

**Master of Library and Information Science
(Integrated: Session 2015-2017)**

2016

CONTENT DESIGNATION AND METADATA ENCODING

(Second Semester; Session : 2015-17)

Course – ML-CC-204

Full Marks: 60

Time : 3½ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer all the questions.

- 1 Write as instructed:
 - (A) Differentiate any two of the following pairs of concepts: 2½ X 2
 - i) CCF/B and MARC 21 Bibliographic Format
 - ii) Paris Principles and IME/ICC Principles
 - iii) Metadata encoding and Cataloguing
 - iv) Name authority and Subject authority
 - (B) Write brief notes on **any two** of the following topics: 3 X 2
 - i) CCF: Record Linking Mechanisms
 - ii) RDA: Structure
 - iii) FRBR: Group I entities
 - iv) Domain-specific Metadata Schema
 - (C) Show your acquaintance with **any four** of the following entities: 1 X 4

i) MARC 21 Holdings Format	ii) CanCore Metadata Schema
iii) MIDAS Metadata Schema	iv) CCF/F
v) RDF	vi) DC.Coverage
- 2.1 (A) What do you mean by Common Communication Format? State its objectives as proposed by Hopkinson. 2+3
- (B) Designate the contents (as instructed) of **any two** of the following records / items of information by using CCF/B (Paris: UNESCO, 1992) 2½ x 2
 - i) Application of six sigma in library management is a collection of papers that belongs to Library everywhere series (published by DRTC, ISI, Bangalore since 1991) with sequence number 36 and is edited by Prof. ARD Prasad of DRTC, ISI Bangalore. The series ISSN is presently 0988-8765 with a note on canceled ISSN 0988-8764 . **Encode data elements related to series area.**

- ii) The title of the document is 'Scientific policy, research and development in Canada'. The subtitle is 'a bibliography'. It was prepared by National Science Library. **Designate the contents of the fields /subfields of TSOR area and Author area.**
 - iii) Central Library, Kalyani University takes a bibliographic record from Library of Congress (code USLC) with filled-in record identifier as C89-123 but wish to assign its own local level record identifier as KUCL0099123. **Designate the contents of the appropriate tags to encode above data.**
 - iv) The original book entitled “La nui Bengali” written in Romanian language by Mircha Eliad includes in title page that the work is translated into Bengali with title “বাংলার রাতের তারাগুলি” and in English with title “The night sky in Bengal”. The eminent language teacher Prof. Ananya Sen is the person responsible for both translation works. **Designate the appropriate fields and subfields.**
- (C) A single volume document, with collective title 'Darling Earth', spine title “Air pollution in 21st century” and record identifier 92-6047329 is edited by R. Sivdasan. It includes two parts. The first part entitled “Ozone depletion in present age” is authored by G. Rao (pp. 4-122) and the second part entitled “Radiation and environmental pollution” is authored by two authors – D. W. Maxwell and U.K. Sharma (pp. 124-231). 5

Designate the contents of the appropriate fields by using the record to record linking mechanism in CCF.

OR

- 2.2 (A) Why is MARC 21 bibliographic format considered as the global defacto standard? Enumerate the components of a MARC 21 based bibliographic record. 2+3
- (B) Designate the contents of **any two** of the following records / items of information by using MARC 21 Bibliographic Data Standard, 1999 edition, Update No. 22 (April 2016) 2½ x 2
- i) The poetry book is the 40th product of American poets' continuum series (with ISSN 0193-6867). Library generally trace the series. **Encode appropriate tags** of MARC 21 Bibliographic Format with indicator positions.
 - ii) The document reads THE BROTHERS KARAMAZOV / A NOVEL IN FOUR PARTS / WITH EPILOGUE / **by Fyodor Dostoyevsky** / translated and annotated by Richard Pevear and Larissa Volokhonsky
Designate contents of the tag 245 of MARC 21 Bibliographic Format with Indicator positions.
 - iii) American Geographical Society of New York / Manual for the classification and cataloguing of maps in the society's collection by Ena L. Yonge and Mary Elizabeth Hartzell.

