

Content analysis based evaluation of library websites: a case study

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One hundred and seventy two parameters and a five-point rating scale have been designed to rank IITs and NITs library websites. A detailed criterion has been developed with two variables "Yes" and "No" while conditional and additional scenarios were added as per the requirement. The present study was carried out on the library website/web page of the 19 IITs and 29 NITs. The study reveals that the score point of IIT Kanpur library website placed in the first position and NIT Agartala placed in the last position among all the engineering institution taken for the study. The study further suggested that the evaluation of libraries' website must be done frequently so as to check the structure and information available in the website as well as to keep the website updated.

Keywords: Content analysis; Web content analysis; Website evaluation; Websites

Introduction

The advent of information communication and technology has substantially changed the role of the library professionals. Internet and websites have become the most popular information and communication tools. Like other websites, library websites also came into being in the 1990s. As soon as the first web browser, Mosaic was released in 1993, the academic health science libraries began developing their websites¹. It is essential to have an idea about the dimensions of online interactivity so that websites can be designed and developed in such a way so as to facilitate interaction between the website and library users³.

The library professionals must keep in mind that the content richness of the websites depends upon the collections, services and the facilities they offer to their patrons. The present paper highlights the different criteria for evaluating the library websites of IITs and NITs.

Review of literature

Fogg⁴ et. al. evaluated 51 different website elements on credibility with 7-point-Likert-type scale.

Kannappanavar and Biradar⁵ analyzed various aspects of the credibility of 37 websites of the Dental Colleges in Karnataka. A checklist of 26 criteria under four headings was designed and the websites were evaluated based on the previous studies.

George⁶ has evaluated the usability testing and design of Carnegie Mellon Libraries website. The study emphasized on think-aloud protocols for usability testing of websites. The study reveals that the protocols have several weaknesses of navigation, screen design and so on where testing indicates that colour and graphics attract attention; font and labels increase visibility; keywords increase readability; and consistency in design increases usability. Islam and Tsuji⁷ have evaluated the usage of 20 university websites of Bangladesh. The authors have developed 23 usability criteria broadly classified into five categories for questionnaire tool. Walia and Gupta⁸ evaluated the homepage of 23 selected National libraries of Asia, maintained in English language. 36 checklists were designed based on the guidelines given by Jacob Nielson and NIC (National Informative Centre) which was grouped in 8 major criteria.

Clyde⁹ has given ten advices for library website designers. Shukla and Tripathy¹⁰ examined the

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contents of the library website and made a comparative study among the 20 central universities and 19 institutes of national importance including the IITs and IIMs. They established a method to measure the overall website performance calculations (OWPC) and criteria-wise website performance calculation (CWPC). Kalra and Verma¹¹ evaluated 46 selected research institute library websites, quantitatively and qualitatively. Usability and usefulness are the two major components that the authors have covered for evaluation of the indicators.

Clausen¹² conducted an empirical survey to 12 Danish academic library websites. Thirty-eight website evaluation criteria has been derived from earlier studies which was further divided into 6 categories; design and structure, quality of information, links and navigation, aesthetic impression, miscellaneous, and general assessment. Osorio¹³ analysed the contents of the home pages from 45 websites of science-engineering libraries from the universities in the USA and Canada using a prototyping model to access content and design.

Still¹⁴ studied the university library websites in four English speaking countries and examined 150 library websites which has access to their own library catalogue and other databases. Adams and Cassner¹⁵ studied the content and design of 48 Academic library websites for distance learners of the ARL institutions. They developed 43 elements where 15 elements were related to design of the websites and 28 with content elements.

Brower¹ analysed 41 academic health sciences library website and the navigational tools were also analysed for layout, technology, and links. He developed 40 criteria under four broad specific areas, such as, general information of library, website aids and tools, library services, and electronic resources. Clyde¹⁶ conducted a content analysis of 50 school library websites from nine countries over a time span from 1996 to 2002. The author identified the changes in the website over a period of time and it was found that 12 additional items of content in the web pages/sites by 2002.

