



UNIVERSITY OF CALCUTTA

Notification No.CSR/20/2023

It is notified for information of all concerned that in terms of the provisions of Section 54 of the Calcutta University Act, 1979, (as amended), and, in exercise of her powers under 9(6) of the said Act, the Vice-Chancellor has, by an order dated 25.07.2023 approved the syllabus of the under mentioned subjects semester wise Four-year (Honours & Honours with Research) /Three-year (Multidisciplinary) programme of U.G. courses of studies, as applicable under CCF,2022, under this University, as laid down in the accompanying pamphlet.

1. Food & Nutrition
2. Defence Studies
3. Human Development
- ✓ 4. Sanskrit (Revised syllabus after incorporating some amendments, in the syllabus published in CSR/18/23,dt.24.7.23)
5. Persian
6. Computer Science
7. B.Mus.(Honours) and Music (Minor)
8. Marks distribution for semesters 1 & 2 and Amendments in the syllabus of English (4-year Honours/3-year MDC)
9. Amendments in SEC paper of Physiology (Honours & Honours with Research) Courses (as mentioned in CSR/13/23,11.07.2023)
10. Environmental Science (Revised syllabus after incorporating some amendments, in the syllabus published in CSR/18/23, DT.24.7.2023)

The above shall take effect from the academic session 2023-2024.

SENATE HOUSE

Kolkata-700073

The 28th July ,2023


Prof.(Dr.) Debasis Das

Registrar

Department of Sanskrit

University of Calcutta Four-year (Honours & Honours with Research) Courses of Studies

Semester I & II of the Sanskrit UG course (Major & Minor) and also of IDC, under CCF in respect of NEP 2020 for Four Year Undergraduate Programme :

- A. 30% of answers have to be written in Sanskrit language and Devanāgarī script excluding IDC. Rest of 70% may be answered in Sanskrit or Bengali or English whichever is comfortable to the students.
- B. Questions have to be set in Sanskrit language and Devanāgarī script excluding IDC. In that case questions will be set in English and Bengali both languages.
- C. Following topics are suitable for the syllabus of Semester I (Major I & Minor I) :
- D. Further communication about any change may be made by the UG Board of Studies only on receiving specific instructions from the appropriate authorities of the University.

Course Title : General Grammar and Metre

(Unit - I)

(Basic Concept of General Grammar)

1. Declension (शब्दरूपाणि) :

नरः, मुनिः, साधुः, लता, नदी, मतिः, फलम्, वारि, मधु, अस्मद्, सुष्मद्, तत्, यत्, इदम्, किम्, अदस्, एकः, द्विः, त्रिः, चतुर्, पञ्चन्, षष्ठ्, अष्टन्।

2. Conjugation (धातुरूपाणि):

भू, कृ, गम्, सेव्, की, दा, श्रु, चि (लट्, लोट्, लङ्, विधिलिङ्, लृट्)

3. Avyaya (अव्ययशब्दाः) :

अद्य, यदा, तदा, इह, श्वः, परश्वः, ह्यः, परह्यः, प्रातः, सायम्, शनैः, उच्चैः, एव, इव, अलम्, उपरि, अधः, विना, ऋते, अन्तरेण, अन्तरा, उभयतः, परितः, प्राक्, परम्, क्व।

4. Case-ending and Sandhi (कारक-विभक्तिः, सन्धिः)

5. Suffix (प्रत्ययः) :

कृत् → कृवाच्, ल्यप्, तुमुन्, शत्, शानच्, क्त, कृवत्, तव्य, अनीय्, यत्।
तद्वित् → अण्, इण्, ढक्, ख, छ, मतुप्।

6. Compound (समासः) |

(Unit - II) (Metre)

