#### Minutes of relevant Academic Council/BOS meetings



"ज्ञानतीर्थ" परिसर, विष्णुपूरी, नांदेड - ४३१६०६ (महाराष्ट्र)

VAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED

"Dnyanteerth", Vishnupuri, Nanded - 431606 Maharashtra State (INDIA) Established on 17th September 1994 - Recognized by the UGC U/s 2(f) and 12(B), NAAC Re-accredited with 'A' Grade



ACADEMIC (1-BOARD OF STUDIES) SECTION

Phone: (02462) 229542 Fax : (02462) 229574

Website: www.srtmun.ac.in

E-mail: bos.srtmun@gmail.com

संलग्नित महाविद्यालयांतील विज्ञान व तंत्रज्ञान विद्याशाखेतील पदवी स्तरावरील प्रथम वर्षाचे CBCS Pattern नुसारचे अभ्यासक्रम शैक्षणिक वर्ष २०१९–२० पासून लागू करण्याबाबत.

### रियत्र क

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, दिनांक ०८ जून २०१९ रोजी संपन्न झालेल्या ४४व्या मा. विद्या परिषद बैठकीतील ऐनवेळचा विषय क्र.११/४४-२०१९ च्या ठरावानुसार प्रस्तुत विद्यापीठाच्या संलग्नित महाविद्यालयांतील विज्ञान व तंत्रज्ञान विद्याशाखेतील पदवी स्तरावरील प्रथम वर्षाचे खालील विषयांचे C.B.C.S. (Choice Based Credit System) Pattern नुसारचे अभ्यासक्रम शैक्षणिक वर्ष २०१९–२० पासून लागू करण्यात येत आहेत.

- Agricultural Microbiology 1.
- 2. Agrochemicals & Fertilizers
- 3. Analytical Chemistry
- 4. B.C.A.
- 5. B.Voc. (Food Processing, Preservation and Storage)
- B.Voc. (Web Printing Technology) 6.
- 7. Biochemistry
- 8. **Bioinformatics**
- 9. **Biophysics**
- 10. Biotechnology (Vocational)
- 11. Biotechonology
- 12. Botany
- 13. Chemistry
- 14. Computer Application (Optional)
- 15. Computer Science (Optional)
- 16. Computer Science
- 17. Dairy Science

- 18. Dyes and Drugs
- 19. Electronics
- 20. **Environmental Science**
- **Fishery Science** 21.
- 22. Food Science
- 23. Geology
- 24. Horticulture
- 25. Industrial Chemistry
- 26. Information Technology (Optional)
- 27. Mathematics
- Microbiology 28.
- 29. Network Technology
- 30. Physics
- 31. Software Engineering
- **Statistics** 32.
- 33. Zoology

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणुन द्यावी.

'ज्ञानतीर्थ' परिसर,

- विष्णुपुरी, नांदेड ४३१ ६०६.
- जा.क.: शैक्षणिक—०१/परिपत्रक/पदवी—सीबीसीएस अभ्यासक्रम/ २०१९–२०/**२९२**

दिनांक: ०३.०७.२०१९.

प्रत माहिती व पुढील कार्यवाहीस्तव :

- १) मा. कुलसचिव यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- २) मा. संचालक, परीक्षा व मूल्यमापन मंडळ यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- ३) प्राचार्य, सर्व संबंधित संलग्नित महाविद्यालये, प्रस्तुत विद्यापीठ.
- ४) साहाय्यक कुलसचिव, पदव्युत्तर विभाग, प्रस्तृत विद्यापीठ.
- ५) उपकुलसचिव, पात्रता विभाग, प्रस्तुत विद्यापीठ.

६) सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ.

स्वाक्षरित / .

उपकलसचिव

शैक्षणिक (१–अभ्यासमंडळ) विभाग

# Swami Ramanand Teerth Marathwada University,Nanded (NAAC Re-accredited with 'A' Grade)



# Syllabus of

# Bachelor of Computer Application (3 years) (Revised CBCS pattern)

**Introduced from Academic Year 2019-2020** 

# **Bachelor of Computer Application**

**Bachelor of Computer Application** (3years) program / degree is a specialized program in computer applications. It builds the student on studies in applied use of computers and to become competent in the current race and development of new computational sciences. The duration of the study is of six semesters, which is normally completed in three years.

#### **CBCS** pattern

<u>The Bachelor of Computer Application</u> program as per CBCS (Choice based credit system) pattern, in which choices are given to the students under open electives and subject electives. The students can choose open electives from the wide range of options to them.