Michalec¹⁷ conducted a content analysis of 82 art library websites where the author analysed the content, contact details, hours of operation, library collection, the library web pages, library OPAC, link to the parent institution, number of clicks required to

navigate library information, local resources, link to search engines, link to reference assistance, the update quotient of the website, etc. Qutab and Mahmood¹⁸ analysed 52 websites of Pakistan, including academic, special, public and national libraries with the help of a 77 item checklist designed for the study. Aharony¹⁹ analyzed 31 academic libraries homepage from the ACRL accredited LIS schools. It is observed in the study that graphics have been used in websites. Yazdi and Deshpande²⁰ evaluated 71 library association websites, using 15 selected Webometric criteria, such as – authority (authors of the website), about association, accessibility, contact us, customer service, search, site map, HTML quality, navigation and links, copyright, presentations (graphic design), user friendliness, FAQ, currency, and coverage of web document.

Wilson²¹ evaluated the contents of 24 Alabama academic library websites which include 14 public and 10 private institutions and further examines the services with design and accessibility standards of the websites. For the study, 32 criteria under 5 broad headings were developed for evaluating the web contents.

In the digital age, Web Content Analysis is an emerging area of research and a challenging task for the library professionals. Devi and Verma²² pointed out the following parameters for measuring the quality of libraries websites which are as under:

- i. Structure, content and services of the libraries websites.
- ii. Patterns of information gathering, graphics and multimedia of libraries websites.
- iii. Aesthetic value, accuracy, currency, accessibility and user friendliness.

Devi and Verma²³ evaluated and compared the web contents of the North Eastern Hill University and Mizoram University. They have developed 73 criteria under 14 broad headings for analyzing the contents where 69 criteria have been analyzed quantitatively. A quantitative three-point-rating scale was designed to determine a meaningful numerical rating. Verma and Devi²⁴ have also analysed the contents available in the library web page/website of 12 Indian Institutes of Management. The authors have developed 112 criteria under 10 broad headings.

Concentrating on designing the criteria of the web content analysis of the library website, the present study is undertaken for the fulfillment of betterment of the design and the contents available in the website.

Scope of the study

The content analysis is a very important segment in the field of library and information science through which one studies about the content of documents. In the present digital era, web has become the master source of information and plays an important role in its dissemination because people became more web centric to find their information. The present study develops an evaluation criteria for the content analysis of the libraries website. The criteria developed for the study is based on the content available in the libraries website taken for the study. A parameter scale was developed and applied to the IITs and NITs library's website. The study is limited to the library websites of Indian Institutes of Technology (IITs) and National Institutes of Technology (NITs), which are the apex educational institutions of higher education and research in the field of engineering and having the status of institutions of national importance, declared by the Institutes of Technology Act, 1961. The scope of the present study is further limited to 19 IITs and 29 NITs which have functional libraries' website/web page as on March, 2017.

Objectives of the Study

- To develop evaluation criteria for the content analysis of the selected libraries website based on the existing criteria; and
- To find out the rank of the engineering institutes taken for the study on the basis of the parameters developed.

Methodology

The evaluation criteria for the web content analysis of the IITs and NITs library website/web page have been set up keeping in mind the accessing point of the contents from the website by the users. Evaluation criteria with 172 parameters has been designed to analyse the web contents of IITs and NITs libraries based on earlier study of Shukla and Tripathy¹⁰ including the parameters like- availability of the library website, their accessibility, navigation, design

of the website, language used, currency etc., (Annexure I). The study categorized in two variables 'Yes' and 'No' and the scores were provided for the answers 'Yes' (1) and 'No' (0) where conditional Yes (+1) and conditional No (-2) and additional (+1/2) scenario was added as per the requirement. Therefore, for the present study of the web content analysis the above mentioned evaluation criteria were followed. The contents were matched with each other and duplicate features were removed from the tabulated data and the similar features (concepts) were grouped at one place. The scoring system was adopted for the website content evaluation.

