

**Ordinances and Outlines of Tests, Syllabi
&
Courses of Study**

For

Bachelor of Arts (Hon's) in Pali
(Three Years Semester System Degree Course)



Nava Nalanda Mahavihara, Nalanda, Bihar, India
(Deemed University under Ministry of Culture, Govt. of India)

Outlines of Tests, Syllabi and Courses of Study

Bachelor of Arts (Hon's) in Pali

Eligibility for Admission:-

A candidate possessing the **Pali Diploma** of the Nava Nalanda Mahavihara, Nalanda, Universities of Calcutta and University of Delhi or **I.A., I. Sc., I. Com. and Uttar Madhyama** from any Indian or foreign Board/University or possessing the degree of **Pandit Parikbha in Pali** of Sri Lanka or **Pathamagy** Examination in Pali of Myanmar or **Mahapatiyatti Uttama-vijja** of Buddhika Vityalana of Cambodia or **Visarada** of Bangiya Sanskrit Parishad, Govt. of West Bengal or **Upadhi** of Assam Sanskrit Association or **Upadhi** of Bangladesh in any one of the Pali Tipitakas or any other equivalent oriental degree of a recognised Board/Association/Council/University is eligible for admission in this course after qualifying in the Entrance/Proficiency Test conducted by the Mahavihara.

Structure of the Course:

The Bachelor of Arts (Hon's) in Pali is a full time course of three years duration. It is divided into three parts: B.A. (Hon's) in Pali, Part I (consisting of two semesters: Semester I and Semester II), B.A. (Hon's) in Pali, Part II (consisting of two semesters: Semester III and Semester IV) and B.A. (Hon's) in Pali, Part III (consisting of two semesters: Semester V and Semester VI). The course is conducted in the form of lectures, seminars, and tutorials. Teaching of semester I and II will be sequential and also that of semester III and IV. Syllabus for each paper will be discussed in 40 to 50 clock hours (approximately) during each semester.

A Bachelor of Arts (Hon's) in Pali, student is assessed for his/her performance at tests consisting of 1600 marks i.e. thirty two papers of 50 marks each (Written Test of 37 marks & Internal Assessment of 13 marks).

Structure of the question papers:

The question paper of each paper will consist of five units. First four units will contain two questions each from the corresponding four units of the syllabi and out of the two questions at least one question will have to be attempted from each unit. Each question of first four units will carry 7.5 marks. The last unit will contain seven objective-type questions giving equal weightage to all the four units of the syllabi. The candidates are required to give answer of objective-type question either in one word or in a single sentence and will carry one mark each.

Pattern of the Questions:

- Textual questions & critical question from the prescribed texts.
- Short Notes on Buddhist concepts dealt within the prescribed texts.
- Explanation of Pali verses from the prescribed texts.
- Annotated translations of Pali passages (verse/prose) into Hindi/English from the prescribed texts.
- Translations of Hindi/English sentences/passages into Pali.

Structure of the Course

B.A. (Hons.) Pali, Semester I

Course Category	Paper Code	Title of the Papers	Maximum Marks
Core (Pali)	BPL101	Introduction to Pali Language	50
	BPL102	Introduction to Pali Canonical & Extra Canonical Literature	50
Compulsory (English, Hindi)	BPS101	English	50
	BPS102	Hindi	50
Elective (A.H.C.& Arch., Philosophy)	BPS103	Ancient History Culture & Archaeology	50
	BPS104	Philosophy	50

Total 300

B.A. (Hons.) Pali, Semester II

Course Category	Paper Code	Title of the Papers	Maximum Marks
Core (Pali)	BPL203	Pali Grammar and Composition I	50
	BPL204	Pali Vinaya Literature	50
Compulsory (English, Hindi)	BPS205	English	50
	BPS206	Hindi	50
Elective (A.H.C.& Arch., Philosophy)	BPS207	Ancient History Culture & Archaeology	50
	BPS208	Philosophy	50

Total 300

B.A. (Hons.) Pali, Semester III

Course Category	Paper Code	Title of the Papers	Maximum Marks
Core (Pali)	BPL305	Pali Grammar and Composition II	50
	BPL306	Pali Sutta Literature	50
Compulsory (English, Hindi)	BPS309	English	50
	BPS310	Hindi	50
Elective (A.H.C.& Arch., Philosophy)	BPS311	Ancient History Culture & Archaeology	50
	BPS312	Philosophy	50

Total 300

B.A. (Hons.) Pali, Semester IV

Course Category	Paper Code	Title of the Papers	Maximum Marks
Core (Pali)	BPL407	General Introduction to Pali Language and Elementary Pali Grammar	50
	BPL408	Pali Abhidhamma Literature	50
Compulsory (English, Hindi)	BPS413	English	50
	BPS414	Hindi	50
Elective (A.H.C.& Arch., Philosophy)	BPS415	Ancient History Culture & Archaeology	50
	BPS416	Philosophy	50

Total 300

B.A. (Hons.) Pali, Semester V***

Course Category	Paper Code	Title of the Papers	Maximum Marks
Pali (Hons')	BPL509	Introduction to Pali Grammar and Composition	50
	BPL510	Origin & Development of Pali Commentaries & Manual Literature	50
	BPL511	Origin & Development of Vamsa Literature	50
	BPL512	Introduction to Pali Kavaya Literature	50

Total 200

*** Besides, there will one paper of Environmental Studies of 50 marks. Every student will have to pass this paper, but the marks obtained in this paper would not be taken in the total. See on page 26.

B.A. (Hons.) Pali, Semester VI

Course Category	Paper Code	Title of the Papers	Maximum Marks
Pali (Hons')	BPL613	Introduction to Pali Grammar and Composition	50
	BPL614	Introduction to Pali Extra Canonical Literature	50
	BPL615	Introduction to Pali Poetics & Lexicon Texts	50
	BPL616	Pali Composition	50

Total 200

Syllabi and Courses of Study:

Bachelor of Arts (Hon's) in Pali Semester - I

There are two papers in Bachelor of Arts (Hon's) in Pali, Semester - I. Each paper carries 50 marks. Out of which 13 Marks are allotted to Internal Assessment. The written paper carries 37 marks.

