources by the Institute/University

Table 4.3.27 Distribution of respondents according to recommendation for subscribing E-resources by the Institute/University (n=220)

<table>
<thead>
<tr>
<th>Recommended E-resources</th>
<th>CSAUAT F(%)</th>
<th>NDUAT F(%)</th>
<th>I.A.S, B.H.U F(%)</th>
<th>Total F(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-resource Consortia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CeRA</td>
<td>00 (0)</td>
<td>00 (0)</td>
<td>10 (4.17)</td>
<td>10 (4.55)</td>
</tr>
<tr>
<td>E-Journals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISEE</td>
<td>01 (2)</td>
<td>00 (0)</td>
<td>00 (0)</td>
<td>01 (0.45)</td>
</tr>
<tr>
<td>Indian Agriculture Sciences</td>
<td>04 (8)</td>
<td>00 (0)</td>
<td>00 (0)</td>
<td>04 (1.82)</td>
</tr>
<tr>
<td>Indian journal of horticulture</td>
<td>00 (0)</td>
<td>00 (0)</td>
<td>01 (0.83)</td>
<td>01 (0.45)</td>
</tr>
<tr>
<td>E-Journal of plant breeding</td>
<td>00 (0)</td>
<td>00 (0)</td>
<td>21 (17.5)</td>
<td>21 (9.54)</td>
</tr>
</tbody>
</table>
## Results and Discussion

<table>
<thead>
<tr>
<th>Journal Name</th>
<th>Volume</th>
<th>Issue</th>
<th>Year</th>
<th>Impact Factor</th>
<th>Cite Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>IJAS</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>(3.33)</td>
<td>(1.82)</td>
</tr>
<tr>
<td>GCA</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>(3.33)</td>
<td>(1.82)</td>
</tr>
<tr>
<td>IISE</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>(3.33)</td>
<td>(1.82)</td>
</tr>
<tr>
<td>Indian journal of entomology</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>(3.33)</td>
<td>(1.82)</td>
</tr>
<tr>
<td>Florida entomologist</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>(3.33)</td>
<td>(1.82)</td>
</tr>
<tr>
<td>Pure &amp; Applied microbiology</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>(3.33)</td>
<td>(1.82)</td>
</tr>
<tr>
<td>Advances in agronomy</td>
<td>00</td>
<td>00</td>
<td>05</td>
<td>(4.17)</td>
<td>(2.27)</td>
</tr>
<tr>
<td>Indian journal of agricultural economics</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td>(0.83)</td>
<td>(0.45)</td>
</tr>
<tr>
<td>Indian journal of agril. Marketing</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td>(0.83)</td>
<td>(0.45)</td>
</tr>
<tr>
<td>International journal of agril. Sciences</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td>(0.83)</td>
<td>(0.45)</td>
</tr>
</tbody>
</table>

### E-Books

<table>
<thead>
<tr>
<th>Title</th>
<th>Volume</th>
<th>Issue</th>
<th>Year</th>
<th>Impact Factor</th>
<th>Cite Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetable breeding</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td>(0.83)</td>
<td>(0.45)</td>
</tr>
<tr>
<td>The process of communication- dk berlo</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>(3.33)</td>
<td>(1.82)</td>
</tr>
<tr>
<td>Applied entomology</td>
<td>00</td>
<td>00</td>
<td>04</td>
<td>(3.33)</td>
<td>(1.82)</td>
</tr>
</tbody>
</table>

### Databases

<table>
<thead>
<tr>
<th>Database</th>
<th>Volume</th>
<th>Issue</th>
<th>Year</th>
<th>Impact Factor</th>
<th>Cite Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiastate.com</td>
<td>01</td>
<td>00</td>
<td>05</td>
<td>(4.17)</td>
<td>(2.73)</td>
</tr>
<tr>
<td>ovidsp</td>
<td>00</td>
<td>00</td>
<td>01</td>
<td>(0.83)</td>
<td>(0.45)</td>
</tr>
<tr>
<td>Blast</td>
<td>00</td>
<td>00</td>
<td>26</td>
<td>(21.67)</td>
<td>(11.82)</td>
</tr>
</tbody>
</table>
Results and Discussion

<table>
<thead>
<tr>
<th></th>
<th>00 (0)</th>
<th>00 (0)</th>
<th>26 (21.67)</th>
<th>26 (11.82)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graminae</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willey online library</td>
<td>00 (0)</td>
<td>00 (0)</td>
<td>05 (4.17)</td>
<td>05 (2.27)</td>
</tr>
</tbody>
</table>

