

D/BoT-832  
12/10/25



**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY, HISAR**  
(Established by State Legislature Act 17 of 1995)  
'A+' Grade, NAAC Accredited State Govt. University

Acad./AC-III/F-142/2025/ 5890

Dated: 10/10/2025

To

The Controller of Examinations  
GJUS&T, Hisar.

**Sub: Approval of syllabi of list of Value Added Courses (VAC) pools for Postgraduate Programmes under NEP-2020 being run in University Teaching Departments and affiliated degree Colleges w.e.f. academic session 2025-26.**

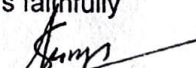
Sir,

I am directed to inform you that the Vice-Chancellor, on the recommendations of Dean Academic Affairs and Nodal Officer, NEP-2020, is pleased to approve the list of Value Added Courses (VAC) pools alongwith their syllabi for Postgraduate Programmes under NEP-2020 being run in University Teaching Departments and affiliated degree Colleges w.e.f. academic session 2025-26. It is also approved that, if there is less number of Postgraduate programmes in affiliated degree College, the student of Postgraduate Programme can also opt VAC offered by other Postgraduate Programmes which are not being run by that affiliated degree College and may be taught by the teachers of Undergraduate Programmes, if the College allow to offer such Value Added Courses (VAC) Programme. The Value Added Courses (VAC) should be relevant and provide value addition. Further, any regular/contractual teacher(s) (UG/PG programme) are allowed to teach the Value Added Courses (VAC) of affiliated degree Colleges.

A copy of list of Value Added Courses (VAC) pools alongwith their syllabi for Postgraduate Programmes under NEP-2020 being run in University Teaching Departments and affiliated degree Colleges w.e.f. academic session 2025-26. You, are therefore, requested to take further necessary action, accordingly.

Yours faithfully

DA: As above

  
Deputy Registrar (Academic)  
for Dean Academic Affairs

Endst. No. Acad./AC-III/Fac.-142/2025/ 5891-5928

Dated: 10/10/2025

A copy of above is forwarded to the following for information and necessary action:-

1. Dean, Faculty of Humanities and Social Sciences, GJUST, Hisar with the request to arrange to upload the syllabi of Value Added Courses (VAC) as mentioned in the attached list concerned with the Postgraduate Programmes being run by affiliated degree colleges under Faculty of Humanities and Social Science, w.e.f. academic session 2025-26 under NEP-2020 on the website of the University for information of affiliated degree colleges and the students.

  
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2. ✓ Chairperson, of the concerned Department, GJUST, Hisar with the request to arrange to upload the syllabi of Value Added Courses (VAC) as mentioned in the attached list concerned with the Postgraduate Programmes being run by their Departments under NEP-2020 w.e.f. academic session 2025-26 on the website of the University for information of affiliated degree colleges and the students.
3. Principals, affiliated degree Colleges concerned, GJUST, Hisar alongwith syllabi of list of Value Added Courses (VAC) pool for, Postgraduate Programmes under NEP-2020 being run in affiliated degree Colleges w.e.f. academic session 2025-26.
4. OSD to Vice-Chancellor (for kind information of the Vice-Chancellor), GJUST, Hisar.
5. P.A. to Registrar (for kind information of the Registrar), GJUST, Hisar.

  
Deputy Registrar (Academic)

- ① Pls. upload on University website - related to Botany letter / Scheme / Syllabus.
- ② Send PDF on WhatsApp PG BOS group
- ③ Send PDF hard copy to Affiliated colleges
  - Sat College
  - Ghat College
  - DN College

  
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### PG Programmes as per National Education Policy-2020

#### **Pool of Value Added Courses (VAC) for PG Programmes of UTD and Affiliated Colleges**

Value-Added Courses (VAC) : These courses aim at enabling the students to acquire and demonstrate the acquisition of knowledge and understanding of constitutional, human and moral values, Indian Knowledge System (IKS), Intellectual Property Rights (IPR), Environment Science etc. The student is required to opt only one VAC out of this Pool.

(w.e.f. session 2025-26)

#### **For University and Affiliated Colleges**

Department/subject	Semester-I		Remarks
	Course Code	Nomenclature	
Allied Health Sciences	U25VAC101T		Only Code Assign
Applied Psychology	U25VAC102T	Human Values and Character Strengths	Syllabi approved
Artificial Intelligence and Data Sciences	U25VAC103T(i) OR U25VAC103T(ii)	Fundamental of Cyber Security OR Ethical AI and Data Privacy	Syllabi approved
Biotechnology	U25VAC104T	Environmental Biotechnology	Syllabi approved
Botany	U25VAC105T	Roll of Plants in Human Welfare	Syllabi approved
Business Administration	U25VAC105T		Only Code Assign
Chemistry	U25VAC107T	Role of Chemistry in Society	Syllabi approved
Civil Engineering	U25VAC108T		Only Code Assign
Commerce	U25VAC109T	Human Values and Ethics in Business	Syllabi approved
Computer Science & Engineering	U25VAC110T/ U25VAC101T	IoT in Smart Cities and Automation	Syllabi approved
Economics	U25VAC111T	Political Economy of India	Syllabi approved
Education	U25VAC112T		Only Code Assign
Electrical and Electronics Engineering	U25VAC113T		Only Code Assign
English and Foreign Language	U25VAC114T	Academic Writing	Syllabi approved
Environmental Science & Engineering/Environmental Science	U25VAC115T(i) OR U25VAC115T(ii)	Natural Resources & Biodiversity OR Environmental Issue & Sustainable Development	Syllabi approved
Food Technology	U25VAC116T	Indian Traditional Foods	Syllabi approved
Geography	U25VAC117T	Disaster Management	Syllabi approved