Paper Code	Title of the Paper	Marks
BPL10I	Introduction to Pali Language	37
BPL10I	Introduction to Pali Canonical & Extra Canonical Literature	37

BPL10I

Introduction to Pali Language

Maximum Marks: 37

Pass Marks: 17

Unit – 1 General Introduction to Pali Language -

- a- Etymology of the Term Pali & Its Homeland.
- b- Origin & Development of Pāli Language

Unit – 2 Phonology & Morphology of Pali

- a- Phonological Characteristics of Pali.
- b- Morphological Characteristics of Pali.

Unit – 3 Elementary Pali Grammar

- a- *Pali Saddarupa – Buddha, Phala, Latā, Muni, Sādhū, Amha & tumha*
- b- *Dhaturupa – Bhu, Gama, Paṭha, Cara* (in all the Tenses).

Unit – 4 Pali Composition

- a. Translations of Hindi/English sentences/passages into Pali.
- b. Translations of Pali sentences/passages into Hindi/English.

Division of Marks:

- i. Three descriptive questions with options one each from **Unit1,2 and 3.** 3x7 = 21
- ii. Essay on one topic from the given three 1x8= 8
- iii. Translation from Pali to Hindi/English & vice versa 2x4 = 8

Suggested Readings:

1. Barua, Dwijendra Lal, *Pāli Grammar*, Calcutta, West Bengal Board of Secondary Education, 19
2. Dhramarakshita, Bhikkhu, *Pāli Sāhitya Kā Itihāsa*, Gyānamandala Limited, Varanasi, 1971.
3. Geigre, W., *Pali Literature and Language*, Calcutta University Publication, 1968.
4. Kashyapa, Bhikkhu J., *Pali Mahavyakarana*, Motilal Banarasidass, New Delhi.
5. Kashyapa, Bhikkhu J., *Pali Nisseni*, Ed. Rajesh Ranjan, Samyak Prakashan, Paschimpuri N.Delhi, 2010
6. Junghare, I.Y., *Topic in Pali Historical Phonology*, Motilal Banarasidass, Delhi.
7. Law, B. C., *A History of Pāli Literature*, Indica Books, Varanasi, India, 2000.
8. Mishra, Madhusudan, *A Comparative and Historical Pali Grammar*, Aroma Publishing House, New Delhi, 1986.
9. Pandey, Ram Awadh & Ravinath Mishra *Pāli Vyakarana*,
10. Tiwari, L. N. & Birbal Sharma (Ed.) *Kaccayana Vyakarana*, Tara Printing Press, Varanasi, 1961.
11. Gune, Pandurang Damodar, *An Introduction to Comparative Philology*, Poona, Oriented Book House, 1692
12. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.
13. Winternitze M.A., *A History of Indian Literature*, Vol. II, Oriental Books, Reprint Corporation, Rani Jhansi Road, New Delhi, 1968.

BPL102

Introduction to Pāli Canonical & Extra Canonical Literature

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Introduction to the Pali Canonical literature

- a- Meaning of the word Pitaka & General Introduction to the Vinaya Piṭaka
- b- A General Introduction to the Mahavagga & Cullavagga.

Unit – 2 Introduction to the Pali Canonical literature

- a- A General Introduction to the Sutta Piṭaka.
- b- A General Introduction to the Dighanikaya & Majjhimanikaya.

Unit – 3 Introduction to the Pali Canonical literature

- a- A General Introduction to the Abhidhamma Piṭaka.
- b- A General Introduction to the Dhammasangani & Vibhanga.

Unit – 4 Introduction to the Extra Canonical Literature

- a- A General Introduction to the Milindapanha.
- b- A General Introduction to the Nettippakarana & Petakopadesa.

Division of marks

- i. Two critical questions with option, one each from Unit 1 and Unit 2 2X8=16
- ii. Four short notes from Unit 3 and 4 4X3.5=14
- iii. Seven short questions answerable in one word/sentence 7X1= 7

Suggested Readings:

1. Nettipakarana, Chattha Sangayana,
2. Peṭakopadesa Chattha Sangayana,
3. The Guide, (Nettipakarana), Bhikshu Nanamoli, Pali Rext Society, London, 1977
4. Milinda Pañhapali, Ed. Tr. Dwarika Das Shastri, Bauddha Bharati Prakashan, Varanasi1990
5. F. Max Muller, *Questions of King Milinda, Sacred Books of the east, vol.35*
6. Andersen, D. & H. Smith, (Ed.), *The Sutta Nipāta*, reprint, London: PTS, 1984. Tr. K.R. Norman, *The Groups of Discourses*, with alternative tr. by I. B. Horner & W. Rahula, London: PTS, 1984.
7. Dhramarakshita, Bhikkhu, *Pāli Sāhitya Kā Itihāsa*, Gyānamandala Limited, Varanasi, 1971.
8. Dharmratana, Bhikkhu, (Ed. & Tr.), *The Suttanipata*, Mahabodhi Sabha, Saranath, 1960.
9. Geigre, W., *Pali Literature and Language*, Calcutta University Publication, 1968.
10. Law, B. C., *A History of Pāli Literature*, Indica Books, Varanasi, India, 2000.
11. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.

Semester – II

There are two papers in Bachelor of Arts (Hon's) in Pali, Semester - II. Each paper carries 50 marks. Out of which 13 Marks are allotted to Internal Assessment. The written paper carries 37 marks.

Paper Code	Title of the Paper	Marks
BPL203	Pāli Grammar and Composition	37
BPL204	Pali Vinaya Literature	37

BPL203

Pāli Grammar and Composition

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Introduction to Pali Grammar

- a- Pali Alphabets – Sara & Byanjana.
- b- Sandhi in Pali.

Unit – 2 Introduction to Pali Grammar

- a- Karaka in Pali.
- b- Use of Vibhatti in Pali.

Unit – 3 Introduction to Pali Grammar

- a- Nipātas (Indeclinable).
- b- Change of Gender (Linga Vipallāsa).

Unit – 4 Pali Composition

- a- Translations of Hindi/English sentences/passages into Pali.
- b- Translations of Pali sentences/passages into Hindi/English.