It is evident from Table 4.3.27 that majority (11.82 %) of the respondents recommended the Institute/University to subscribe Blast database and Graminae database followed by e-journal of plant breeding (9.54 %), CeRA consortium (4.55 %), Indiastate.com data base (2.73 %), Advances in Agronomy e-journal (2.27 %), Willey online library database (2.27 %), e-journal Indian Agriculture Sciences (1.82 %), e-journal IJAS (1.82 %), e-journal GCA (1.82 %), e-journal ISEE (1.82 %), e-journal Indian journal of entomology (1.82 %), e-journal Pure & applied microbiology (1.82 %), e-book The process of communication-dk berlo (1.82 %), e-book Applied entomology (1.82 %), ejournal ISEE (0.45 %), e-journal Indian journal of horticulture (0.45 %), e-journal Indian journal of agricultural economics (0.45 %), e-journal Indian journal of agril. Marketing (0.45 %), e-journal International journal of agril. Sciences (0.45 %), e-book vegetable breeding (0.45 %), ovidsp data base (0.45 %). Eight percent of the respondents from CSAUAT recommended the Institute/University to subscribe e-journal Indian Agriculture Sciences followed by e-journal ISEE (2 %) and Indiastate.com data base (2%) while none of the respondents from NDUAT recommended the Institute/University to subscribe any consortium or e-journals or e-books or databases. Majority (21.67 %) of the respondents recommended the Institute/University to subscribe Blast database Graminae database followed by e-journal of plant breeding (17.5 %), CeRA consortium (4.17 %), Advances in Agronomy e-journal (4.17 %), Indiastate.com data base (4.17 %), Willey online library database (4.17 %), e-journal IJAS (3.33 %), e-journal GCA (3.33 %), e-journal ISEE (3.33 %), e-journal Indian journal of entomology (3.33 %), e-journal Florida entomologist (3.33 %), e-journal Pure & applied microbiology (3.33 %), e-book The process of communication-dk berlo (3.33 %), e-book Applied entomology (3.33 %), e-journal Indian journal of horticulture (0.83 %), e-journal Indian journal of agricultural economics (0.83 %), e-journal Indian journal of agril. Marketing (0.83 %), e-journal International journal of agril. Sciences (0.83 %), e-book vegetable breeding (0.83 %). Ovidsp data base (0.83 %).
4.3.28 Opinion on the aspect that the uses of E-resources have increased in comparison with the conventional resources

Table 4.3.28 Distribution of respondents according to use of E-resources comparison with the conventional resources (n=220)

<table>
<thead>
<tr>
<th>Uses of E-resources comparison with the conventional resources</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Very high</td>
<td>9 (18)</td>
<td>6 (12)</td>
<td>27 (22.5)</td>
<td>42 (19.09)</td>
</tr>
<tr>
<td>High</td>
<td>18 (36)</td>
<td>39 (78)</td>
<td>68 (56.67)</td>
<td>125 (56.82)</td>
</tr>
<tr>
<td>Moderate</td>
<td>21 (42)</td>
<td>4 (8)</td>
<td>25 (20.83)</td>
<td>50 (22.73)</td>
</tr>
<tr>
<td>Low</td>
<td>2 (4)</td>
<td>1 (2)</td>
<td>0 (0)</td>
<td>3 (1.36)</td>
</tr>
<tr>
<td>Very low</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>

Fig. 4.33 Distribution of respondents according to use of E-resources comparison with the conventional resources
Results and Discussion

From the Table 4.3.28 it can be seen that majority (56.82 %) of the respondents belonged to high category followed by moderate category (22.73 %), very high category (19.09) and low category (1.36 %) of opinion regarding increase in the use of e-resources in comparison to the conventional resources. Majority (42 %) of the respondents from CSAUAT belonged to moderate category followed by high category (36 %), very high category (18) and low category (4 %) of opinion regarding increase in the use of e-resources in comparison to the conventional resources. Majority (78%) of the respondents from NDUAT belonged to high category followed by very high category (12 %), moderate category (8) and low category (2%) of opinion regarding increase in the use of e-resources in comparison to the conventional resources. Majority (56.67%) of the respondents from IAS,BHU belonged to high category followed by very high category (22.5 %) and moderate category (20.83) of opinion regarding increase in the use of e-resources in comparison to the conventional resources. None of the respondents from any of the three Universities/Institutes belonged to very low category of opinion opinion regarding increase in the use of e-resources in comparison to the conventional resources.