Score Point adopted for the study according to the Variables are:

Variables	Scores Allotted
Yes (Normal)	+2
No (Normal)	0
Yes (Conditional)	+1
No (Conditional)	0
Yes (Additional)	+1/2

Based on the scoring points 172-parameter point was devised. The five-point rating scale was derived based on the maximum score of 172 evaluation points and the scale of ratings to rank institutions is based on the point as below:

- More than 141 : Excellent
- 106 – 140 : Very Good
- 71 – 105 : Good
- 36 – 70 : Average
- 1 – 35 : Needs Improvement

On the basis of these 172 parameters mentioned in checklist, selected IITs and NITs libraries' websites was checked and evaluated to collect the primary data for the study between the period of 1st November – 30th November, 2016 and the data was again checked and verified between 1st March – 15th March, 2017.

Availability of dedicated library websites in IITs and NITs

A website is a collection of pages identified by a common domain which relates the same topic maintained by a person or a group of persons or an institution or an organization depending on the nature of the website. And the library website is a platform

Table 1—List of IIT Library Websites

Sl. no.	Name of the IITs	URL of the Library website
1	IIT Kharagpur	http://www.library.iitkgp.ernet.in/
2	IIT Bombay	http://www.library.iitb.ac.in/
3	IIT Kanpur	http://pkklib.iitk.ac.in/
4	IIT Madras	http://www.cenlib.iitm.ac.in/
5	IIT Delhi	http://library.iitd.ac.in/
6	IIT Guwahati	http://www.iitg.ernet.in/lib/
7	IIT Roorkee	http://mgcl.iitr.ac.in/
8	IIT Bhubaneswar	http://library.iitbbs.ac.in/
9	IIT Hyderabad	http://library.iith.ac.in/
10	IIT Jodhpur	http://library.iitj.ac.in/
11	IIT Patna	http://library.iitp.ac.in/
12	IIT Indore	http://library.iiti.ac.in/
13	IIT Mandi	http://library.iitmandi.ac.in/
14	IIT (ISM) Dhanbad	http://www.ismlib.ac.in/

Table 2—List of NIT library websites

Sl. no.	Name of the NIT	URL of the Library website
1	NIT Surathkal	http://library.nitk.ac.in/
2	NIT Calicut	http://www.library.nitc.ac.in/
3	NIT Rourkela	http://library.nitrkl.ac.in/
4	Malaviya NIT Jaipur	http://online.mnit.ac.in/Library/
5	NIT Sikkim	http://www.kic.nitsikkim.ac.in/

for the library professionals to communicate the information relating to the library with their users on an online mode. The present study reveals that out of the 19 IITs taken for the study only 74% of IITs (14) have a separate dedicated library website and only 17% of NITs (5), out of 29 NITs taken for the study, have their separate dedicated library website. So, it was observed that among the NITs only a few have made a separate library website for their respective library. The list of the URLs of IITs and NITs library website are given below under Table 1 and Table 2.

Total score of content analysis and evaluation features of IITs and NITs libraries' website/web page

With the design of the quantitative five-point rating scale discussed in the methodology the point was derived on the basis of the maximum score of 172 evaluation criteria. The study tries to find out the best web content available in the libraries' website of IITs and NITs. The study reveals that no IITs and NITs libraries' website comes under the excellent 'more than 141' and very good '106-140' grading systems.

Table 3—Total point scored by IITs

Score Point	Name of the IITs
More than 141 Excellent	-
106 – 140 Very Good	-
71 – 105 Good	IIT Kanpur IIT Bombay IIT Kharagpur IIT Delhi IIT Gandhinagar IIT Patna IIT-ISM Dhanbad IIT Roorkee IIT Madras
36 – 70 Average	IIT Bhubaneswar IIT Guwahati IIT Mandi IIT-BHU Varanasi IIT Hyderabad IIT Indore IIT Jodhpur IIT Ropar IIT Tirupati IIT Palakkad
1 – 35 Needs Improvement	

But the study further reveals that total seven engineering institutes (one IIT and six NITs) fall under the needs improvement '1 – 35' grading system. The lists of the total point scored by IITs and NITs have given in Tables 3 and 4.