Division of Marks:

- i. Two descriptive optional questions one each from
Unit 1, 2 and 3. 3x7 = 21
- ii. Essay on one topic from the given three 1x8 = 8
- iii. Translation from Pali to Hindi/English & vice versa 2x4 = 8

Suggested Readings:

1. Barua, Dwijendra Lal, *Pāli Grammar*, Calcutta, West Bengal Board of Secondary Education, 19
2. Kashyapa, Bhikkhu J., *Pali Mahavyakarana*, Motilal Banarasidass, New Delhi.
3. Junghare, I.Y., *Topic in Pali Historical Phonology*, Motilal Banarasidass, Delhi.
4. Mishra, Madhusudan, *A Comparative and Historical Pali Grammar*, Aroma Publishing House, New Delhi, 1986.
5. Pandey, Ram Awadh & Ravinath Mishra *Pāli Vyakarana*,
6. Shukla, Hari Shankar, *Pali Nibandhavali*, Tara Publications, Varanasi.
7. Tiwari, L. N. & Birbal Sharma (Ed.) *Kaccayana Vyakarana*, Tara Printin Press, Varanasi, 1961.
8. Gune, Pandurang Damodar, *An Introduction to Comparative Philology*, Poona, Oriented Book House, 1692
9. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.
10. Winternitze M.A., *A History of Indian Literature*, Vol. II, Oriental Books, Reprint Corporation, Rani Jhansi Road, New Delhi, 1968.

BPL204

Pali Vinaya Literature

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Textual study of the Vinayapitaka

- a- Mahāvagga, Mahkhandhaka - Bodhikatha, Dhammacakkapavattana
- b- Mahāvagga, Mahkhandhaka

Unit – 2 Textual study of the Vinayapitaka

- a- Cullavagga: Pañcastikkhandhaka -
- b- Cullavagga: Sattasatikkhandhaka -

Unit – 3 Technical Terms of Vinaya Piṭaka

- a- Vassāvāsa, Uposatha, Pavāraṇā,
- b- Pabbajā, Upasampadā, Upajjhāya, Ācariya, Saddhivihārika, Antevāsi

Unit – 4 Introduction to Patimokkha

- a- A General Introduction to the Pātimokkha.
- b- The Prajikadhamma of the Bhikkhu & the Bhikkhuni Patimokkha.

Division of Marks:

- i. Three descriptive questions with options one each from **Unit 1, 2 and 3.** 3x7 = 21
- ii. Short notes on two topics out of given four from **Unit 4** 2x4 = 8
- iii. Eight short questions answerable either in one word or in one sentence from all the **Units** 8x1=8

Suggested Readings:

1. Dhramarakshita, Bhikkhu, *Pāli Sāhitya Kā Itihāsa*, Gyānamandala Limited, Varanasi, 1971.
2. Geigre, W., (Tr. in English by Batakrishna Ghosh), *Pali Literature and Language*, Calcutta University Publication, 1968.
3. Horner, I.B., *The Book of Discipline*, 6 Vols., P.T.S., London, 1982-86.
4. Jain, Bhagchandra, (Ed.), *Pātimokkha*, Mamta Prakashan, Nagpur, 1966.
5. Kabil Singh, Chatsumarn, *The Bhikkhuni Patimokha of Six Schools*, Bangkok, Thammasat University, 1991.
6. Kashyap, Bhikshu J., (Ed.), *Mahavagga*, Nalanda Edition, Nalanda, 1956.
7. Law, B. C., *A History of Pāli Literature*, Indica Books, Varanasi, India, 2000.
8. Oldenberg, H., (Ed.), *The Vinaya Pitakam*, 5 Vols, London, Pali Text Society, 1964.

9. Pachow, W., *Comparative study of Pratimoksa*, The Sino- Indian Cultural Society, Santiniketan, 1955.
10. Rhys Davids, T. W. & H. Oldenberg, (Tr.), *Vinaya Texts*, Vols. I, II & III, Motilal Banarasidass, Delhi.
11. Sankrityayan, Rahul, *Vinaya Pitaka* (Hindi Translation), Taipei, 1993.
12. Sankrityayana, Rahula, *Pāli Sāhitya Kā Itihāsa*, Hindi Sansthan, Lucknow, 1976.
13. Shastri, Dwarikadas, (Ed. & Tr.), *Mahavagga*, Bauddh Bharti, Varanasi, 1998.
14. Shastri, Swami Dwarikada, (Ed.), *Pātimokkha*, Bauddha Bharati, Varanasi.
15. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.
16. Upasak, C. S., *Dictionary of Early Buddhist Monastic Terms* (Based on Pali Literature), Nalanda, Nava Nalanda Mahavihara, 2003.
17. Vadekar, R. D., *Patimokkha*, Bhandarkar Oriental Research Institute, Pune, 1939.

Semester III

There are two papers in Bachelor of Arts (Hon's) in Pali, Semester - III. Each paper carries 50 marks. Out of which 13 Marks are allotted to Internal Assessment. The written paper carries 37 marks.

Paper Code	Title of the Paper	Marks
BPL305	Introduction to Pali Grammar and Composition	37
BPL306	Pali Sutta Literature	37

BPL305

Pali Grammar and Composition

Maximum Marks: 37

Pass Marks: 17

Unit – 1 General Introduction to Pali Language

- a- Pāli is not a homogeneous language.
- b- Linguistic Characteristics of Pāli.

Unit – 2 Elements of Pāli Grammar

- a- Kāraka
- b- Vibhatti

Unit – 3 Elements of Pāli Grammar

- a- General Introduction to Sandhikappa of Kaccayana Vyakarana
- b- Study of Sarasandhi and Niggahitasandhi

Unit – 4 Composition

- a- Write about the given Philosophical terms in Pāli in 100 Words:-
Buddha, Dhamma, Saṅgha, Cattari ariya Saccāni, Tilakkhanam, Sīla
Samādhi, Paññā

Division of Marks:

- | | | |
|------|---|----------|
| i. | Three descriptive questions with options one each from
Unit 1, 2 and 3. | 3x7 = 21 |
| ii. | Short notes on two topics out of given four from Unit 4 | 2x4 = 8 |
| iii. | Eight short questions answerable either in one word or
in one sentence from all the Units | 8x1=8 |

Suggested Readings:

1. Barua, Dwijendra Lal, *Pāli Grammar*, Calcutta, West Bengal Board of Secondary Education, 19
2. Dhramarakshita, Bhikkhu, *Pāli Sāhitya Kā Itihāsa*, Gyānamandala Limited, Varanasi, 1971.
3. Geigre, W., *Pali Literature and Language*, Calcutta University Publication, 1968.
4. Kashyapa, Bhikkhu J., *Pali Mahavyakarana*, Motilal Banarasidass, New Delhi.
5. Junghare, I.Y., *Topic in Pali Historical Phonology*, Motilal Banarasidass, Delhi.
6. Law, B. C., *A History of Pāli Literature*, Indica Books, Varanasi, India, 2000.
7. Mishra, Madhusudan, *A Comparative and Historical Pali Grammar*, Aroma Publishing House, New Delhi, 1986.
8. Norman, K. R., *Pāli Literature*, (Including the Canonical Literature in Prakrit and Sanskrit of all the Hīnyāna Schools of Buddhism), Otto Harrassowitz, Wiesbaden, 1983.
9. Pandey, Ram Awadh & Ravinath Mishra *Pāli Vyakarana*,
10. Shukla, Hari Shankar, *Pali Nibandhavali*, Tara Publications, Varanasi.
11. Tiwari, L. N. & Birbal Sharma (Ed.) *Kaccayana Vyakarana*, Tara Printin Press, Varanasi, 1961.
12. Tiwary, Bhola Nath, *Bhasa Vigyan*,
13. Gune, Pandurang Damodar, *An Introduction to Comparative Philology*, Poona, Oriented Book House, 1692

14. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.
15. Winternitze M.A., *A History of Indian Literature*, Vol. II, Oriental Books, Reprint Corporation, Rani Jhansi Road, New Delhi, 1968.

BPL306
Pali Sutta Literature

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Dighanikaya

- a- Introductory Study of Dighanikaya
b- Dighanikaya-Ambatthasutta

Unit – 2 Majjhimanikaya

- a- Introduction to Majjhimanikaya
b- Majjhimanikaya- Kakacupamasutta, Alagdupamasutta

Unit – 3 Khuddakanikaya

- a- Introduction to Khuddakanikaya
b- Khuddakapatho- Dasa Sikkhapadani, Battimsakara, Kumarapanha, Mangalasutta

Unit – 4 Khuddakanikaya

- a- Introduction to Dhammapada
b- Dhammapada-Yamakavaggo, Cittavaggo

Division of Marks:

- i. Three descriptive questions with options one each from **Unit 1, 2 and 3.** 3x7 = 21
ii. Short notes on two topics out of given four from **Unit 4** 2x4 = 8
iii. Eight short questions answerable either in one word or in one sentence from all the **Units** 8x1 = 8

Suggested Readings:

1. K., Sri Dhammananda, *The Dhammapada*, The Corporate Body of the Buddha Educational Foundation, Taiwan, 1998
2. Narada Thera, (Ed. & Tr.), *The Dhammapada*, Buddhist Missionary Society, Kuala Lumpur, 1978.
3. Khuddakapatho, Ed. & Tr. Bhikshu Satyapal, Samyak Prakashan, N Delhi
4. Khuddakapatho, e-book Ed. & Tr. Anandjyoti Bhikkhu

5. Dhramarakshita, Bhikkhu, *Pāli Sāhitya Kā Itihāsa*, Gyānamandala Limited, Varanasi, 1971.
6. Horner, I. B., *The Middle Length Sayings*, P.T.S., London, Vols. I, II & III, 1951-1956.
7. Kashyap, Bhikshu J., (Ed.), *Dighanikaya*, Vols. I & II, Nalanda Edition, Nalanda, 1958.
8. Kashyap, Bhikshu J., (Ed.), *Majjhimanikaya*, Vols. I & II, Nalanda Edition, Nalanda, 1958.
9. Rhys Davids, T.W., *Dialogues of the Buddha*, Three Vols. S.B.B., 1951, 1956, 1957.
10. Sankrityayan, Rahula, *Dīghanikāyo* (Hindi tr.)
11. Sankrityayana, Rahula, *Pāli Sāhitya Kā Itihāsa*, Hindi Sansthan, Lucknow, 1976.
12. Sankrityayan, Rahula & Bhikkhu Dharmarakshit, *Majjhimanikāya* (Hindi tr.), Sarnath, Mahabodhi Sabha, 1964.
13. Shastri, Dwarikadas, (Ed. & Tr.), *Dīghanikāyapāli*, Bauddha Bharati, Varanasi.
14. Shastri, Dwarikadas, (Ed. & Tr.), *Majjhimanikāyapāli*, Bauddha Bharati, Varanasi.
15. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.

Semester IV

There are two papers in Bachelor of Arts (Hon's) in Pali, Semester - IV. Each paper carries 50 marks. Out of which 13 Marks are allotted to Internal Assessment. The written paper carries 37 marks.

Paper Code	Title of the Paper	Marks
BPL407	General Introduction to Pali Language And Elementary Pali Grammar	37
BPL408	Pali Abhidhamma Literature_	37

BPL407

General Introduction to Pali Language and Elementary Pali Grammar

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Introduction to Grammatical Traditions in India

- a- History of Development of Sanskrit Grammar
- b- Schools of Pali Grammar

Unit – 2 Basic Element of Pali Grammar

- a- Samasa
- b- Paccaya (Itthipaccaya)

Unit – 3 Composition

- a- Short Notes on the life of Following Personalities- Ananda,Upali, Kaccayana, Sariputta, Moggallana,Mahapajapati Gotami

Unit – 4 Translation

- a- From Pali to Hindi/English
- b- From Hindi/English to Pali

Division of Marks:

- i. Three descriptive questions with options one each from
Unit 1, 2 and 3. 3x7 = 21
- ii. Essay on one topic from the given three 1x8= 8
- iii. Translation from Pali to Hindi/English & vice versa 2x4 = 8

Suggested Readings:

1. Barua, Dwijendra Lal, *Pāli Grammar*, Calcutta, West Bengal Board of Secondary Education, 19
2. Dhramarakshita, Bhikkhu, *Pāli Sāhitya Kā Itihāsa*, Gyānamandala Limited, Varanasi, 1971.
3. Geigre, W., *Pali Literature and Language*, Calcutta University Publication, 1968.
4. Kashyapa, Bhikkhu J., *Pali Mahavyakarana*, Motilal Banarasidass, New Delhi.
5. Junghare, I.Y., *Topic in Pali Historical Phonology*, Motilal Banarasidass, Delhi.
6. Law, B. C., *A History of Pāli Literature*, Indica Books, Varanasi, India, 2000.
7. Mishra, Madhusudan, *A Comparative and Historical Pali Grammar*, Aroma Publishing House, New Delhi, 1986.
8. Norman, K. R., *Pāli Literature*, (Including the Canonical Literature in Prakrit and Sanskrit of all the Hīnyāna Schools of Buddhism), Otto Harrassowitz, Wiesbaden, 1983.
9. Pandey,Ram Awadh & Ravinath Mishra *Pāli Vyakarana*,
10. Shukla, Hari Shankar, *Pali Nibandhavalī*, Tara Publications, Varanasi.
11. Tiwari, L. N. & Birbal Sharma (Ed.) *Kaccayana Vyakarana*, Tara Printin Press, Varanasi, 1961.
12. Tiwary, Bhola Nath, *Bhasa Vigyan*,

13. Gune, Pandurang Damodar, *An Introduction to Comparative Philology*, Poona, Oriented Book House, 1992
14. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.
15. Winternitze M.A., *A History of Indian Literature*, Vol. II, Oriental Books, Reprint Corporation, Rani Jhansi Road, New Delhi, 1968.