4.3.29 Opinion on importance of E- resources for satisfying the information needs the present scenario

Table 4.3.29 Distribution of respondents according to the opinion that E- resource is a pre-requisite to satisfy the information need in the present scenario (n=200)

<table>
<thead>
<tr>
<th>E- resource is a pre-requisite to satisfy the information need in the present scenario</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>26 (52)</td>
<td>30 (60)</td>
<td>35 (29.17)</td>
<td>91 (41.36)</td>
</tr>
<tr>
<td>Agree</td>
<td>24 (48)</td>
<td>20 (40)</td>
<td>85 (70.83)</td>
<td>129 (58.64)</td>
</tr>
<tr>
<td>Disagree</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>
Fig. 4.3 Distribution of respondents according to the opinion that E-resource is a pre-requisite to satisfy the information need in the present scenario

Table 4.3.29 reveals that majority (58.64 %) of the respondents were agree followed by strongly agree (41.36 %) regarding the opinion that e-resource is a pre-requisite to satisfy the information need in the present scenario. Majority (52 %) of the respondents from CSAUAT were strongly agree followed by agree (48 %) regarding the opinion that e-resource is a pre-requisite to satisfy the information need in the present scenario while majority (60 %) of the respondents from NDUAT were strongly agree followed by agree (40 %) regarding the opinion that e-resource is a pre-requisite to satisfy the information need in the present scenario. Majority (70.83 %) of the respondents from I.A.S,BHU were agree followed by strongly agree (29.17 %) regarding the opinion that e-resource is a pre-requisite to satisfy the information need in the present scenario.

4.3.30 Affect on study by the use of E-Resources

Table 4.3.30 Distribution of respondents according to Affect on study by use of E-Resources (n=220)

<table>
<thead>
<tr>
<th>Affect on study by the use of E-resources</th>
<th>CSAUAT F(%)</th>
<th>NDUAT F(%)</th>
<th>I.A.S, B.H.U F(%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>38 (76)</td>
<td>50 (100)</td>
<td>106 (88.33)</td>
<td>194 (88.18)</td>
</tr>
<tr>
<td>No</td>
<td>12 (24)</td>
<td>0 (0)</td>
<td>14 (11.67)</td>
<td>26 (11.82)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>
It is clear from Table 4.3.30 that majority (88.18%) of the respondents indicated affect on study by the use of e-resources while 11.82 percent indicated no effect on study by the use of e-resources. Majority (76%) of the respondents from CSAUAT indicated affect on study by the use of e-resources while 24 percent indicated no effect on study by the use of e-resources. Cent percent of the respondents from NDUAT indicated affect on study by the use of e-resources. Majority (88.33%) of the respondents indicated affect on study by the use of e-resources while 11.67 percent indicated no effect on study by the use of e-resources.

**Table 4.3.31 Distribution of respondents according to Extent of Affect**

<table>
<thead>
<tr>
<th>Extent of Affect</th>
<th>CSAUAT F(%)</th>
<th>NDUAT F(%)</th>
<th>I.A.S, B.H.U F(%)</th>
<th>Total F(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Considerably</td>
<td>25 (50)</td>
<td>11 (22)</td>
<td>79 (65.83)</td>
<td>115 (52.27)</td>
</tr>
<tr>
<td>To some extend</td>
<td>22 (44)</td>
<td>38 (76)</td>
<td>41 (34.16)</td>
<td>101 (45.91)</td>
</tr>
<tr>
<td>Not at all</td>
<td>3 (6)</td>
<td>1 (2)</td>
<td>0 (0)</td>
<td>4 (1.82)</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>

Fig. 4.35 Distribution of respondents according to affect on study by use of E-Resources