Designate Tag 1xx and Tag 245 and Tag 7xx of MARC 21 Bibliographic Format with Indicator positions.
 - iv) The item is a report published by Organizing Committee of Rome Olympic Games on the 17th Olympic Games held in Rome, Italy in 1960.
Designate contents of the tag 111 of MARC 21 Bibliographic Format with Indicator positions.
- (C) Designate the contents of the various fields (**from Leader to 8xx**) of the following card catalogue record by using MARC 21 Bibliographic Data Standard, 1999 edition, Update No. 22, April 2016 5

Anxiety in sports : an international perspective / edited by Dieter Hackfort, Charles D. Spielberger. New York : Hemisphere Pub. Corp., c1989.
xviii, 275 p. : ill. ; 24 cm.
796/.01 HAC/A

Additional information: DDC 19th ed is in use; Leader: 00972cam a2200265 a 4500; Date entered 22/08/1989 at 1.07 PM; Control no: 1493191; Belongs to The Series in health psychology and behavioral medicine (ISSN:8756-467X); LCSH descriptors: Sports – Psychological aspects; Anxiety.

- 3.1 (A) Point out the needs of authority data format. What are the procedures of managing authority data in computerized library catalogue? 2+3
- (B) Designate the contents of **any two** of the following records / items of information by using MARC 21 Authority Data Standard, 1999 edition, Update No. 22 (April 2016) 2½ x 2
- i) A LC subject authority record shows LC control no.: sh2007001751 / LCCN Permalink: <https://lcn.loc.gov/sh2007001751> / LC classification: Z666.7 / Topical subject heading: Metadata harvesting / Variant(s): Harvesting, Metadata / See also: < Information retrieval > Microformats / Found in: Work cat.: 2007009006: Cole, Timothy W. Using the Open Archives Initiative protocol for metadata harvesting, c2007. /
- Designate appropriate tags** of MARC 21 Authority Format with Indicator positions.
- ii) A library record shows topical subject heading: Ornithology Variant(s): Avian biology See also: Zoology Bird (Source: LC database, Oct. 23, 2006 titles: avian biology). **Designate required tags** of MARC 21 Authority Format with Indicator positions.
- iii) Personal name heading: Gosvāmī, Jaṃya / Variant(s): Jaṃya Gosvāmī Goswami, Joy Joy Goswami / Found in: His Pāgalī, tomāra saṅge, 1994: t.p. (Jaṃya Gosvāmī) His Hṛdaye premera śīrsha, 1994: t.p. (Jaṃya Gosvāmī) jkt. / (b. 11/10/1954; / poet; / award: Ānanda puraskāra, 1990) / Bengali poet Joy Goswami reading from his poetry /
- Designate appropriate tags** of MARC 21 Authority Format with Indicator positions.
- iv) The main entry of MARC 21 Bibliographic record shows Indian Council for Communication Training and Research in 110\$a. Variant(s) are: Indian Council of Communication Training and Research and Indian Council for Communication Training and Research, Tamilnadu. **Designate Tags 110, 410 and 510** of MARC 21 Authority Format with Indicator positions.
- (C) Create a MARC 21 based Authority record (covering 100, 370, 374, 375, 377, and 400) on the basis of given information. 5

The authority record on Amartya Sen shows following item of information: Personal name heading: Sen, Amartya, 1933- and Variants are: Sen, Amartya Kumar, Amartya Sen, 1933-, Sen, A. K. (Amartya Kumar), 1933-, Sen, Amartya K. (Amartya Kumar), 1933-. Prof Sen born in Santiniketan, India on Nov. 03, 1933 and as a globally reputed scholar in Economics worked in institutions like Trinity College (University of Cambridge), Thomas W. Lamont University, Harvard University, and Nalanda International University.

Additional information from Biog. resource center (Contemp. authors), Mar. 23, 2009

Amartya Sen; also known as Amartya Kumar Sen, Amartya K. Sen, A.K. Sen; b. Nov. 3, 1933, Santiniketan, India; Trinity College, Cambridge, Ph. D., 1959; economist, educator, writer, and editor; Trinity College, Cambridge, master, 1998-

Additional information from Wikipedia viewed on 2013-01-28

Amartya Sen; born 3 November 1933; is an Indian philosopher and economist who was awarded the 1998 Nobel Memorial Prize in Economic Sciences for his contributions to welfare economics and social choice theory.