Ranking of IITs and NITs Libraries' Website/Web Page on the basis of web Content

The ranking of the IITs and NITs libraries' website/web page is listed under the Table 5. The ranking of the institutes have been done according to the score point obtained by the libraries' website/web page based on the availability of the web contents. It is found that IIT Kanpur (102.5) scores the highest point followed by IIT Bombay (95) among the IITs whereas among the NITs, NIT Rourkela library website scores the first which is placed in the ninth position among all the engineering institutes taken for the study. NIT Agartala placed the last position among the engineering institutes. The list of the institutes according to their rank on the availability of the web contents in their respective library website/web page is shown in Table 5.

Conclusion

In the present era, the web has become the master source of information in disseminating the

Table 4—Total point scored by NITs

Score Point	Name of the NITs
More than 141 Excellent	-
106 – 140 Very Good	-
71 – 105 Good	NIT Rourkela
36 – 70 Average	NIT Silchar NIT Jamshedpur MNIT Jaipur NIT Surathkal NIT Hamirpur NIT Goa NIT Sikkim NIT Calicut VNIT Nagpur MNNIT Allahabad NIT Tiruchirappali NIT Warangal NIT Raipur SVNIT Surat NIT Delhi MANIT Bhopal NIT Durgapur NIT Jalandhar NIT Uttarakhand NIT Srinagar NIT Nagaland NIT Arunachal Pradesh
1 – 35 Needs Improvement	NIT Mizoram NIT Manipur NIT Meghalaya NIT Patna NIT Kurukshetra NIT Agartala

Table 5—Ranking of IITs and NITs Libraries' Website/Web Page based on the total score

Rank	Name of the Institute	Total Score
1	IIT Kanpur	102.5
2	IIT Bombay	95
3	IIT Kharagpur	92
4	IIT Delhi	85
5	IIT Gandhinagar	84
6	IIT Patna	83
7	IIT-ISM Dhanbad	79.5
8	IIT Roorkee	77
9	NIT Rourkela	71.5
10	IIT Madras	71
11	NIT Silchar	70
12	IIT Bhubaneswar	69.5
13	IIT Guwahati	69
13	NIT Jamshedpur	69

Contd —

Table 5—Ranking of IITs and NITs Libraries' Website/Web Page based on the total score

Rank	Name of the Institute	Total Score
14	MNIT Jaipur	68
15	IIT Mandi	67.5
16	NIT Surathkal	66.5
16	NIT Hamirpur	66.5
17	IIT-BHU Varanasi	65
18	IIT Hyderabad	62.5
19	IIT Indore	61
20	NIT Goa	60
21	NIT Sikkim	59.5
22	NIT Calicut	59
22	IIT Jodhpur	59
23	VNIT Nagpur	58.5
24	MNNIT Allahabad	58
24	NIT Tiruchirappalli	58
25	IIT Ropar	56.5
26	NIT Warangal	54
27	NIT Raipur	53
27	SVNIT Surat	53
28	NIT Delhi	51.5
29	MANIT Bhopal	50
30	NIT Durgapur	48
31	NIT Jalandhar	45.5
32	NIT Uttarakhand	40.5
33	NIT Srinagar	38
33	NIT Nagaland	38
33	NIT Arunachal Pradesh	38
34	IIT Tirupati	37.5
35	IIT Palakkad	35
36	NIT Mizoram	31
37	NIT Manipur	28
38	NIT Meghalaya	26.5
39	NIT Patna	24.5
40	NIT Kurukshetra	22.5
41	NIT Agartala	15.5

—Contd

information. So, the evaluation of libraries' website must be done frequently so as to check the structure and the web content and information available in the website. It is necessary to evaluate the websites based on certain criteria. For this reason the present study was undertaken and on basis of the existing criteria, the researcher formulated 172 parameters so as to help in evaluating the library website.

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CONTENT ANALYSIS EVALUATION CRITERIA OF THE LIBRARY WEBSITE/WEB PAGE OF IITs AND NITs LIBRARIES

1. Does the library have separate website for itself?
 - a) Yes () [2 Point]
 - b) No ()*

*If no then,
Does the library have a separate webpage?