Hindi	U25VAC118T	हिन्दी कहानियों में मानवीय मूल्य	Syllabi approved
Law	U25VAC119T		Only Code Assign
Library and Information Science	U25VAC120T		Only Code Assign
Mass Communication	U25VAC121T	Media Literacy	Syllabi not approved
Mathematics	U25VAC122T	Applications of Vedic Mathematics OR MOOC/NPTEL/SWYAM	Syllabi approved
Mechanical Engineering	U25VAC123T		Only Code Assign
Pharmaceutical Sciences	U25VAC124T		Only Code Assign
Physics	U25VAC125T	Indian Scientists	Syllabi not approved
Physiotherapy	U25VAC126T		Only Code Assign
Printing Technology	U25VAC127T		Only Code Assign
Yoga Science	U25VAC128T	Yoga Philosophy and Practices	Syllabi approved
Zoology	U25VAC129T	Wildlife and Conservation	Syllabi approved
Microbiology	U25VAC130T	Environmental Microbiology	Only Code Assign
Sanskrit	U25VAC131T	गुरु जम्भेश्वर की शिक्षाएं	Syllabi approved

### For Affiliated Colleges

Department/subject	Semester-I		Remarks
	Course Code	Nomenclature	
Computer Science	P25VAC101T	IoT in Smart Cities and Automation	Syllabi approved
Defence and Strategic Studies	P25VAC102T	Dimension of Terrorism	Syllabi approved
Economics	P25VAC103T(i) OR P25VAC103T(ii)	Political Economy of India OR History of Economic Thoughts	Syllabi approved
	U25VAC102T/ P25VAC104T	Human Values and Character Strengths	Only Code Assign
Political Science	P25VAC105T		Only Code Assign
Psychology	U25VAC106T	Foundation of Human Values	Syllabi approved
Public Administration	U25VAC107T OR M25VAC101T	Good Governance OR Disaster Management	Syllabi approved
Sociology	P25VAC108T	Constitutional Rights of Indian Women	Syllabi approved with different Code (P25VAC114T)
Yoga	P25VAC109T	Yoga Philosophy and Practices	Syllabi approved



Semester-I

Value Added Course (VAC)

Role of Plants in Human Welfare

Paper code: U25VAC105T

Credits: 2

Exam. Time: 2 Hrs

External Marks: 35

Internal Marks: 15

Total Marks: 50

**Course Objectives:** The aim of this course is to give the students essential knowledge and to create awareness about the essential role of plants in maintaining human health and well-being. It will also explore the ecological, medicinal, nutritional, economic, and cultural significance of plants. It will also promote awareness about the sustainable use of plant resources for future generations. It will encourage conservation of plant biodiversity for global and local welfare.

Course outcomes (CO): On successful completion of this course:	
CO1	Students will be able to <b>understand</b> the role of medicinal and aromatic plants in traditional healing systems (Ayurveda, Siddha, Unani) and modern applications, including their use in immunity boosting, mental health, and disease prevention.
CO2	Students will be able to <b>apply</b> knowledge of plant-based active principles and herbal nutraceuticals to recognize their relevance in modern medicine, health supplements, and aromatherapy.
CO3	Students will be able to <b>analyze</b> the ecological and environmental services provided by plants, such as phytoremediation, air and water purification, climate regulation, and urban greenery.
CO4	Students will be able to <b>evaluate</b> the socio-cultural, economic, and psychological importance of plants in religion, folklore, literature, rituals, and daily life, including their utility as timber, oils, fibers, dyes, and resins.

**Note:** The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to this, four more questions (each question may be of 2 parts) will be set consisting of two questions from each unit. The student/candidate is required to attempt three questions in all by selecting one question from each of the two units of 10 marks each in addition to the compulsory Question No.1.

UNIT-I

**Medicinal Plants and Traditional Healing Systems:** (Ayurveda, Siddha, Unani), Role of plants in modern medicine (active principles and their sources), Herbal nutraceuticals and dietary supplements, Plants in mental health and aromatherapy, Role of plants in immunity boosting and disease prevention, Case studies: Neem, Tulsi, Aloe vera, Giloy, Ashwagandha, etc.



## UNIT-II

Role of Plants in Climate Regulation and Ecosystem Services., Phytoremediation and air/water purification, Sacred groves and religious importance of plants, Plants in art, literature, rituals, and folklore. Economic value: Timber, fibers, resins, oils, and dyes, Urban greenery and its psychological & environmental benefits.

### Suggested Readings:

1. Kochhar, S.L. (2012). *Economic Botany in the Tropics*. MacMillan India Ltd., New Delhi.
2. Jain, S.K. (2005). *Manual of Ethnobotany*. Scientific Publishers.
3. Upadhyay, R. (2023). *Botany for B.Sc. Students – Economic Botany and Ethnomedicine*. S. Chand Publishing.
4. Wickens, G.E. (2001). *Economic Botany: Principles & Practices*. Kluwer Academic Publishers.
5. Pandey, B.P. (2018). *Economic Botany*. S. Chand Publishing.

### Mapping of COs with POs:

Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	S	S	M	S	M	S	S
CO2	S	S	M	S	S	M	S
CO3	M	S	S	M	S	S	S
CO4	S	M	S	S	M	M	S

S = Strong, M = Medium, W = Weak