BPL408

Abhidhamma Literature(Theravada and Sarvastivada)

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Chapter wise Introduction to the Abhidhammic Texts

- a- Dhammasaṅgaṇi
- b- Vibhaṅga

Unit – 2 Chapter wise Introduction to the Abhidhammic Texts

- a- Dhātukathā
- b- Puggala Paññitti

Unit – 3 Chapter wise Introduction to the Abhidhammic Texts

- a- Kathāvatthu
- b- Yammaka

Unit – 4 Chapter wise Introduction to the Abhidhammic Texts

- a- Introduction to the Patthana
- b- Arammanapaccya, Adhipatipaccaya, Anantarapaccya, Samanantarapaccya, Sahajatapaccaya.

Division of Marks:

- i. Two descriptive questions with options one each from **Unit 1, 2 and 3.** 3x7 = 21
- ii. Short notes on two topics out of given four from **Unit 4** 2x4 = 8
- iii. Eight short questions answerable either in one word or in one sentence equally from all the **Units** 8x1= 8

Suggested Readings:

1. Vibhaṅga , Nalanda Sanskaran,
2. Dhātukathā, Nalanda Sanskaran,
3. Puggala Paññitti, Nalanda Sanskaran,
4. Kathāvatthu, Nalanda Sanskaran,
5. Yammaka, Nalanda Sanskaran,

6. Bapat, P.V. & R.D. Wadekar (Ed.), *Dhammasangaïi*, Pune, 1940.
7. Bapat, P.V., & R.D. Wadekar (Ed.) *Atthasalini*, Pune, 1942.
8. Kashyap, Bhikshu J., *Abhidhamma Philosophy*, Bhartiya Vidyaprakashan, New Delhi.
9. Kashyap, Bhikshu J., *Dhammasangani*, Nalanda Edition, 1960.
10. Kashyap, Bhikshu J., (Ed.), *Patthanapakarana*, Vol. I, Nalanda Edition, Nalanda, 1961.
11. Nanaponika Thera, *Guide Through Abhidhama Pitaka*, Hermitage Publication, Ceylon, 1968.
12. Narada Thera, *A Manual of Abhidhamma Philosophy*, Vajrama Colombo, 1960.
13. Rhys Davids, C.A.F., *A Buddhist Manual of Psychological Ethics*, Royal Asiatic Society, London, 1923.
14. Tiwary, Prof. Mahesh, (Ed.), *Abhidhammavataro*, New Delhi Edition, 1987.
15. Tripathi, Ram Shankar and Revatadhamma, *Abhidhammattha-sangaho*, with Hindi exposition, Sampurnananda Sanskrit University, Varanasi Publication.
16. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.
17. Winternitze M.A., *A History of Indian Literature*, Vol. II, Reprint, Oriental Books Corporation, Rani Jhansi Road, New Delhi, 1968.

Semester V

There are four papers in Bachelor of Arts (Hon's) in Pali, Semester - V. Each paper carries 50 marks. Out of which 13 Marks are allotted to Internal Assessment. The written paper carries 37 marks.

Paper Code	Title of the Paper	Marks
BPL509	Introduction to Pali Grammar and Composition	37
BPL510	Origin & Development of Pali Commentaries & Manual Literature	37
BPL511	Origin & Development of Vamsa Literature	37
BPL512	Introduction to Pali Kavaya Literature	37

BPL509

Introduction to Pali Grammar and Composition

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Elements of Pāli Grammar

- a- Adhikārabodhaka Paccaya
- b- Apaccabodhaka Paccaya

Unit – 2 Elements of Pāli Grammar

- a- Comparative Study of Sandhi and Kāraka in Kaccāyana Vyākaraṇa and Laghusiddhant Kaumudi with relevant Sutras and Examples.

Unit – 3 Translation from Prescribed chapters of texts

- a- Milindapañho- Lakkhaṇaṇho
- b- Dīghanikāya- Brahmajāla Sutta

Unit – 4 Short Notes in Pali on Prescribed Topics

- a- Boddho, Dhammo, Sngho, Aniccata, Anattata,, Dukkata

Division of Marks:

- i. Three descriptive questions with options one each from **Unit 1, 2 and 3.** 3x7 = 21
- ii. Short notes on two topics out of given four from **Unit 4** 2x4 = 8
- iii. Eight short questions answerable either in one word or in one sentence equally from all the **Units** 8x1=8

Suggested Readings:

1. Kashyapa, Bhikkhu J., *Pali Mahavyakarana*, Motilal Banarasidass, New Delhi.
2. Junghare, I.Y., *Topic in Pali Historical Phonology*, Motilal Banarasidass, Delhi.
3. Law, B. C., *A History of Pāli Literature*, Indica Books, Varanasi, India, 2000.
4. Mishra, Madhusudan, *A Comparative and Historical Pali Grammar*, Aroma Publishing House, New Delhi, 1986.
5. Norman, K. R., *Pāli Literature*, (Including the Canonical Literature in Prakrit and Sanskrit of all the Hīnyāna Schools of Buddhism), Otto Harrassowitz, Wiesbaden, 1983.
6. Pandey, Ram Awadh & Ravinath Mishra *Pāli Vyakarana*,
7. Shukla, Hari Shankar, *Pali Nibandhavali*, Tara Publications, Varanasi.
8. Tiwari, L. N. & Birbal Sharma (Ed.) *Kaccayana Vyakarana*, Tara Printin Press, Varanasi, 1961.
9. Milindapañho- Lakkhaṇaṇho

10. Dīghanikāya- Brahmajāla Sutta
11. Gune, Pandurang Damodar, *An Introduction to Comparative Philology*, Poona, Oriented Book House, 1692
12. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.
13. Winternitze M.A., *A History of Indian Literature*, Vol. II, Oriental Books, Reprint Corporation, Rani Jhansi Road, New Delhi, 1968.