 - a) Yes () [1 Point]
 - b) No ()#

#If no then,
Does the library web page is dedicated to its main institute's website?

 - a) Yes () [½ Point]
 - b) No () [0 Point]
2. Do the library website/ web page has direct link on parent's home page?
 - a) Yes () [2 Point]
 - b) No ()*

*If no then,
Does the library web page/website link under facilities, quick links, sections, resources, campus infrastructure, etc. with the title "Central Library" or "Library"?

 - a) Yes () [1 Point]
 - b) No () [0 Point]
3. Does the page title appear in the top window bar?
 - a) Yes () [2 Point]
 - b) No () [0 Point]
4. Does the library web page/website have the home link to go back to their Home page?
 - a) Yes () [2 Point]
 - b) No () [0 Point]
5. Does the title describe content or location in site structure?
 - a) Yes () [2 Point]
 - b) No () [0 Point]
6. Whether the view resolution is suggested in the respective library website/web page?
 - a) Yes () [2 Point]
 - b) No () [0 Point]
7. Does the library website/web page provide information about the browser compatibility respectively?
 - a) Yes () [2 Point]
 - b) No () [0 Point]
8. Does the site's page format is followed same in all the web pages?
 - a) Yes () [2 Point]
 - b) No () [0 Point]
9. Whether the library website/web page gives information about the number of visitors of the page?
 - a) Yes () [2 Point]
 - b) No () [0 Point]
10. Does the library web page/website use any graphics along with the text for communication with the users?
 - a) Yes () [2 point]*
 - b) No () [0 point]#

*If yes then,
Whether the graphics used in the library website/web page are animated?

 - a) Yes () [1 Point]
 - b) No () [0 Point]

#If no then,

Does the library web page/website use only text and not graphics for communicating with the users?

- a) Yes () [1 point]
b) No () [0 Point]

11. Does the library website/web page offer information in more than one language?

- a) Yes () [2 Point]*
b) No () [0 Point]#

*If yes then,

Whether the library website/web page offers information in English and Hindi language?

- a) Yes () [1 Point]
b) No () [0 Point]

#If no then,

Does the library website/web page offer information only in English language?

- a) Yes () [1 Point]
b) No () [0 Point]

12. If the library website/web page offers information in multi languages?

- a) Yes () [1 Point]
b) No () [0 Point]

If yes then please specify the language

13. Does the library web page/website provide postal address of the library?

- a) Yes () [2 Point]
b) No () [0 Point]

14. Does the library web page/website provide phone no. of the library or a concerned person?

- a) Yes () [2 Point]
b) No () [0 Point]

15. Does the library web page/website provide the fax no. of the library?

- a) Yes () [2 Point]
b) No () [0 Point]

16. Whether the library web page/website provides the email address of the librarian/library?

- a) Yes () [2 Point]
b) No () [0 Point]

17. Whether the library web page/website provides any separate contact link?

- a) Yes () [2 Point]
b) No () [0 Point]

18. Does the library web page/website provide feedback form or email link?

- a) Yes () [2 Point]
b) No () [0 Point]

19. Does the library web page/website provide search option in any corner of their page?

- a) Yes () [2 Point]
b) No () [0 Point]

20. Whether the library web page/website provides the sitemap of the library?

- a) Yes () [2 Point]
b) No () [0 Point]

21. Does the library website/web page give information about the FAQs?

- a) Yes () [2 Point]
b) No () [0 Point]

22. Does the library web page/website provide information about the copyright of the site?

- a) Yes () [2 Point]*
b) No () [0 Point]

*If yes then,

Whether the library web page/website provides any information about the maintenance of the site?

- a) Yes () [1 Point]
- b) No () [0 Point]

23. Does the library web page/website provide the date of updation?

- a) Yes () [2 Point]*
- b) No () [0 Point]

*If yes then,

Whether the page has been updated in the past three months?

- a) Yes () [1 Point]
- b) No () [0 Point]

24. Does the library website/web page have given the present date respectively?

- a) Yes () [2 Point]
- b) No () [0 Point]

25. Does the library website/web page provide information about the genesis of the library or an introduction of the library?