Results and Discussion
It is evident from the Table 4.3.31 that majority (52.27 %) of the respondents indicated considerable affect on study by the use of e-resources followed by 45.91 percent who indicated upto some extent affect on study by the use of e-resources while only 1.82 percent indicated no affect on study by the use of e-resources. Fifty percent of the respondents from CSAUAT indicated considerable affect on study by the use of e-resources followed by 44 percent who indicated upto some extent affect on study by the use of e-resources while only 6 percent indicated no affect on study by the use of e-resources. . Majority (76 %) of the respondents from NDUAT indicated upto some extent affect on study by the use of e-resources followed by 22 percent who indicated considerable affect on study by the use of e-resources while only 2 percent indicated no affect on study by the use of e-resources. Majority (65.83%) of the respondents from IAS,BHU indicated considerable affect on study by the use of e-resources followed by 34.16 percent who indicated up to some extent affect on study by the use of e-resources while none of the respondents indicated no affect on study by the use of e-resources.
4.3.32 Quality of information available acquired from internet

Table 4.3.32 Distribution of respondents according to Quality of information acquired from internet on World Wide Web (www)

<table>
<thead>
<tr>
<th>Quality of information</th>
<th>University/Institution</th>
<th>Total F(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CSAUAT F(%)</td>
<td>NDUAT F(%)</td>
</tr>
<tr>
<td>High quality</td>
<td>17 (34)</td>
<td>6 (12)</td>
</tr>
<tr>
<td>Average</td>
<td>7 (14)</td>
<td>9 (18)</td>
</tr>
<tr>
<td>Good</td>
<td>26 (52)</td>
<td>35 (70)</td>
</tr>
<tr>
<td>Poor</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
</tr>
</tbody>
</table>

It can be seen from Table 4.3.32 that majority (50.45 %) of the respondent considered the quality of information acquired from internet on World Wide Web as good followed by average (31.82 %) and high quality (31.82 %). Majority (52 %) of the respondent from CSAUAT considered the quality of information acquired from internet on World Wide Web
as good followed by high quality (34 \%) and average (14 \%). Majority (70 \%) of the respondent from NDUAT considered the quality of information acquired from internet on World Wide Web as good followed by average (18 \%) and high quality(12 \%). Majority (45 \%) of the respondent from IAS,BHU considered the quality of information acquired from internet on World Wide Web as average followed by good (41.67 \%) and high quality(13.33 \%). None of the respondents from any of the Universities/Institute indicated the quality of information acquired from internet on World Wide Web as poor.

### 4.3.33 Places used to access E-resources

#### Table 4.3.33 Distribution of respondents according to E-resources access places

<table>
<thead>
<tr>
<th>Places to accessed E-resources</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Library</td>
<td>41 (82)</td>
<td>8 (16)</td>
<td>75 (62.5)</td>
<td>124 (56.36)</td>
</tr>
<tr>
<td>Home</td>
<td>4 (8)</td>
<td>6 (12)</td>
<td>3 (2.5)</td>
<td>13 (5.91)</td>
</tr>
<tr>
<td>Hostel</td>
<td>45 (90)</td>
<td>47 (94)</td>
<td>116 (96.67)</td>
<td>208 (94.55)</td>
</tr>
<tr>
<td>Department</td>
<td>42 (84)</td>
<td>46 (92)</td>
<td>100 (83.33)</td>
<td>188 (85.45)</td>
</tr>
<tr>
<td>Private Cyber Cafe</td>
<td>6 (12)</td>
<td>37 (74)</td>
<td>2 (1.67)</td>
<td>45 (20.45)</td>
</tr>
</tbody>
</table>

Fig. 4.38 Distribution of respondents according to E-resources access places
Table 4.3.3 shows that majority (94.55%) of the respondent accessed e-resources from their hostels followed by Department (85.45%), Library (56.36%) and Private Cyber Cafe (20.45%). Majority (90%) of the respondent from CSAUAT accessed e-resources from their hostels followed by Department (85.45%), Library (56.36%) and Private Cyber Cafe (20.45%). Majority (94%) of the respondent from NDUAT accessed e-resources from their hostels followed by Department (85.45%), Private Cyber Cafe (37%) and Library (16%). Majority (96.67%) of the respondent from IAS,BHU accessed e-resources from their hostels followed by Department (83.33%), Library (62.5) and Private Cyber Cafe (1.67%).