1. Following topics from Chandomañjari of Gangādāsa :

पद्मम्, वृत्तम्, अक्षरम्, गणाः, लघुः, गुरुः, यतिः।

2. Selected Metres (छन्दः) :

इन्द्रवज्ञा, उपेन्द्रवज्ञा, उपजातिः, शालिनी, भुजङ्गप्रयातम्, वंशस्थविलम्, मालिनी, प्रहर्षिणी, रुचिरा, शिखरिणी, वसन्ततिलकम्, मन्दाक्रान्ता, शार्दूलविक्रीडितम्, स्वगंधरा।

References :

- i) भट्टाचार्य, महामहोपाध्यायाचार्य श्रीरबीन्द्रनाथ : शब्दरूपदीपिका, संस्कृत बुक डिपो।
- ii) भट्टाचार्य, महामहोपाध्यायाचार्य श्रीरबीन्द्रनाथ : धातुरूपदीपिका, संस्कृत पुस्तक भाण्डार।
- iii) Sastri, Janakinath : Helps to Study of Sanskrit.
- iv) Durgācaraṇa Sāṃkhyavedāntatīrtha (ed.) : Vyākaraṇa Kaumudī, Sanskrit book Depot.
- v) मुखोपाध्याय, ड: सच्चिदानन्द : सिद्धान्तकोमुदी : समासप्रकरण।
- vi) मुखोपाध्याय, ड: सच्चिदानन्द : सिद्धान्तकोमुदी : कारकप्रकरण।
- vii) पण्डि, ड: विश्वरञ्जन : सन्धि प्रकरण।
- viii) Lahiri & Sastri : Pāṇiniyam, Sanskrit Book Depot.
- ix) Vidyānidhi, Gurunātha : Chandomañjari.
- x) বসু, ড: অনিল : ছন্দস্তত্ত্ব।

E. Following topics are suitable for the syllabus of SEC for Semester I (Major I & Minor I) :

1. Translation from Bengali to Sanskrit in short sentences.
2. Translation from Sanskrit to either Bengali or English.
3. Comprehension in Sanskrit.
4. Paragraph writing in Sanskrit.
5. Letter writing in sanskrit.

F. Following topics are suitable for the syllabus of Semester II (Major II & Minor II) :

Course Title : History of Sanskrit Literature

(Unit - I)

(History of Vedic Literature)

ऋग्वेदः, यजुर्वेदः, सामवेदः, अथर्ववेदः, ब्राह्मणम्, आरण्यकम्, उपनिषद्, वेदाङ्गानि।

(Unit - II)

(History of Classical Sanskrit Literature)

1. रामायणम्, महाभारतम्, पुराणम्।
2. Historical works and Lyrical poetry.
3. Brief discussions on the following authors and their works :
कालिदासः, भासः, अश्वघोषः, भारविः, भट्टिः, दण्डी, बाणभट्टः, शूद्रकः, श्रीहर्षः, भट्टनारायणः, कुमारदासः, हर्षदेवः।

(Unit - III)

(History of Scientific and Technical Sanskrit Literature)

व्याकरणशास्त्रम्, दर्शनशास्त्रम्, अलङ्कारशास्त्रम्, आयुर्वेदः, वास्तुशास्त्रम्, सङ्गीतशास्त्रम्, नाट्यशास्त्रम्, गणितशास्त्रम्, ज्योतिषशास्त्रम्, शिल्पशास्त्रम्।

(Unit - IV)

(Contribution of Scholars in the field of Sanskrit Literature)

1. Pt. Gaurinātha Sāstrī.
2. M. M. Pañcānan Tarkaratna.
3. M. M. Kālipada Tarkācārya.
4. M. M. Pramathanāth Tarkabhūṣaṇ.
5. Rājñī Bhabānī.
6. M. M. Niranjan Swarūp Brahmacārī.