OR

- 3.2 (A) What do you mean by Crosswalk? Create a crosswalk between CCF/B and MARC 21 bibliographic format on the basis of eight areas of ISBD. 1+4
- (B) Designate the contents of **any two** of the following records / items of information by using MARC 21 Bibliographic Data Standard, 1999 edition, Update No. 22 (April, 2016) 2½ x 2
- i) Annals of public health and research / San Diego, California : JSciMed Central, 2014 / Began with: Volume 1, issue 1, published 19 February 2014 / Bimonthly / ISSN 2378-9328 / Dewey class no. 362.1 / Serial key title Annals of public health and research / Abbreviated title Ann. public health res. / Subjects Public health— Periodicals. Public health--Research--Periodicals. / Additional Links <http://www.jsimedcentral.com/PublicHealth> / Type of material: Periodical or Newspaper / Content type: text / Media type: computer / Carrier type: online resource /
Designate 2xx and 3xx tags of the serial record according to MARC 21 Bibliographic Format with Indicator positions.
 - ii) EuroSPI (Conference) (20th : 2013 : Dundalk, Ireland) / Systems, Software and Services Process Improvement : 20th European Conference, EuroSPI 2013, Dundalk, Ireland, June 25-27, 2013. Proceedings. / Heidelberg : Springer-Verlag, 2013. / ISBN 9783642391781 3642391788 /
Designate Tags 08X, 1xx and 2xx of MARC 21 Bibliographic Format with Indicator positions.
 - iii) The war in the Pacific / [Boston, Mass.] : FlagTower, c1995. / Description: 1 computer laser optical disc ; 4 3/4 in. + 1 user manual / ISBN 1888148039 / System requirements: MPC with 486SX 33MHz processor; 8MB RAM; Windows 3.1 (or later) or Windows 95; 256-color display capability; hard disk with 4MB free space; double-speed CD-ROM drive; mouse; headphones or speakers. / Title from disc label / (c)1995 First Electronic Publishing Limited/
Designate required 2xx and 5xx tags of the electronic resource according to MARC 21 Bibliographic Format with Indicator positions.
 - iv) High-performance structural fibers for advanced polymer matrix composites / Committee on High-Performance Structural fibers for Advanced Polymer Matrix Composites / National Materials Advisory Board / Division on Engineering and Physical Sciences / Washington, D.C. : National Academies Press, c2005.
Designate 2xx and 7xx tags of MARC 21 Bibliographic Format with Indicator positions.
- (C) Designate the contents of the various fields (**from 020 to 7xx**) of the following card catalogue record by using MARC 21 Bibliographic Data Standard, 1999 edition, Update No. 22 (April, 2016) 5

TH9148 **The Adventures of Safety Frog.** Fire safety
[videorecording] / Century 21 Video, Inc. — Van Nuys, Calif. :
AIMS Media, 1988.

1 videocassette (10 min.) : sd., col. ; 1/2 in.
Cataloged from contributor's data.
VHS.
Audience: Elementary grades.
Issued also as motion picture.
Summary: Safety Frog teaches children to be fire safe,
explaining that smart kids never play with matches. She shows how
smoke detectors work and explains why they are necessary. She also
describes how to avoid household accidents that lead to fires and how
to stop, drop, and roll if clothing catches fire.
For sale (\$195.00) or rent (\$50.00)

1. Fire prevention -- Juvenile films. 2. Fire detectors -- Juvenile
films. 3. Dwellings -- Fires and fire prevention -- Juvenile films. 4.
Puppet films. 5. Fire prevention. 6. Safety. I. Century 21 Video, Inc.
II. AIMS Media. III. Title: Fire safety [videorecording]

Dewey Class no.: 613.6 -- dc 11

89-711816
MARC

- 4.1 (A) What is DCMI? Show RDF based DCMES encoding system with a suitable example. 1+4
- (B) Show metadata encoding as instructed: 2½ x 2
- Alternative title of a document originally available in English has alternative German (language code de) title as: Das Wohltemperierte Klavier, Teil I. Show Qualified metadata encoding in RFC 2731 format for **title and alternative title**.
 - An image has following attributes: captioned as "Dublin Core icon"; available from http://purl.org/metadata/dublin_core/images/dc2.gif; gif image of 4KB. Show RFC 2731 based encoding of the following Dublin Core metadata elements – **DC.Title, DC.Identifier, DC.Type, and DC.Format**.
 - A medical website includes an exclusive document on *heart attack*. Librarian wants to add standard terms like *Myocardial Infarction* from MESH and *Pericardial Effusion* from LCSH. Show encoding of **DC.Subject** element in qualified form.
 - The Saga of War is a novel, describing US civil war era; 1861-1865 available in the web through ISBN 1-56592-149-6 as URN. Show encoding of **DC.Relation and DC.Coverage** elements in qualified form.
- (C) The song Candle in the Wind, available from web as MP3 audio file, is related to Diana, Princess of Wales. It is created by John, Elton in 1997 as Tribute to a dead princess. It is a version of Elton John's 1976 song Candle in the Wind. 5

Show RFC 2731 based encoding of **DC.Title, DC.Creator, DC.Date, DC.Type, DC.Description and DC.Relation**.