4.3. 3.4 Satisfaction level with infrastructure facilities

Table 4.3.4 Distribution of respondents according to Satisfaction level with Infrastructure Facilities available in the Institute/ University for accessing E-resources (n=220)

<table>
<thead>
<tr>
<th>Satisfaction Level</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Satisfied</td>
<td>16 (32)</td>
<td>2 (4)</td>
<td>104 (87)</td>
<td>122 (55.45)</td>
</tr>
<tr>
<td>Partly Satisfied</td>
<td>21 (42)</td>
<td>13 (26)</td>
<td>10 (8)</td>
<td>44 (20.00)</td>
</tr>
<tr>
<td>Not satisfied</td>
<td>13 (26)</td>
<td>35 (70)</td>
<td>06 (5)</td>
<td>54 (24.55)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>

Fig. 4.39 Distribution of respondents according to E-resources access place Satisfaction level with Infrastructure Facilities available in the Institute/ University for accessing E-resources
It can be seen from Table 4.3.4 that majority (55.45 %) of the respondents were satisfied with infrastructure facilities available in the Institute/ University for accessing e-resources followed by 24.55 percent of the respondents who were not satisfied along with 20 percent of the respondents who were partly satisfied with infrastructure facilities available in the Institute/ University for accessing e-resources. Majority (42 %) of the respondents from CSAUAT were partly satisfied with infrastructure facilities available in the Institute/ University for accessing e-resources followed by 32 percent of the respondents who were satisfied along with 26 percent of the respondents who were not satisfied with infrastructure facilities available in the Institute/ University for accessing e-resources. Majority (70 %) of the respondents from NDUAT were not satisfied with infrastructure facilities available in the Institute/ University for accessing e-resources followed by 26 percent of the respondents who were partly satisfied along with 4 percent of the respondents who were satisfied with infrastructure facilities available in the Institute/ University for accessing e-resources. Majority (87 %) of the respondents from IAS,BHU were satisfied with infrastructure facilities available in the Institute/ University for accessing e-resources followed by 8 percent of the respondents who were partly satisfied along with 5 percent of the respondents who were partly satisfied with infrastructure facilities available in the Institute/ University for accessing e-resources.

4.4 Problems (Discouraging factors) encountered by the research scholars while Accessing the E-resources

Table 4.4.1 Distribution of respondents according to the factors that discouraged the use of E-resources

<table>
<thead>
<tr>
<th>Reasons discouraged for using E-resources</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient E-resources in their subject area</td>
<td>30 (60)</td>
<td>45 (90)</td>
<td>66 (55)</td>
<td>141 (64.09)</td>
</tr>
<tr>
<td>Lack of space</td>
<td>15 (30)</td>
<td>4 (8)</td>
<td>73 (60.83)</td>
<td>92 (41.82)</td>
</tr>
<tr>
<td>Non subscription of important E-resources by the Institute/University library</td>
<td>37 (74)</td>
<td>11 (22)</td>
<td>90 (75)</td>
<td>138 (62.73)</td>
</tr>
</tbody>
</table>
### Results and Discussion

<table>
<thead>
<tr>
<th>Problem</th>
<th>Number</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient computers and / or labs</td>
<td>36 (72)</td>
<td>16 (32)</td>
</tr>
<tr>
<td>Lack of maintenance of computer systems and equipments</td>
<td>38 (76)</td>
<td>12 (24)</td>
</tr>
<tr>
<td>Slow speed of accessing</td>
<td>35 (70)</td>
<td>43 (86)</td>
</tr>
<tr>
<td>Less opening hours of library/computer centre</td>
<td>11 (22)</td>
<td>38 (76)</td>
</tr>
<tr>
<td>Power failure</td>
<td>41 (82)</td>
<td>41 (82)</td>
</tr>
<tr>
<td>Lack of trained Staff</td>
<td>3 (6)</td>
<td>29 (58)</td>
</tr>
<tr>
<td>Lack of congenial atmosphere</td>
<td>2 (4)</td>
<td>2 (4)</td>
</tr>
<tr>
<td>Network failure</td>
<td>36 (72)</td>
<td>38 (76)</td>
</tr>
<tr>
<td>Difficult to read from screen</td>
<td>9 (18)</td>
<td>5 (10)</td>
</tr>
<tr>
<td>Cannot find what to look for</td>
<td>2 (4)</td>
<td>5 (10)</td>
</tr>
<tr>
<td>Uncomfortable</td>
<td>0 (0)</td>
<td>6 (12)</td>
</tr>
<tr>
<td>No knowledge of using computer</td>
<td>2 (4)</td>
<td>4 (8)</td>
</tr>
</tbody>
</table>