References :

- i) গোপ, যুধিষ্ঠির : সংস্কৃতসাহিত্যের ইতিহাস, সংস্কৃত বুক ডিপো।
- ii) বসু, যোগীরাজ : বেদের পরিচয়।
- iii) শ্রীঅনিবার্ণ : সাহিত্য প্রসঙ্গ, হৈমবতী প্রকাশনী ট্রাস্ট, কোলকাতা।
- iv) ভৌমিক, জাহানীচরণ : সংস্কৃত সাহিত্যের ইতিহাস।
- v) বন্দ্যোপাধ্যায়, ধীরেন্দ্রনাথ : সংস্কৃত সাহিত্যের ইতিহাস, পশ্চিমবঙ্গ রাজ্য পুস্তক পর্যট্ট, কোলকাতা।
- vi) ভট্টাচার্য, বিষ্ণুপদ : প্রাচীন ভারতীয় অলঙ্কারশাস্ত্রের ভূমিকা।
- vii) ভট্টাচার্য, ডঃ অমিত : ভারতীয় দর্শনের রূপরেখা, সংস্কৃত বুক ডিপো।
- viii) সেনগুপ্তা, জ্যোতি : ভারতীয় দর্শন।
- ix) Keith, A. B. : History of Sanskrit Literature, MLBD, Delhi.
- x) Shastri, Gaurinath : A Concise History of Sanskrit Literature, MLBD, Delhi.
- xi) Winternitz, Maurice : Indian Literature (Vol. I-III), MLBD, Delhi.
- xii) Krishnamachariar, M. : History of Classical Sanskrit Literature, MLBD, Delhi.
- xiii) Jana, Sunil Kumar : Anubada Chandrika, Sanskrit Book Depot.

- xiv) Shukla, D.N. : *Vāstu-Śāstra* : Hindu Science of Architecture - Mānasāra Series (Vol.1), Munshiram Monoharlal Publishers Pvt. Ltd., New Delhi.
- xv) Shukla, D.N. : *Vāstu-Śāstra* : Hindu Canons of Iconography and painting - (Vol.2), Munshiram Monoharlal Publishers Pvt. Ltd., New Delhi.

G. Followings are suitable for the **IDC** for **Semester I & II** :

- 1. (a) Medical Science; (b) Music, Painting, Dance - **Semester I**.
- 2. (a) Mathematics & Astronomy; (b) Architecture - **Semester II**.

H. Following topics are suitable for the syllabus of **SEC** for **Semester II (Major II & Minor II)** :

- 1. Spoken Sanskrit.
- 2. Computer Awareness for Sanskrit (Basic Computer Awareness, Typing in Unicode for Preservation and Digitalization of Sanskrit Text Web Publishing)

References :

- i) Bose, D.M., Sen, S.N., Subbarayappa, B.V. : A Concise History of Science in India, Indian National Science Academy, New Delhi.
- ii) Shruthi, Keshav : Science and Technology in Ancient India, Vijñāna Bhārati Publication.
- iii) Naqvi, Nasim, H. : A Study of Buddhist Medicine and Surgery in Gāndhāra, MLBD, Delhi.
- iv) Subbarayappa, B.V. : Medicine and Life Sciences in India : History of Science, Philosophy and Culture in India (vol. IV, Part 2), D.P. Chattpadhyaya (Gen. Ed.), Centre for studies in Civilizations, New Delhi.
- v) Roychaudhuri, Bimalakanta : The Dictionary of Hindustani Classical Music, MLBD, Delhi.
- vi) Shukla, D.N. : *Vāstu-Śāstra* : Hindu Canons of Iconography and Painting - (Vol. 2), Munshiram Monoharlal Publishers Pvt. Ltd., New Delhi.
- vii) Baumer, Rachel Van M., Brandon, James R. : Sanskrit Drama in Performance, MLBD, Delhi.
- viii) Subbarayappa, B.V. : The Tradition of Astronomy in India, *Jyotiḥśāstrah* : History of Science, Philosophy and Culture in India (Vol. IV, Part 2), D.P. Chattpadhyaya (Gen. Ed.), centre for Studies in Civilizations, New Delhi.
- ix) Datta, Bibhutibhusan, Singh, Avadhesh Narayan : History of Hindu Mathematics (Part I & II), Asia Publishing House, New Delhi.
- x) Dhaky, M.A. : Architecture in India : History of Science, Philosophy and Culture in India (vol. IV, Part 2), D.P. Chattpadhyaya (Gen. Ed.), centre for Studies in Civilizations, New Delhi.
- xi) Shukla, D.N. : *Vāstu-Śāstra* : Hindu science of Architecture Mānasāra Series (Vol.1), Munshiram Monoharlal publishers pvt. Ltd., New Delhi.