BPL510

Origin & Development of Pali Commentaries & Manual Literature

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Origin of Pāli Commentarial Literature

- a- History of the development of Pāli Commentatorial Literature
- b- Origin and Development of Manual Literature

Unit – 2 Introduction to Pāli Commentarial Literature

- a- Detailed description of Aṭṭhasālini
- b- Detailed description of Sumangala Vilasini

Unit – 3 Introduction to Pāli Manual Literature

- a- AbhidhammathaSaṅgaho
- b- Abhidhammāvatāro

Unit – 4 Introduction to Pali Commentators and Manual Writers

- a- Life of Buddhaghosa and Buddhadatta
- b- Life of Dhammapala and Aniruddha

Division of Marks:

- | | |
|---|----------|
| i. Three descriptive questions with options one each from Unit 1, 2 and 3. | 3x7 = 21 |
| ii. Short notes on two topics out of given four from Unit 4 | 1x8 = 8 |
| iii. Eight short questions answerable either in one word or in one sentence equally from all the Units | 8x1=8 |

Suggested Readings:

1. Sumangala Vilasini, Vol. I Ed. Mahesh Tiwari, Nava Nalanda Mahavihara, Nalanda 1974
2. Aṭṭhasālini, Nalanda Sanskaran,
3. Abhidhamma Philosophy - Bhikkhu J. Kassapa
4. Abhidhammatha Sangaho (Navanita Tika) – D.D. Kosmbi.

5. Abhidhammattha Sangaho - Ram Sankar Tripathi & Revata Dhamma Varanasi.
6. Vibhajyavada - B.N.Sharma
7. Sthavirvada aur Nirvana - Laldeo yadav.
8. Abhidhammāvatāro Ed.Mahesh Tiwari
9. Buddhaghosuppatti, James Gray, PTS, London, 2001
10. Dhramarakshita, Bhikkhu, *Pāli Sāhitya Kā Itihāsa*, Gyānamandala Limited, Varanasi, 1971.
11. Geigre, W., *Pali Literature and Language*, Calcutta University Publication, 1968.
12. Hazara, K. L., *Studies on Pali Commentaries*, B. R. Publishing Corporation, Delhi,
13. Law, B. C., *A History of Pāli Literature*, Indica Books, Varanasi, India, 2000.
14. B.C. Law, *Life and Works of Buddhaghosa*, Nag Publishers, Delhi, 1987-88.
15. Malalasekera, G. P., *The Pāli Literature of Ceylon*, P.T.S. London, 1928.
16. M.L. Bode, *Pali Literature of Burma*, P.T.S. London, 1909.
17. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.
18. Winternitze M.A., *A History of Indian Literature*, Vol. II, Reprint, Oriental Books Corporation, Rani Jhansi Road, New Delhi, 1968.

BPL511

Origin & Development of Vamsa Literature

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Introduction to Dipavamsa

- a- Genaral Intriduction to Dīpavaṃsa
- b- Pathamasangiti

Unit – 2 Introduction to Mahavamsa

- a- General Introduction to Mahāvaṃsa
- b- Lankagamana

Unit - 3 Introduction to Dāthāvamsa

- a- General Introduction to Dathavamsa
- b- Second Travel of Tooth Relic

Unit – 4 General Introduction to Sāsanavamsa

- a- General Introduction to Sasanvamsa
- b- Fifth Chapter

Division of Marks:

- | | | |
|------|---|----------|
| i. | Three descriptive questions with options one each from
Unit 1, 2 and 3. | 3x7 = 21 |
| ii. | Short notes on two topics out of given four from Unit 4 | 2x4 = 8 |
| iii. | Eight short questions answerable either in one word or
in one sentence equally from all the Units | 8x1= 8 |

Suggested Readings:

1. Sasanavamso, Ed, C. S. Upasaka, Nalanda Sanskarana, 1961
2. Dathavamso, Ed. Asam Unnanse, 1883
3. Dathavamso, Ed. Prdyumna Dubey, Divya Prakashan, Varanasi, 1987
4. Mahavamsa Ed. W. Gaigar, 1948
5. Dipavamsa, Ed. Paramananad Singh Tr. Dwarika Das Shastri, Kashi Vidyapeeth, Varanasi, 1996
6. Dipavamsa, Ed. H. Oldenburg PTS, London, 1879
7. Adikaram, E. W., *Early History of Buddhism in Ceylon*, Buddhist Cultural Centre, Dehiwala, Sri Lanka, 1994.
8. Dhramarakshita, Bhikkhu, *Pāli Sāhitya Kā Itihāsa*, Gyānamandala Limited, Varanasi, 1971.
9. Geigre, W., *Pali Literature and Language*, Calcutta University Publication, 1968.
10. Law, B. C., *A History of Pāli Literature*, Indica Books, Varanasi, India, 2000.
11. Malalasekera, G. P. *The Pāli Literature of Ceylon*, P.T.S. London, 1928.
12. M.L. Bode, *Pali Literature of Burma*, P.T.S. London, 1909.
13. Norman, K. R., *Pāli Literature, Including the Canonical Literature in Prakrit and Sanskrit of all the Hīnyāna Schools of Buddhism*, Otto Harrassowitz, Wiesbaden,
14. Pande, G. C., *Studies in the Origins of Buddhism*, Motilal Banarasidass, Delhi, India, 1995.
15. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.
16. Winternitze M.A., *A History of Indian Literature*, Vol. II, Reprint, Oriental Books Corporation, Rani Jhansi Road, New Delhi, 1968.

BPL512

Introduction to Pali Kavya Literature

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Telakatahagatha

- a- General Introduction to Telakatāhagātha.
- b- Telakatāhagātha; first 15 verses.

Unit – 2 Jinacaritam

- a- General Introduction to Jinacaritam
- b- Jinacaritam; first two chapters

Unit – 3 Saddhammopayana

- a- General Introduction to Saddhammopāyara
- b- Saddhammopāyara – First chapter

Unit – 4 Pajjamadhu

- a- General Introduction to Pajjamadhu.
- b- Pajjamadhu- First fifteen verses.