#### **Eligibility and Fees**

The eligibility of a candidate to take admission to <u>Bachelor of Computer Application</u> program is as per the eligibility criteria fixed by the University. More details on admission procedure and fee structure can be seen from the prospectus of the college / institution as well as on website of the University.

#### **Credit Pattern**

Every course has corresponding grades marked in the syllabus structure. There are 24 credits per semester. A total of 144 credits are essential to complete this program successfully. The Grading pattern to evaluate the performance of a student is as per the University rules.

Every semester has a combination of Theory (core or elective) courses and Lab courses. Each theory course has 04 credits which are split as 03 external credits and 01 internal credit. The university shall conduct the end semester examination for 03 external credits. For theory internal credit, student has to appear for 01 class test (15 marks) and 01 assignment (10 marks). Every lab course has 02 credits which are split as 01 external credit and 01 internal credit. For lab internal credit, the student has to submit Laboratory Book (05 marks) and remaining 20 marks are for the Lab activities carried out by the student throughout the semester. For lab external credit, 20 marks are reserved for the examinational experiment and 05 marks are for the oral / viva examinations.

The open elective has 04 credits which are purely internal. If students are opting for MOOCs as open elective, then, there must be a Faculty designed as MOOCs course coordinator who shall supervise learning through MOOCS. This is intentionally needed as the MOOCs course coordinator shall verify the MOOC details including its duration, staring date, ending date, syllabus contents, mode of conduction, infrastructure feasibility, and financial feasibility during start of each semester. This is precautionary as the offering of the MOOCs through online platforms are time specific and there must be proper synchronization of semester duration with the MOOCs duration. Students must opt for either institutional / college level open elective or a course from University recognized MOOCs platforms as open electives.

The number of hours needed for completion of theory and practical courses as well as the passing rules, grading patterns, question paper pattern, number of students in practical batches, etc shall be as per the recommendations, norms, guidelines and policies of the UGC, State Government and the SRTM University currently operational. The course structure is supplemented with split up in units and minimum numbers of hours needed for completion of the course, wherever possible.

Under the CBCS pattern, students would graduate <u>Bachelor of Computer Application</u> with a minimum number of required credits which includes compulsory credits from core courses, open electives and program specific elective course. All students have to undergo lab / practical activities leading to specific credits and project development activity as a part of professional UG program.

- 1. **B.Sc. Computer Application Degree** / program would be of 144 Credits. Total credits per semester= 24
- Each semester shall consist of three core courses, one elective course, one open elective course and two practical courses. Four theory courses (core+elective) = 16 Credits
- 3. Two practical / Lab courses= 4 Credits in total (02 credits each), One Open elective= 4 credit
- 4. One Credit = 25 marks, Two Credits = 50 Marks, Four Credits = 100 Marks

#### PEO, PO and CO Mappings

- 1. **Program Name** : Bachelor of Computer Application
- 2. Program Educational Objectives: After completion of this program, the graduates / students would

PEO I :Technical Expertise	Implement fundamental domain knowledge of core courses for developing effective computing solutions by incorporating creativity and logical reasoning.
PEO II : Successful Career	Deliver professional services with updated
	technologies in Computer application based
	career.
PEO III :Hands on Technology	Develop leadership skills and incorporate ethics,
and Professional experience	team work with effective communication & time
	management in the profession.
PEO IV :Interdisciplinary and Life	Undergo higher studies, certifications and research
Long Learning	programs as per market needs.

3. Program Outcome(s): Students / graduates will be able to

**PO1:** Apply knowledge of mathematics, science and algorithm in solving Computer problems and applied use of banks.

- **PO2:** Learn various custom software
- PO3: Design component, or processes to meet the needs within realistic constraints.
- **PO4:** Identify, formulate, and solve problems using computational temperaments.
- **PO5:** Comprehend professional and ethical responsibility in computing profession.
- **PO6:** Express effective communication skills.
- PO7: Recognize the need for interdisciplinary, and an ability to engage in life-long learning.
- PO8: Actual hands on technology to understand it's working.
- PO9: Knowledge of contemporary issues and emerging developments in computing profession.