- xii) Online Tools for Sanskrit Grammar developed by Computational Linguistics Group,
Department of Sanskrit, University of Delhi : <http://Sanskrit.du.ac.in> .

Department of Sanskrit
University of Calcutta
Three-year Multi-Disciplinary Courses of Studies

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Semester I & II of the Sanskrit UG course (Major & Minor) and also of IDC, under CCF, in respect of NEP 2020 for Four Year Undergraduate Programme :

- A. 20% of answers have to be written in Sanskrit language and Devanāgarī script excluding IDC. Rest of 80% may be answered in Sanskrit or Bengali or English whichever is comfortable to the students.
- B. Questions have to be set in Sanskrit language and Devanāgarī script excluding IDC. In that case questions will be set in English and Bengali both languages.
- C. Following topics are suitable for the syllabus of Semester I (Major I & Minor I) :
- D. Further communication about any change may be made by the UG Board of Studies only on receiving specific instructions from the appropriate authorities of the University.

Course Title : General Grammar and Metre
(Unit - I)
(Basic Concept of General Grammar)

1. Declension (शब्दरूपाणि) :
नरः, मुनिः, साधुः, लता, नदी, मतिः, फलम्, वारि, मधु, अस्मद्, युष्मद्, तत्, यत्, इदम्, किम्, अदस्, एकः, द्विः, त्रिः, चतुर्, पञ्चन्, षष्ठ्, अष्टन्।
2. Conjugation (धातुरूपाणि):
भू कृ, गम् सेव्, क्री, दा, श्रु, चि (लट्, लोट्, लड्, विधिलिङ्, लृट्)
3. Avyaya (अव्ययशब्दाः) :
अद्य, यदा, तदा, इह, श्वः, परश्वः, ह्यः, परह्यः, प्रातः, सायम्, शनैः, उच्चैः, एव, इव, अलम्, उपरि, अधः, विना, ऋते, अन्तरेण, अन्तरा, उभयतः, परितः, प्राक्, परम्, क्व।
4. Case-ending and Sandhi (कारक-विभक्तिः, सन्धिः)
5. Suffix (प्रत्ययः) :
कृत् → कृवाच्, ल्यप्, तुमुन्, शत्, शानच्, क्त, क्तवतु, तव्य, अनीयर्, यत्।
तद्वित् → अण्, इण्, ढक्, ख, छ, मतुप्।
6. Compound (समासः) |

(Unit - II) (Metre)

1. Following topics from Chandomāñjari of Gangādāsa :

पद्यम्, वृत्तम्, अक्षरम्, गणाः, लघुः, गुरुः, यतिः।

2. Selected Metres (छन्दः) :

इन्द्रवज्रा, उपेन्द्रवज्रा, उफजातिः, शालिनी, भुजङ्गप्रयातम्, वंशस्थविलम्, मालिनी, प्रहर्षिणी, रुचिरा, शिखरिणी, वसन्ततिलकम्, मन्दाक्नान्ता, शार्दूलविक्रीडितम्, स्मगधरा।

References :