Division of Marks:

- i. Three descriptive questions with options one each from **Unit 1, 2 and 3.** 3x7 = 21
- ii. Short notes on two topics out of given four from **Unit 4** 2x4 = 8
- iii. Eight short questions answerable either in one word or in one sentence equally from all the **Units** 8x1= 8

Suggested Readings:

1. Telakatāhagātha ed.C. Piyatissa Unnanse, 1900
2. Telakatāhagātha, Bhikshu Kalyaniya, saranath, Varanasi
3. Jinacaritam- Ed. Tr. Ram Nakshatra Prasad, Classical Publishing Company, Karampura,N. Delhi
4. Pajjamadhu. Ed. Tr. Komal Chand Jain ,Varanasi
5. Pajjamadhu. Ed Gangadhar Koparkar,Ahmadnagar
6. Jina Charita - Tr. Siddharth, Pilgrims Publishing House, Varanasi
7. Saddhama Sangho- Siddharth Moti Lal Banarsi Das
8. Saddhamopayanan - Brahamadeo Naryan Sharma, Varanasi
9. Pajjamadhu. Ed. Gunaratney, JPTS,London, 1987
10. Jinacaritam- Ed. Medhanand Unnanse JPTS,London,1986

Semester VI

There are four papers in Bachelor of Arts (Hon's) in Pali, Semester - VI. Each paper carries 50 marks. Out of which 13 Marks are allotted to Internal Assessment. The written paper carries 37 marks.

Paper Code	Title of the Paper	Marks
BPL613	Introduction to Pali Grammar and Composition	37
BPL614	Introduction to Pali Extra Canonical Literature	37

BPL615	Introduction to Pali Poetics & Lexicon Texts	37
BPL616	Pali Composition	37

BPL613

Introduction to Pali Grammar and Composition

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Elements of Pāli Grammar

- a- Nāma pada

Unit – 2 Elements of Pāli Grammar

- a- Etymological derivation of the following Pali words: Buddhō, Sattha, Bhikkhu, Dhammo, Phalāya, latāya, Muni, Sāmanero
b- Phonological Change in Pali

Unit - 3 Translation

- a- Translation of Pali verses from Suttanipata-Khaggavishanasutta
b- Translation of Pali verses from Therigatha- Ambapali Their Gatha

Unit – 4 Short Notes in Pali on Prescribed Pali Terms from-

- a- Dighanikaya, Majjhimanikaya, Khuddakanikaya

Division of Marks:

- | | |
|---|----------|
| i. Two descriptive optional questions one each from
Unit 1 and 2. | 2x7 = 14 |
| ii. Translation of two Pali verses from Unit 3 | 2x4 = 8 |
| iii. Short notes on two topics out of given five from Unit 4 | 2x4 = 8 |
| iv. Seven short questions answerable either in one word or
in one sentence from all the Units | 7x1 = 7 |

Suggested Readings:

1. Muller, F. Max, and Fausboll V., *Dhammapada and Sutta-Nipata*, SBE Vol. 10, Motilal Banarsidas Publishers Private Limited, Delhi, 2003.
2. Narada Thera, (Ed. & Tr.), *The Dhammapada*, Buddhist Missionary Society, Kuala Lumpur, 1978.
3. Therigatha
4. Kashyapa, Bhikkhu J., *Pali Mahavyakarana*, Motilal Banarasidass, New Delhi.
5. Junghare, I.Y., *Topic in Pali Historical Phonology*, Motilal Banarasidass, Delhi.
6. Pandey, Ram Awadh & Ravinath Mishra *Pāli Vyakarana*,

7. Tiwari, L. N. & Birbal Sharma (Ed.) Kaccayana Vyakarana, Tara Printin Press, Varanasi, 1961.
8. Gune, Pandurang Damodar, *An Introduction to Comparative Philology*, Poona, Oriented Book House, 1962
9. Upadhyaya, Bharat Singh, *Pāli Sāhitya Kā Itihāsa*, Hindi Sāhitya Sammelana, Prayāga, 1994.
10. Winternitze M.A., *A History of Indian Literature*, Vol. II, Oriental Books, Reprint Corporation, Rani Jhansi Road, New Delhi, 1968.

BPL614

Introduction to Pali Extra Canonical Literature

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Origin And Development of Extra Canonical Literature

- a- Historicity of Pali Extra Canonical Literature
- b- Life History of Bhikkhu Nagasena

Unit – 2 Nettipakarana

- a- General Introduction to Nettipakarana
- b- Introductory Study of 16 Haras

Unit – 3 Peṭakopadesa

- a- General Introduction to Peṭakopadesa
- b- Study of Naya

Unit – 4 Milinda Pañho

- a- General Introduction to Milinda Pañho
- b- Textual Study of Selected Portion of Lakkhanapaho- Lakkhano Pañho (Puggalavimansana Panho, Pabbajjapanho, Patisandhipanho)

Division of Marks:

- i. Three descriptive questions with options one each from **Unit 1, 2 and 3.** 3x7 = 21
- ii. Short notes on two topics out of given four from **Unit 4** 2x4 = 8
- iii. Eight short questions answerable either in one word or in one sentence equally from all the **Units** 8x1 = 8

Suggested Readings:

1. Nettipakarana, Chattha Sangayana,
2. Peṭakopadesa Chattha Sangayana,
3. The Guide, (Nettipakarana), Bhikshu Nanamoli, Pali Rext Society, London, 1977
4. Milinda Pañhapali, Ed. Tr. Dwarika Das Shastri, Bauddha Bharati Prakashan, Varanasi 1990
5. F. Max Muller, *Questions of King Milinda, Sacred Books of the east, vol.35*

BPL615
Introduction to Pali Poetics & Lexicon Texts

Maximum Marks: 37

Pass Marks: 17

Unit – 1 Origin and Development of Pali Poetics

- a- General Introduction to Indian Poetics.
- b- History of Pali Poetry

Unit – 2 Subodhalankara

- a- General Introduction to Subodhalankara
- b- Study of Alankara-Upama, Rupaka, Silittha.