### ा सा विया या विमुक्तये ।। स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड



"ज्ञानतीर्थ" परिसर, विष्णुपूरी, नदिड - ४३१६०६ (महाराष्ट्र)

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED

WII KAWIANAND IEEKIH WAKAIHWADA UNIVEKSIII NANDI "Dnyanteerth", Vishnupuri, Nanded - 431606 Maharashtra State (INDIA)

Established on 17th September 1994 – Recognized by the UGC U/s 2(f) and 12(B), NAAC Re-accredited with 'A' Grade



ACADEMIC (1-BOARD OF STUDIES) SEC

Phone: (02462) 229542 Fax : (02462) 229574

Website: www.srtmun.ac.in

E-mail: bos.srtmun@gmail.com

संलग्नित महाविद्यालयांतील विज्ञान व तंत्रज्ञान विद्याशाखेतील पदव्युत्तर स्तरावरील प्रथम वर्षाचे CBCS Pattern नुसारचे अभ्यासक्रम शैक्षणिक वर्ष २०१९–२० पासून लागू करण्याबाबत.

### प रि प त्र क

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, दिनांक ०८ जून २०१९ रोजी संपन्न झालेल्या ४४व्या मा. विद्या परिषद बैठकीतील ऐनवेळचा विषय क्र.११/४४–२०१९ च्या ठरावानुसार प्रस्तुत विद्यापीठाच्या संलग्नित महाविद्यालयांतील विज्ञान व तंत्रज्ञान विद्याशाखेतील पदव्युत्तर स्तरावरील प्रथम वर्षाचे खालील विषयांचे C.B.C.S. (Choice Based Credit System) Pattern नुसारचे अभ्यासक्रम शैक्षणिक वर्ष २०१९–२० पासून लागू करण्यात येत आहेत.

- 1. Bioinformatics
- 2. Biotechnology
- 3. Boichemistry
- 4. Botany
- 5. Chemistry
- 6. Computer Management
- 7. Computer Science
- 8. Dairy Science
- 9. Environmental Science
- 10. Herbal Medicine
- 11. Information Technology
- 12. M.C.A.
- 13. Microbiology
- 14. Physics
- 15. Software Engineering
- 16. System Administration & Networking
- 17. Zoology

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणून द्यावी.

'ज्ञानतीर्थ' परिसर,

- विष्णुपुरी, नांदेड ४३१ ६०६.
- **जा.क्र.:** शैक्षणिक—१/परिपत्रक/पदव्युत्तर—सीबीसीएस अभ्यासक्रम/२०१९—२०/४**६**४

स्वाक्षरित / --उपकुलसचिव

शैक्षणिक (१–अभ्यासमंडळ) विभाग

दिनांक: ११.०७.२०१९.

प्रत माहिती व पुढील कार्यवाहीस्तव :

- १) मा. कुलसचिव यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- २) मा. संचालक, परीक्षा व मूल्यमापन मंडळ यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- ३) प्राचार्य, सर्व संबंधित संलग्नित महाविद्यालये, प्रस्तुत विद्यापीठ.
- ४) साहाय्यक कुलसचिव, पदव्युत्तर विभाग, प्रस्तुत विद्यापीठ.
- ५) उपकुलसचिव, पात्रता विभाग, प्रस्तुत विद्यापीठ.
- ६) सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ.

#### Swami Ramanand Teerth Marathwada University, Nanded SYLLABUS M.Sc. BIOTECHNOLOGY CHOICE BASED CREDIT SYSTEM (June 2019)