It is evident from Table 4.4.1 that majority (65.91%) of the respondents indicated slow speed of accessing internet as the main discouraging factor to use e-resources followed by insufficient E-resources in their subject area (64.09%), non subscription of important E-resources by the Institute/University library (62.73%), lack of maintenance of computer systems and equipments (59.55%), insufficient computers and / or labs (54.55%), power failure (45.45%), less opening hours of library/computer centre (43.18%), Network failure (42.73%), lack of space (41.82%), lack of trained staff (41.36%), lack of congenial atmosphere (22.2%), uncomfortable (17.27%), difficult to read from screen (15.91%), no knowledge of using computer (5%) and can’t find what to look for (15.91%). Majority (82%) of the respondents from CSAUAT indicated power failure as the main discouraging factor to use e-resources followed by lack of maintenance of computer systems and equipments (76%)}
Results and Discussion

%), non subscription of important E-resources by the Institute/University library (74 %), Network failure (72 %), insufficient computers and / or labs (72 %), slow speed of accessing internet (70 %), insufficient E-resources in their subject area (60 %), lack of space (30 %), less opening hours of library/computer centre (22 %), difficult to read from screen (18 %), lack of trained staff (6 %), lack of congenial atmosphere (4 %), can’t find what to look for (4 %) and no knowledge of using computer (4 %). Majority (90 %) of the respondents from NDUAT indicated insufficient E-resources in their subject area as the main discouraging factor to use e-resources followed by slow speed of accessing internet (86 %), power failure (82 %), less opening hours of library/computer centre (76 %), Network failure (76 %), lack of trained staff (58 %), insufficient computers and / or labs (32 %), lack of maintenance of computer systems and equipments (24 %), non subscription of important E-resources by the Institute/University library (22 %), uncomfortable (12 %), difficult to read from screen (10 %), can’t find what to look for (10 %), lack of space (8 %), no knowledge of using computer (8 %) and lack of congenial atmosphere (4 %). Majority (75 %) of the respondents from IAS,BHU indicated internet non subscription of important E-resources by the Institute/University library as the main discouraging factor to use e-resources followed by lack of maintenance of computer systems and equipments (67.5), lack of space (60.83 %), insufficient computers and / or labs (56.67 %), insufficient E-resources in their subject area (55 %), slow speed of accessing (55.83 %), lack of trained staff (49.17 %), less opening hours of library/computer centre (38.33 %), lack of congenial atmosphere (37.5 %), uncomfortable (26.67 %), difficult to read from screen (17.5 %), network failure (16.67 %), power failure (15 %), no knowledge of using computer (4.17 %) and can’t find what to look for (0.83 %).

Table 4.4.2 Distribution of respondents according to adequacy of training provided to research scholars for using E-resources

<table>
<thead>
<tr>
<th>Institute/University provided adequate training on how to use E-resources for students of Agriculture</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Yes</td>
<td>14 (28)</td>
<td>5 (10)</td>
<td>45 (37.5)</td>
<td>64 (29.09)</td>
</tr>
<tr>
<td>No</td>
<td>36 (72)</td>
<td>45 (90)</td>
<td>75 (62.5)</td>
<td>156 (70.91)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>
Results and Discussion

Table 4.4.2 indicates that majority (70.91 %) of the respondents indicated that the institute/university didn’t provide adequate training on how to use E-resources for students of agriculture and 29.09 per cent of the respondents indicated that the Institute/University provided adequate training on how to use E- resources for students of Agriculture. Majority (72 %) of the respondents from CSAUAT indicated that the institute/university didn’t provide adequate training on how to use E-resources for students of agriculture and 28 per cent of the respondents indicated that the Institute/University provided adequate training on how to use E- resources for students of Agriculture. Majority (90 %) of the respondents from NDUAT indicated that the institute/university didn’t provide adequate training on how to use E-resources for students of agriculture and 10 per cent of the respondents indicated that the Institute/University provided adequate training on how to use E- resources for students of Agriculture. Majority (62.50 %) of the respondents indicated that the institute/university didn’t provide adequate training on how to use E-resources for students of agriculture and 37.50 per cent of the respondents indicated that the Institute/University provided adequate training on how to use E- resources for students of Agriculture.