- i) भट्टाचार्य, महामहोपाध्यायाचार्य श्रीरवीन्द्रनाथ : शब्दरूपदीपिका, संस्कृत बुक डिपो।
- ii) भट्टाचार्य, महामहोपाध्यायाचार्य श्रीरवीन्द्रनाथ : धातुरूपदीपिका, संस्कृत पुस्तक भाण्डार।
- iii) Sastri, Janakinath : Helps to Study of Sanskrit.
- iv) Durgācarāṇa Sāṃkhyavedāntafīrtha (ed.) : Vyākaraṇa Kaumudī, Sanskrit book Depot.
- v) मुखोपाध्याय, ड: सचिदानन्द : सिद्धान्तकोमुदी : समासप्रकरण।
- vi) मुखोपाध्याय, ड: सचिदानन्द : सिद्धान्तकोमुदी : कारकप्रकरण।
- vii) পণ্ড, ড: বিশ্বরঞ্জন : সম্প্রিত্র প্রকরণ।
- viii) Lahiri & Sastri : Pāṇiniyam, Sanskrit Book Depot.
- ix) Vidyānidhi, Gurunātha : Chandomāñjari.
- x) বসু, ড: অনিল : ছন্দস্তত্ত্ব।

E. Following topics are suitable for the syllabus of SEC for Semester I (Major I & Minor I) :

1. Translation from Bengali to Sanskrit in short sentences.
2. Translation from Sanskrit to either Bengali or English.
3. Comprehension in Sanskrit.
4. Paragraph writing in Sanskrit.
5. Letter writing in sanskrit.

F. Following topics are suitable for the syllabus of Semester II (Major II & Minor II) :

Course Title : History of Sanskrit Literature

(Unit - I)

(History of Vedic Literature)

ऋग्वेदः, यजुर्वेदः, सामवेदः, अथर्ववेदः, ब्राह्मणम्, आरण्यकम्, उपनिषद्, वेदाङ्गानि।

(Unit - II)

(History of Classical Sanskrit Literature)

1. रामायणम्, महाभारतम्, पुराणम्।

2. Historical works and Lyrical poetry.

3. Brief discussions on the following authors and their works :

कालिदासः, भासः, अश्वघोषः, भारविः, भट्टिः, दण्डी, बाणभट्टः, शूद्रकः, श्रीहर्षः, भट्टनारायणः, कुमारदासः, हर्षदेवः।

(Unit - III)

(History of Scientific and Technical Sanskrit Literature)

व्याकरणशास्त्रम्, दर्शनशास्त्रम्, अलঙ्कारशास्त्रम्, आयुर्वेदः, वास्तुशास्त्रम्, सङ्गीतशास्त्रम्, नाट्यशास्त्रम्, गणितशास्त्रम्, ज्योतिषशास्त्रम्, शिल्पशास्त्रम्।

(Unit - IV)

(Contribution of Scholars in the field of Sanskrit Literature)

1. Pt. Gaurinātha Sāstrī.
2. M. M. Pañcānan Tarkaratna.
3. M. M. Kālipada Tarkācārya.
4. M. M. Pramathanāth Tarkabhūṣan.
5. Rājñī Bhabānī.
6. M. M. Niranjan Swarūp Brahmācārī.

References :

- i) গোপ, যুধিষ্ঠির : সংস্কৃতসাহিত্যের ইতিহাস, সংস্কৃত বুক ডিপো।
- ii) বসু, যোগীরাজ : বেদের পরিচয়।
- iii) শ্রীঅনিবার্ণ : সাহিত্য প্রসঙ্গ, হৈমবতী প্রকাশনী ট্রাস্ট, কোলকাতা।
- iv) ভৌমিক, জাহানবীচরণ : সংস্কৃত সাহিত্যের ইতিহাস।
- v) বন্দ্যোপাধ্যায়, ধীরেন্দ্রনাথ : সংস্কৃত সাহিত্যের ইতিহাস, পশ্চিমবঙ্গ রাজ্য পুস্তক পর্যট্ট, কোলকাতা।
- vi) ভট্টাচার্য, বিষ্ণুপদ : প্রাচীন ভারতীয় অলঙ্কারশাস্ত্রের ভূমিকা।
- vii) ভট্টাচার্য, ড: অমিত : ভারতীয় দর্শনের ইতিহাস, সংস্কৃত বুক ডিপো।
- viii) সেনগুপ্তা, জ্যোতি : ভারতীয় দর্শন।
- ix) Keith, A. B. : History of Sanskrit Literature; MLBD, Delhi.
- x) Shastri, Gaurinath : A Concise History of Sanskrit Literature, MLBD, Delhi.
- xi) Winternitz, Maurice : Indian Literature (Vol. I-III), MLBD, Delhi.
- xii) Krishnamachariar, M. : History of Classical Sanskrit Literature, MLBD, Delhi.
- xiii) Jana, Sunil Kumar : Anubada Chandrika, Sanskrit Book Depot.