- a) Yes () [2 Point]
- b) No () [0 Point]

26. Does the library website/web page provide information regarding the aims/objective/mission/statement of the library?

- a) Yes () [2 Point]
- b) No () [0 Point]

27. Does the library web page/website provide any information on library news and events in their respective site?

- a) Yes () [2 Point]
- b) No () [0 Point]

28. Does the library web page/website have provided any information for working hours of the library?

- a) Yes () [2 Point]
- b) No () [0 Point]

29. Does the library web page/website provide information about library rules in their site respectively?

- a) Yes () [2 Point]
- b) No () [0 Point]

30. Does the library website/web page provide information regarding user membership detail?

- a) Yes () [2 Point]
- b) No () [0 Point]

31. Does the library web page/website provide information about the staff of the library?

- a) Yes () [2 Point]*
- b) No () [0 Point]

*If yes then,

Do they provide additional information about the library advisory committee?

- a) Yes () [1 Point]#
- b) No () [0 Point]

#If yes then,

Does the library website/web page provide additional information about their library purchase committee?

- a) Yes () [1 Point]
- b) No () [0 Point]

32. Does the library website/web page provide library brochure respectively?

- a) Yes () [2 Point]
- b) No () [0 Point]

33. Does the library website/web page provide information about the infrastructure facilities of the library?

- a) Yes () [2 Point]*
- b) No () [0 Point]

*If yes then,

Does the library website/web page provide information about the IT infrastructure facilities of the library?

- a) Yes () [1 Point]
- b) No () [0 Point]

(Or)

Does the library website/web page provide information about the physical facilities (floor space/sitting capacity/water coolers/computer terminals, etc) of the library?

- a) Yes () [1 Point]
- b) No () [0 Point]

34. Does the library website/web page provide any facility for help or help link to their clientele?

- a) Yes () [2 Point]
- b) No () [0 Point]

35. Does the library website/web page provide any information regarding ask the librarian respectively?

- a) Yes () [2 Point]
- b) No () [0 Point]

36. Does the library website/web page provide academic calendar in their site?

- a) Yes () [2 Point]
- b) No () [0 Point]

37. Whether the library website/web page provides information about the holidays of the library?

- a) Yes () [2 Point]
- b) No () [0 Point]

38. Does the library website/ web page provide information about their future plans?

- a) Yes () [2 Point]
- b) No () [0 Point]

39. Does the library website/web page provide information about their achievements respectively?

- a) Yes () [2 Point]
- b) No () [0 Point]

40. Does the library website/web page provide information about the budget allocation of the library?

- a) Yes () [2 Point]
- b) No () [0 Point]

41. Does the library website/web page provide information about the physical location of the library?

- a) Yes () [2 Point]
- b) No () [0 Point]

42. Does the library website/web page provide information about the floor plan/location guide in the library?

- a) Yes () [2 Point]
- b) No () [0 Point]

43. Does the library website/web page provide photo gallery in their respective site?

- a) Yes () [2 Point]
- b) No () [0 Point]

44. Does the library website/web page provide information about the library resources in their site respectively?

- a) Yes () [2 Point]
- b) No () [0 Point]

45. Does the library web page/website have separate web page/hyperlink for Web OPAC/Online Catalogue?

- a) Yes () [2 Point]*
- b) No

*If no, then

Does the library web page/website provide only information regarding Web OPAC/ Online Catalogue?