Fig. 4.40 Distribution of respondents according to adequacy of training provided to research scholars for using E-resources
Table 4.4.3 Distribution of respondents according to Need of training programmes to improve the use of E-resources 

<table>
<thead>
<tr>
<th>Need of training programme to improve the use of E-resources</th>
<th>CSAUAT F(%)</th>
<th>NDUAT F(%)</th>
<th>I.A.S, B.H.U F(%)</th>
<th>Total F(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>45 (90)</td>
<td>49 (98)</td>
<td>108 (90)</td>
<td>202 (91.82)</td>
</tr>
<tr>
<td>No</td>
<td>5 (10)</td>
<td>1 (2)</td>
<td>12 (10)</td>
<td>18 (8.18)</td>
</tr>
<tr>
<td>Total</td>
<td>50 (100)</td>
<td>50 (100)</td>
<td>120 (100)</td>
<td>220 (100)</td>
</tr>
</tbody>
</table>

Fig. 4.41 Distribution of respondents according to Need of training programmes to improve the use of E-resources

It is evident from the Table 4.4.3 that majority (91.82 %) of the respondents indicated need of the training programme while 8.18 per cent of the respondents indicated no need of such programmes. Majority (90 %) of the respondents from CSAUAT indicated need of the training programme while 10 per cent of the respondents indicated no need of such programmes. Majority (98 %) of the respondents from NDUAT indicated need of the training programme while 2 per cent of the respondents indicated no need of such programmes. Majority (90%) of the respondents from IAS, BHU indicated need of the training programme while 10 per cent of the respondents indicated no need of such programmes.
Results and Discussion

Table 4.4.4 Distribution of respondents according to usefulness of training programmes in accessing E-resources (n=220)

<table>
<thead>
<tr>
<th>Training which is more useful to you for accessing E-resources</th>
<th>CSAUAT</th>
<th>NDUAT</th>
<th>I.A.S, B.H.U</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
<td>F(%)</td>
</tr>
<tr>
<td>Computer/ICT training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VMU</td>
<td>34 (68)</td>
<td>44 (88)</td>
<td>49 (40.83)</td>
<td>127 (57.73)</td>
</tr>
<tr>
<td>U</td>
<td>11 (22)</td>
<td>5 (10)</td>
<td>57 (47.50)</td>
<td>73 (33.18)</td>
</tr>
<tr>
<td>NU</td>
<td>5 (10)</td>
<td>1 (2)</td>
<td>14 (11.67)</td>
<td>20 (9.09)</td>
</tr>
<tr>
<td>CD-ROMs &amp; Internet search</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VMU</td>
<td>4 (8)</td>
<td>6 (12)</td>
<td>8 (6.67)</td>
<td>18 (8.18)</td>
</tr>
<tr>
<td>U</td>
<td>29 (58)</td>
<td>40 (80)</td>
<td>29 (24.17)</td>
<td>98 (44.55)</td>
</tr>
<tr>
<td>NU</td>
<td>17 (34)</td>
<td>4 (8)</td>
<td>83 (69.17)</td>
<td>104 (47.27)</td>
</tr>
<tr>
<td>Electronic resources access</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VMU</td>
<td>9 (18)</td>
<td>0 (0)</td>
<td>64 (53.33)</td>
<td>73 (33.18)</td>
</tr>
<tr>
<td>U</td>
<td>22 (44)</td>
<td>5 (10)</td>
<td>33 (27.50)</td>
<td>60 (27.27)</td>
</tr>
<tr>
<td>NU</td>
<td>19 (38)</td>
<td>45 (90)</td>
<td>23 (19.17)</td>
<td>87 (39.55)</td>
</tr>
</tbody>
</table>

Note: VMU= Very Much Useful, U=Useful, NU=Not Useful

Fig. 4.42 Distribution of respondents according to usefulness of training programmes in accessing E-resources
Table 4.4.4 reveals that majority (57.73%) of the respondents indicated Computer/ICT training very much useful for accessing e-resources followed by useful (33.18%) and not useful (9.09%). Majority (68%) of respondents from CSAUAT indicated Computer/ICT training very much useful for accessing e-resources followed by useful (22%) and not useful (10%). Majority (88%) of respondents from NDUAT indicated Computer/ICT training very much useful for accessing e-resources followed by useful (10%) and not useful (2%). Majority (47.50%) of respondents from IAS,BHU indicated Computer/ICT training useful for accessing e-resources followed by very much useful (40.83%) and not useful (11.67%).