OR

- 4.2 (A) What is RFC 2731? Make a comparative study of Generic metadata schema and Domain-specific metadata schema. 2+3
- (B) Show metadata encoding as instructed: 2½ x 2
- A landscape image of animal has following attributes: caption - Marian with sheep; photographer - Bert Bos; camera use - Canon Eos 5; descriptive notes - Marian brings the sheep to the field in the morning. The lamb she carries was born that night; format – image/jpeg.
- Encode the picture with appropriate DC elements by using the **RDF wrapper** given below.
- ```
<?xml version='1.0' encoding='ISO-8859-1'?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
 xmlns:rdfs="http://www.w3.org/TR/1999/PR-rdf-schema-19990303#"
 xmlns:dc="http://www.w3.org/2000/PhotoRDF/dc-1-0#"
 <rdf:Description rdf:about="">

.....

</rdf:Description>
</rdf:RDF>
```
- A web page includes “Group photograph of the attendees at the recent conference on Capacity building for Public Libraries in India”. The event is related with the 5<sup>th</sup> Capacity Building Workshop held at INFLIBNET Centre, Ahemdabad, India, March 3-5, 2015. Photo was taken on the front steps on the INFLIBNET Centre on March 3, 2013. The image is available in gif format through URL <http://www.inflibnet.ac.in/CBPL/workshops/5ws/caption/ws5.gif>

and published by INFLIBNET. The photograph is also available from INFLIBNET Newsletter October, 2015. Show Qualified metadata encoding in RFC 2731 format for the following elements – **DC.Title, DC.Publisher, DC.Description, DC.Subject, DC.Identifier and DC.Relation.**

- iii) A Ph.D. thesis entitled A study of web mining tools for query optimization is awarded in June 09, 2015 to Kumar, Sourabh by University of Lucknow (Department of Computer Science and Information Technology) and is guided by Mansotra, Vibhakar. It is available from Shodhganga repository through URI <http://hdl.handle.net/10603/65416> from December 29, 2015. The thesis has 207 pages and 69 references. Bibliography is included from p. 197-207.

**Describe the object by following Shodhganga metadata schema (any four elements).**

- iv) The document is homepage of UKOLN. It is published by UKOLN, University of Bath through URL <http://www.ukoln.ac.uk/> in 2001. UKOLN is a national focus of expertise in digital information management. It provides policy, research and awareness services to the UK library, information and cultural heritage communities. UKOLN is based at the University of Bath.

**Describe the resource by using any four Simple DC in XML format.**

Note: `xmlns="http://example.org/myapp/"`  
`xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"`  
`xsi:schemaLocation="http://example.org/myapp/`  
`http://example.org/myapp/schema.xsd"`  
`xmlns:dc="http://purl.org/dc/elements/1.1/"`

- (C) The MARC format of an electronic journal is shown below. Convert the MARC record into Simple Dublin Core in HTML format (RFC 2731) through semantic mapping.

```
022 |a 1082-9873
082 1 4 |a 025 |2 12
210 1 0 |a DLIB MAGAZINE
222 0 |a D-Lib magazine |b (Online)
245 0 0 |a D-Lib magazine |h [Elektronisk resurs].
246 3 |a Digital library magazine
260 |a Reston, Va. : |b Corporation for National Research Initiatives, |c 1995-
520 8 |a Presents "D-Lib Magazine," a monthly electronic publication related to digital libraries. Includes
commentaries and news articles.
550 |a Early issues have subtitle: the magazine of the Digital Library Forum.
650 0 |a Digital libraries |v Periodicals.
650 0 |a Electronic publishing |v Periodicals.
710 2 |a Corporation for National Research Initiatives. |4 pbl
710 2 |a D-Lib Forum. |4 pbl
856 4 0 |u http://www.dlib.org/ |z DOAJ Directory of Open Access Journals:Full Text |x 856free
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