- a) Yes () [1 Point]
- b) No () [0 Point]

46. Does the library website/web page provide information about the bibliographical databases in their site?

- a) Yes () [2 Point]

b) No () [0 Point]

47. Does the library website/web page provide information or access to other online reference sources such as, dictionaries, encyclopaedia, etc. to their site respectively?

a) Yes () [2 Point]

b) No () [0 Point]

48. Does the library website/web page provide links to online catalogue of other libraries?

a) Yes () [2 Point]

b) No () [0 Point]

49. Does the library website/web page provide information about their collections in the library?

a) Yes () [2 Point]

b) No () [0 Point]

Note: If the library web page/website provides information of the following library collections then add half (½) mark for each of the following mentioned here:

- | | | | |
|--------|------------------------|-----|---------------|
| i. | Books | () | [½ Point] |
| ii. | Journals | () | [½ Point] |
| iii. | References Sources | () | [½ Point] |
| iv. | Reports | () | [½ Point] |
| v. | Theses/Dissertations | () | [½ Point] |
| vi. | Newspaper/Magazines | () | [½ Point] |
| vii. | Conference Proceedings | () | [½ Point] |
| viii. | Monographs | () | [½ Point] |
| ix. | Archives | () | [½ Point] |
| x. | Audio-visual material | () | [½ Point] |
| xi. | CD/DVDs / CD ROM | () | [½ Point] |
| xii. | Microforms | () | [½ Point] |
| xiii. | Microfilms | () | [½ Point] |
| xiv. | Newsletters | () | [½ Point] |
| xv. | Patents | () | [½ Point] |
| xvi. | Standards | () | [½ Point] |
| xvii. | Pamphlets | () | [½ Point] |
| xviii. | Ongoing Projects | () | [½ Point] |
| xix. | Others x n | () | [½ x n Point] |

50. Does the library web page/website provide any information regarding library services in their site respectively?

a) Yes () [2 Point]

b) No () [0 Point]

Note: If the library web page/website provides information of the following library services then add half (½) mark for each of the following mentioned here:

- | | | | |
|-------|--------------------------------------|-----|-----------|
| i. | Circulation Service | () | [½ Point] |
| ii. | Research & Reference Service | () | [½ Point] |
| iii. | Referral Service | () | [½ Point] |
| iv. | Bindery Service | () | [½ Point] |
| v. | User education/orientation/awareness | () | [½ Point] |
| vi. | Inter-library loan | () | [½ Point] |
| vii. | Document Delivery Service | () | [½ Point] |
| viii. | Reprographic Service | () | [½ Point] |
| ix. | CAS | () | [½ Point] |
| x. | SDI | () | [½ Point] |
| xi. | Newspaper Clippings | () | [½ Point] |
| xii. | Bibliographic Service | () | [½ Point] |
| xiii. | Resource/ Subject Guides | () | [½ Point] |
| xiv. | Book Bank | () | [½ Point] |
| xv. | Video viewing facility | () | [½ Point] |
| xvi. | Bulletin Board Service | () | [½ Point] |

- | | | | |
|---------|---|-----|---------------|
| xvii. | Extension Service | () | [½ Point] |
| xviii. | Courseware | () | [½ Point] |
| xix. | List of course reading materials | () | [½ Point] |
| xx. | Book Purchase Details | () | [½ Point] |
| xxi. | Status of book acquisition | () | [½ Point] |
| xxii. | Book Purchase Recommendation | () | [½ Point] |
| xxiii. | Book Reservation/renew/generate pin facility | () | [½ Point] |
| xxiv. | Theses submitted to the dept. | () | [½ Point] |
| xxv. | External Membership | () | [½ Point] |
| xxvi. | Online address book | () | [½ Point] |
| xxvii. | Other collections (Hindi, etc) | () | [½ Point] |
| xxviii. | Forms | () | [½ Point] |
| xxix. | Telephone directory | () | [½ Point] |
| xxx. | Latest publication information (Faculty/students) | () | [½ Point] |
| xxxi. | Others x n | () | [½ x n Point] |

51. Does the library website/web page gives information regarding the e-resources provided in the library for their clientele?