Majority (47.27%) of the respondents indicated CD-ROMs & Internet search training not useful for accessing e-resources followed by useful (44.55%) and very much useful (8.18%). Majority (58%) of respondents from CSAUAT indicated CD-ROMs & Internet search training useful for accessing e-resources followed by not useful (34%) and very much useful (8%). Majority (80%) of respondents from NDUAT indicated CD-ROMs & Internet search training useful for accessing e-resources followed by very much useful (12%) and not useful (8%). Majority (69.17%) of respondents from IAS,BHU indicated CD-ROMs & Internet search training not useful for accessing e-resources followed by useful (24.17%) and very much useful (6.67%).

Majority (39.55%) of the respondents indicated Electronic resources access training not useful for accessing e-resources followed by very much useful (33.18%) and useful (27.27%). Majority (44%) of respondents from CSAUAT indicated Electronic resources access training useful for accessing e-resources followed by not useful (38%) and very much useful (18%). Majority (90%) of respondents from NDUAT indicated Electronic resources access training not useful for accessing e-resources followed by useful (10%). Majority (53.33%) of respondents from IAS,BHU indicated Electronic resources access training very much useful for accessing e-resources followed by useful (27.50%) and not useful (19.17%).
Table 4.4.5 Problems faced by library professionals while acquiring e-resources

<table>
<thead>
<tr>
<th>Problems</th>
<th>University/Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NDUAT</td>
</tr>
<tr>
<td>Lack of funds</td>
<td>No</td>
</tr>
<tr>
<td>Lack of expertise for management</td>
<td>Yes</td>
</tr>
<tr>
<td>Lack of infrastructure to support storage and access</td>
<td>Yes</td>
</tr>
<tr>
<td>Lack of Technical expertise</td>
<td>No</td>
</tr>
</tbody>
</table>

It is evident from Table 4.4.5 that CSAUAT and BHU CL faced the problem of lack of funds while NDUAT and CSAUAT faced the problem of lack of expertise for management and lack of infrastructure to support storage and access. Only the IAS, BHU indicated the problem of lack of technical expertise.

4.5 RELATIONSHIP BETWEEN USAGE OF E-RESOURCES AND SELECTED INDEPENDENT VARIABLES.

Table 4.5.1 Relationship of independent variables with usage of resources (n= 220)

<table>
<thead>
<tr>
<th>Selected independent variables</th>
<th>‘r’ values</th>
<th>Usefulness of e-resources</th>
<th>Use of subscription based e-resources</th>
<th>Use of social networking sites for study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.036</td>
<td>0.119</td>
<td>0.013</td>
<td></td>
</tr>
<tr>
<td>OGPA</td>
<td>0.005</td>
<td>0.049</td>
<td>0.110</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>0.004</td>
<td>0.107</td>
<td>0.017</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.01 level of probability  ** Significant at 0.05 level of probability

Relationship of selected independent variables (continuous variables) like Age, OGPA and Income was worked out with usage of e-resources which includes usefulness of e-resources, use of subscription based e-resources and use of social networking sites for study. Findings of the study have been presented in Table 4.5.1. It is evident from Table 4.5.1 that there is no significant relationship between selected independent variables and usage of e-resources. The reason may be uniformity of age and OGPA as the selected respondents were
results and Discussion

The findings of the present study are dissimilar to the findings reported by Zhang (2001) and Mtega et al. (2015).

Table 4.5.2 Chi square analysis of independent variables usage of e-resources (n= 220)

<table>
<thead>
<tr>
<th>Selected independent variables</th>
<th>Usefulness of e-resources</th>
<th>Use of subscription based e-resources</th>
<th>Use of social networking sites for study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>7.825</td>
<td>18.182</td>
<td>26.909</td>
</tr>
<tr>
<td>Medium of basic education</td>
<td>16.527</td>
<td>34.199</td>
<td>20.163</td>
</tr>
<tr>
<td>Family background</td>
<td>21.022</td>
<td>28.059</td>
<td>19.38**</td>
</tr>
<tr>
<td>Electronic device possession</td>
<td>39.562</td>
<td>93.023</td>
<td>63.558**</td>
</tr>
</tbody>
</table>

**Significant at 0.05 level of probability

It is clear from Table 4.5.2 that family background and electronic device possession is significantly associated with use of social networking sites for study at 0.05 level of probability. Sex and medium of basic education of the respondents were found to have no any significant association with usefulness of e-resources, use of subscription based e-resources and use of social networking sites for study. The reason may be that those who were possessing more numbers of electronic devices were using more frequently the social networking sites for study. The reason behind the significance of family background may be that the respondents who were from urban background may have more exposure and expertise in using social networking sites for study.

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