Unit – 3 Vuttodaya

- a- General Introduction to **Vuttodaya**
- b- Study of Meter- Anuttubha, Tuttubha

Unit – 4 Lexicon Text

- a- Introduction to Pali Lexicography
- b- Introduction to Abhidhanappadipika

Division of Marks:

- i. Three descriptive questions with options one each from **Unit 1, 2 and 3.** 3x7 = 21
- ii. Short notes on two topics out of given four from **Unit 4** 2x4 = 8
- iii. Eight short questions answerable either in one word or in one sentence equally from all the **Units** 8x1= 8

Suggested Readings:

1. Subodhalankar, By Sangharakkhita Mahasami,Ed. Padmanabha Jaini, PTS, London, 2000
2. Vuttodaya, by Sangharakkhita, Satguru Publication, 1929
3. Abhidhanappadipika, F Luker
4. Research Publication, Vol. II, Nava Nalanda Mahavihara, Nalanda,2004
5. Candraloka By Jaidev,
6. Kavyadarsh, by Dandi

BPL616
Pali Composition

Maximum Marks: 37

Pass Marks: 17

Unit 1 Explanation of Pali Passages from Prescribed Texts

- a- Mahavagga- Bodhikatha
- b- Cullavagga- Pancasatikakkhandha

Unit 2 Explanation of Pali Verses from Prescribed Texts

- a- Dhammapada- Yamakavaggo
- b- Suttanipata- Dhaniyasutta

Unit 3 Essay Writing

- a- Bhagava Buddho, Cattari Ariyasccani
- b- Nibbanam Paramam Sukham, Pattecasamuppado

Unit 4 Translation

- a- Translation from Pali into Hindi/English
- b- Translation from Hindi/English into Pali

Division of Marks:

- i. Two descriptive optional questions one each from
Unit 1 and 2. 2x7 = 14
- ii. Essay on one topic from the given three from Unit 3 1x8 = 8
- iii. Translation from Pali to Hindi/English & vice versa 2x4 = 8
- iv. Seven short questions answerable either in one word or
in one sentence from all the **Units** 7x1 = 7

Suggested Readings:

1. Mahavagga Ed. & Tr Dwarikadas Shastri., Baudh Bharti, Varanasi, 1998.
2. Kashyap, Bhikshu J., (Ed.), *Mahavagga*, Nalanda Edition, Nalanda, 1956.
3. Law, B. C., *A History of Pāli Literature*, Indica Books, Varanasi, India, 2000.
4. Oldenberg, H., (Ed.), *The Vinaya Pitakam*, 5 Vols, London, Pali Text Society, 1964.
5. Dharmratana, Bhikkhu, (Ed. & Tr.), *The Suttanipata*, Mahabodhi Sabha, Saranath, 1960.
7. K., Sri Dhammananda, *The Dhammapada*, The Corporate Body of the Buddha Educational Foundation, Taiwan, 1998.
8. Cullavagga, Bhikshu Jagdish Kashyap, Siri Nava Nalanda Mahavihara, Nalanda
9. Muller, F. Max, and Fausboll V., *Dhammapada and Sutta-Nipata*, SBE Vol. 10, Motilal Banarsidas Publishers Private Limited, Delhi, 2003.
10. Narada Thera, (Ed. & Tr.), *The Dhammapada*, Buddhist Missionary Society, Kuala Lumpur, 1978.
11. Shastri, Dwarikadas, (Ed. & Tr.), *Suttanipāta Pāli*, Bauddha Bharti, Varanasi, 2005.
12. Shastri, Dwarikadas, (Ed. & Tr.), *Dhammapada Pāli* (Hindi and Sanskrit Translation), Bauddha Bharti, Varanasi, 2001.
13. Kashyapa, Bhikkhu J., *Pali Mahavyakarana*, Motilal Banarasidass, New Delhi.
14. Tiwari, L. N. & Birbal Sharma (Ed.) *Kaccayana Vyakarana*, Tara Printin Press, Varanasi, 1961.

SYLLABUS FOR ENVIRONMENTAL STUDIES

Unit 1: The Multidisciplinary Nature of Environmental Studies

Definition, scope and importance

Need for public awareness. (2 lectures)

Unit 2: Natural Resources

Renewable and Non-renewable Resources:

Natural resources and associated problems.

- (a) Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people.
- (b) Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
- (c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
- (d) Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, Case studies.
- (e) Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies.
- (f) Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.

Role of an individual in conservation of natural resources.

Equitable use of resources for sustainable lifestyles. (8 lectures)

Unit 3: Ecosystems

Concept of an ecosystem.

Structure and function of an ecosystem.

Producers, consumers and decomposers.

Energy flow in the ecosystem.

Ecological succession.

Food chains, food webs and ecological pyramids.

Introduction, types, characteristic features, structure and function of the following ecosystem:

- (a) Forest ecosystem
- (b) Grassland ecosystem
- (c) Desert ecosystem
- (d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) (6 lectures)

Unit 4: Biodiversity and Its Conservation

Introduction, definition: genetic, species and ecosystem diversity.

Biogeographical classification of India.

Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values.

Biodiversity at global, National and local levels.

India as a mega-diversity nation.

Hot-spots of biodiversity.

Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts.

Endangered and endemic species of India.

Conservation of biodiversity: in-situ and ex-situ conservation of biodiversity. (8 lectures)

Unit 5: Environmental Pollution

Definition

Causes, effects and control measures of

- | | |
|---------------------|-----------------------|
| (a) Air pollution | (b) Water pollution |
| (c) Soil pollution | (d) Marine pollution |
| (e) Noise pollution | (f) Thermal pollution |
| (g) Nuclear hazards | |

Solid waste management: Causes, effects and control measures of urban and industrial wastes.

Role of an individual in prevention of pollution.

Pollution case studies.

Disaster management: Floods, earthquake, cyclone and landslides. (8 lectures)

Unit 6: Social Issues and the Environment

From unsustainable to sustainable development.

Urban problems related to energy.

Water conservation, rain water harvesting, watershed management.

Resettlement and rehabilitation of people; its problems and concerns. Case studies.

Environmental ethics: Issues and possible solutions.

Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies.

Wasteland reclamation.

Consumerism and waste products.

Environment Protection Act.

Air (Prevention and Control of Pollution) Act.

Water (Prevention and Control of Pollution) Act.

Wildlife Protection Act.

Forest Conservation Act.

Issues involved in enforcement of environmental legislation.

Public awareness. (7 lectures)

Unit 7: Human Population and the Environment

Population growth, variation among nations.

Population explosion—Family Welfare Programme.

Environment and human health.

Human rights.

Value education.

HIV/AIDS.

Women and Child Welfare.

Role of Information Technology in environment and human health.

Case Studies. (6 lectures)

Unit 8: Field Work

Visit to a local area to document environmental assets—river/forest/grassland/hill/mountain.

Visit to a local polluted site—Urban/Rural/Industrial/Agricultural.

Study of common plants, insects, birds.

Study of simple ecosystems—pond, river, hill slopes, etc.

(Field work equal to 5 lecture hours)