- | | | | |
|----|-----|-----|-----------|
| a) | Yes | () | [2 Point] |
| b) | No | () | [0 Point] |

Note: If the library web page/website provides information regarding the e-resources mentioned in the following then add half (½) mark for each of the following mentioned here:

- | | | | |
|-------|---|-----|---------------|
| i. | E-Journal | () | [½ Point] |
| ii. | E-Books | () | [½ Point] |
| iii. | E-Databases | () | [½ Point] |
| iv. | E-theses & dissertations | () | [½ Point] |
| v. | Institutional Repository | () | [½ Point] |
| vi. | E-Question Paper | () | [½ Point] |
| vii. | Online Newspaper | () | [½ Point] |
| viii. | Standards Databases (ASME, ASTM, IEEE, ISO, CMIE, IEC etc.) | () | [½ Point] |
| ix. | NPTEL Video Lecture | () | [½ Point] |
| x. | MOOC | () | [½ Point] |
| xi. | Links to Library Networks | () | [½ Point] |
| xii. | Library Consortium | () | [½ Point] |
| xiii. | E-Newsletter | () | [½ Point] |
| xiv. | Others x n | () | [½ x n Point] |

52. Does the library website/web page give information about the value added services offered for their clientele?

- | | | | |
|----|-----|-----|-----------|
| a) | Yes | () | [2 Point] |
| b) | No | () | [0 Point] |

Note: If the library web page/website provides information of the following value added services then add half (½) mark for each of the services mentioned here:

- | | | | |
|-------|--|-----|---------------|
| i. | Open Access Resources | () | [½ Point] |
| ii. | Information Alert Service (Email) / Article | () | [½ Point] |
| iii. | New Arrival List | () | [½ Point] |
| iv. | Link to other online repositories | () | [½ Point] |
| v. | Moodle | () | [½ Point] |
| vi. | Live Chat with the librarian | () | [½ Point] |
| vii. | Link to online news channels | () | [½ Point] |
| viii. | Virtual reference collection (citation style, e-print archive, etc.) | () | [½ Point] |
| ix. | Mobile library app | () | [½ Point] |
| x. | Anti-Plagiarism/Fair use/copyright (inf. or checking services) | () | [½ Point] |
| xi. | Remote Access | () | [½ Point] |
| xii. | Children's Library Corner | () | [½ Point] |
| xiii. | Others x n | () | [½ x n Point] |

53. Does the library website/web page provide information about the sections of the library respectively?

- a) Yes [2 Point]
 b) No [0 Point]

Note: If the library web page/website provides information about the sections mentioned below then add half (½) mark for each of the services mentioned here:

- i. Periodical Section [½ Point]
 ii. Circulation section [½ Point]
 iii. Acquisition section [½ Point]
 iv. Technical Processing section [½ Point]
 v. Digital Library section [½ Point]
 vi. Book Bank section [½ Point]
 vii. Stack section [½ Point]
 viii. Micrographic/photocopy section [½ Point]
 ix. Reference & Readers Advisory Service [½ Point]
 x. Automation Section [½ Point]
 xi. Information resource access & user services [½ Point]
 xii. Administration [½ Point]
 xiii. Common Room [½ Point]
 xiv. Study Room [½ Point]
 xv. Meeting Room [½ Point]
 xvi. Others x n [½ x n Point]

54. Does the library website/web page provide separate link for the web 2.0 tools?

- a) Yes [2 Point]
 b) No [0 Point]

Note: If the library web page/website provides information of the following Web 2.0 tools then add half (½) mark for each of the following mentioned below:

- i. RSS [½ Point]
 ii. Facebook [½ Point]
 iii. YouTube [½ Point]
 iv. Twitter [½ Point]
 v. Blog [½ Point]
 vi. LinkedIn [½ Point]
 vii. Google+ [½ Point]
 viii. Wiki [½ Point]
 ix. Instagram [½ Point]
 x. ReseachGate [½ Point]
 xi. Pinterest [½ Point]
 xii. Skype [½ Point]
 xiii. Others x n [½ x n Point]

55. Does the library website/web page give information about the events held in the library or for the library?

- a) Yes [2 Point]
 b) No [0 Point]

Note: If the library web page/website provides information about following events then add (½) mark for each of the following mentioned below:

- i. Conferences [½ Point]
 ii. Seminars [½ Point]
 iii. Workshops [½ Point]
 iv. Book Fair [½ Point]
 v. Training Programs [½ Point]
 vi. Others x n [½ x n Point]

NOTE: To calculate the point for overall ranking is on the basis of total score point earned by the particular institute.