- xiv) Shukla, D.N. : *Vāstu-Śāstra* : Hindu Science of Architecture - Mānasāra Series (Vol.1), Munshiram Monoharlal Publishers Pvt. Ltd., New Delhi.
- xv) Shukla, D.N. : *Vāstu-Śāstra* : Hindu Canons of Iconography and painting - (Vol.2), Munshiram Monoharlal Publishers Pvt. Ltd., New Delhi.

G. Followings are suitable for the **IDC** for **Semester I & II** :

- 1. (a) Medical Science; (b) Music, Painting, Dance - **Semester I**.
- 2. (a) Mathematics & Astronomy; (b) Architecture - **Semester II**.

H. Following topics are suitable for the syllabus of **SEC** for **Semester II (Major II & Minor II)** :

- 1. Spoken Sanskrit.
- 2. Computer Awareness for Sanskrit (Basic Computer Awareness, Typing in Unicode for Preservation and Digitalization of Sanskrit Text Web Publishing)

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- ii) Shruti, Keshav : Science and Technology in Ancient India, Vijnāna Bhārati Publication.
- iii) Naqvi, Nasim, H. : A Study of Buddhist Medicine and Surgery in Gāndhāra, MLBD, Delhi.
- iv) Subbarayappa, B.V. : Medicine and Life Sciences in India : History of Science, Philosophy and Culture in India (vol. IV, Part 2), D.P. Chattpadhyaya (Gen. Ed.), Centre for studies in Civilizations, New Delhi.
- v) Roychaudhuri, Bimalakanta : The Dictionary of Hindustani Classical Music, MLBD, Delhi.
- vi) Shukla, D.N. : *Vāstu-Śāstra* : Hindu Canons of Iconography and Painting - (Vol. 2), Munshiram Monoharlal Publishers Pvt. Ltd., New Delhi.
- vii) Baumer, Rachel Van M., Brandon, James R. : Sanskrit Drama in Performance, MLBD, Delhi.
- viii) Subbarayappa, B.V. : The Tradition of Astronomy in India, Jyotiḥśāstrah : History of Science, Philosophy and Culture in India (Vol. IV, Part 2), D.P. Chattpadhyaya (Gen. Ed.), centre for Studies in Civilizations, New Delhi.
- ix) Datta, Bibhutibhusan, Singh, Avadhesh Narayan : History of Hindu Mathematics (Part I & II), Asia Publishing House, New Delhi.
- x) Dhaky, M.A. : Architecture in India : History of Science, Philosophy and Culture in India (vol. IV, Part 2), D.P. Chattpadhyaya (Gen. Ed.), centre for Studies in Civilizations, New Delhi.
- xi) Shukla, D.N. : *Vāstu-Śāstra* : Hindu science of Architecture Mānasāra Series (Vol.1), Munshiram Monoharlal publishers pvt. Ltd., New Delhi.

- xii) Online Tools for Sanskrit Grammar developed by Computational Linguistics Group,
Department of Sanskrit, University of Delhi : <http://Sanskrit.du.ac.in> .