Somester	Code	Title of the Course	Hr/Week	Type of	Credit	Ma	rks	Total
Semester	Coue	The of the Course	III/ WEEK	Course	Creun	ESA	MSA	10141
	BT-I	Cell and Developmental Biology	4	CC	4	75	25	100
	BT-II	Microbiology and Virology	4	CC	4	75	25	100
	BT-III	Biochemistry	4	CC	4	75	25	100
I	BT-IV	<ul><li>(A) Techniques in Biotechnology</li><li>(B) Plant Metabolism and</li><li>Development</li></ul>	4	DSE	4	75	25	100
	Lab course-I	Practicals based on course BT-I and BT-II	4+4	PR	4	100		100
	Lab course-II	Practicals based on course BT-III and BT-IV	4+4	PR	4	100		100
					24	500	100	600
				Type of		Ma	nka	
Semester	Code	Title of the Course	Hr/Week	Course	Credit	ESA	MSA	Total
	BT-V	Molecular Genetics	4	CC	4	75	25	100
	BT-VI	Immunotechnology	4	CC	4	75	25	100
	BT-VII	Process Biotechnology	4	CC	4	75	25	100
		(A) Enzymology	4	DOE	4	75	25	100
TT	B1-VIII	(B) Nanobiotechnology	4	DSE	4	15	25	100
11	Lab course-III	Practicals based on course BT-V and BT-VI	4+4	PR	4	100		100
	Lab course-IV	Practicals based on course BT-VII and BT-VIII	4+4	PR	4	100		100
					24	500	100	600
	1	M.Sc. BT S	SY				_	
Semester	Code	Title of the Course	Hr/Week	Type of	Credit	Ma	rks	Total
Semester		~ · · · ·		Course		ESA	MSA	100
	BT-IX	Genetic Engineering	4	CC	4	75	25	100
	BT-X	Industrial Biotechnology	4	CC	4	75	25	100
	BT- XI	Plant Biotechnology	4	CC	4	75	25	100
	BT- XII	English and Science Communication Skills	2	SDC	2	40	10	50
III	BT- XIII	Intellectual Property Right/Online certification course NPTEL /SWAYM /MOOC of equivalent credit	2	OE	2	50		50
	Lab course- V	Practicals based on course BT-IX and BT-X	4+4	PR	4	100		100
	Lab course-VI	Practicals based on course BT-XI	4	PR	4	100		100
					24	515	85	600
Semester	Code	Title of the Course	Hr/Week	Type of Course	Credit	Ma ESA	rks MSA	Total
	BT- XIV	Computational Biology	4	CC	4	75	25	100
	BT- XV	Pharmaceutical Biotechnology	4	CC	4	75	25	100
	BT- XVI	Environmental Biotechnology	4	CC	4	75	25	100
	BT- XVIII	(A) Animal Biotechnology	4	DOE	4	75	25	100
<b>TX</b> 7	(Elective)	(B) Food Biotechnology	4	DSE	4	15	25	100
11	I als assured VII	Practicals based on course BT-	4 . 4	תת	4			100
	Lad course-vII	XIV + XV+-XVI+XVII	4+4	РК	4	100		100
	Lab course- VIII	Project/ Review Writing	4	PR	4	100		100
					24	500	100	600

 Note :
 2.

 Pattern of Internal Assessment
 1

CC- Core Course, DSE- Discipline Specific Elective, ESA- End Semester Assessment, MSA- Mid Semester Assessment SDC- Skill Development Course, OE- Open Elective

।। सा विद्या या विमुक्तये ।। स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड "ज्ञानतीर्थ" परिसर, विष्णुपूरी, नांदेड - ४३१६०६ (महाराष्ट्र) MANI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED "Dnyanteerth", Vishnupuri, Nanded - 431606 Maharashtra State (INDIA) "Dnyanteerth", Vishnupuri, Nanded - 431606 Maharashtra State (INDIA) Etablished on 17th September 1994 – Recognized by the UGC U/s 2(f) and 12(B), NAAC Re-accredited with 'A Grade ACCADECMIC (1-BOARD OF STUDIES) SECTION

Phone: (02462) 229542 Fax : (02462) 229574

Website: www.srtmun.ac.in

E-mail: bos.srtmun@gmail.com

आंतरविद्याशाखीय अभ्यास विद्याशाखेतील बी.लिब.ॲड आय.एस्सी. विषयाचा सी.बी. सी.एस. पॅटर्नचा सुधारित अभ्यासक्रम शैक्षणिक वर्ष २०१९—२० पासून लागू करण्याबाबत.

### प रि प त्र क

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, प्रस्तुत विद्यापीठाच्या संलग्नित महाविद्यालयांतील आंतरविद्याशाखीय अभ्यास विद्याशाखेतील पदवी स्तरावरील खालील विषयाचा C.B.C.S. (Choice Based Credit System) Pattern चा सुधारित अभ्यासक्रम मा. विद्यापरिषदेच्या मान्यतेच्या आधिन राहून मा. कुलगुरू महोदयांच्या मान्यतेने शैक्षणिक वर्ष २०१९–२० पासून लागू करण्यात येत आहे.

१) बी. लिब. ॲंड आय.एस्सी.

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणुन द्यावी.



प्रत माहिती व पुढील कार्यवाहीस्तव :

- १) मा. कुलसचिव यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- २) मा. संचालक, परीक्षा व मूल्यमापन मंडळ, प्रस्तुत विद्यापीठ.
- ३) प्राचार्य, सर्व संबंधित संलग्नित महाविद्यालये, प्रस्तुत विद्यापीठ.
- ४) साहाय्यक कुलसचिव, पदव्युत्तर विभाग, प्रस्तुत विद्यापीठ.
- ५) उपकुलसचिव, पात्रता विभाग, प्रस्तुत विद्यापीठ.
- ६) सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ.

# SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED



# SYLLABUS

**Bachelor of Library and Information Science** 

Choice Based Credit System (CBCS) Semester Pattern

With Effect from: July, 2019

#### SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED Choice Based Credit System (CBCS) Course Structure B. Lib. & Inf. Sci. (UG) Program Faculty – Interdisciplinary Studies Subject – Library and Information Science With effect from: July, 2019

#### Semester I

			Scheme of Teaching (Periods/Week)			Scheme of Evaluation				
Semester	Paper No.	Title of the Paper	Lectures/ Week	Practical	Total No. of Lect.	Theory/pra ctical (ESE)	Internal (CA)	Practical / Viva-Voce	Total Marks	Credits
Ι	I	Foundations of Library and Information Science	04		60	80	20		100	04
Ι	П	Knowledge Organization: Classification Theory	04		60	80	20		100	04
I	Ш	ICT Application in Library & Information centers	04		60	80	20		100	04
I	IV	Knowledge Organization: Classification – Practice		Per batch 4 hrs (2batch x4 hrs=8 hrs)	120		10	40	50	02
I	V	ICT Application in Library & Information centers: Practice		Per batch 4 hrs (2batch x4 hrs=8 hrs)	120			50	50	02
		Semester - I Total	12	4 hrs per batch	420	240	70	90	400	16
Semester II										
Π	VI	Library management	04		60	80	20		100	04
П	VII	Knowledge Organization: Cataloguing Theory	04		60	80	20		100	04
П	VIII	Information Sources & Services	04		60	80	20		100	04
II	IX	Knowledge Organization: Cataloguing- Practice		Per batch 4 hrs (2batch x4 hrs=8 hrs)	120		10	40	50	02
Ш	Х	Information Sources & Service: Practice		Per batch 4 hrs (2batch x4 hrs=8 hrs)	120			50	50	02
		Semester - II Total	12	4 hrs per batch	420	240	70	90	400	16
I Sem & II Sem Total		24	4 hrs per batch	840	480	140	180	800	32	

ESE (End Semester Examination) CA (Continue Assessment)



Phone: (02462)215542

Academic-1 (BOS) Section

E-mail: bos.srtmun@gmail.com

प्रस्तुत विद्यापीठातील सर्व संलग्नित महाविद्यालयातील आंतरविद्याशाखेअंतर्गत बी.जे. वार्षिक पध्दती या विषयाचा अभ्यासक्रम वर्ष शैक्षणिक वर्ष २०२१–२२ लागू करण्याबाबत.

### र प त्र क

संदर्भ:

- १) विद्यापीठाचे परिपत्रक क्र. शैक्षणिक–०१/परिपत्रक/पदवी–सीबीसीएस अभ्यासक्रम/२०२०–२१/६६६,
  - दि.०१/०९/२०२०.

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, संदर्भ क्र. (१) अन्वये लागू करण्यात आलेला Bachelor of Journalism (BJ) हा अभ्यासक्रम शैक्षणिक वर्ष २०२०–२१ ऐवजी २०२१–२२ पासून लागू करण्याबाबत मा. कुलगुरू महोदयांनी मा. विद्या परिषदेच्या मान्यतेच्या आधीन राहून मान्यता दिली आहे. त्यानुसार संदर्भ क्र. १ नुसार संकेतस्थळावर प्रकाशित BJ वार्षिक पध्दती अभ्यासक्रम शैक्षणिक वर्ष २०२१-२२ पासून लागू करण्यात येत आहे. याची नोंद घेण्यात यावी ही, विनंती.

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेत– स्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणुन द्यावी.

'ज्ञानतीर्थ' परिसर, विष्णुपुरी, नांदेड - ४३१ ६०६. जा.क.:शैक्षणिक-१/बीज वार्षिक पध्दती/अभ्यासक्रम/२०२१-२२/३२६ दिनांक: १७.०२.२०२२.

स्वाक्षरित / — सहा.कुलसचिव शैक्षणिक (१—अभ्यासमंडळ) विभाग

प्रत माहिती व पुढील कार्यवाहीस्तव :

- १) मा. अधिष्ठाता, आंतर विद्याशाखा, प्रस्तुत विद्यापीठ.
- २) मा. सहयोगी, आंतर विद्याशाखा, प्रस्तुत विद्यापीठ.
- ३) मा. कुलसचिव,यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- ४) मा. संचालक, परीक्षा व मूल्यमापन मंडळ यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- ५) मा. प्राचार्य, सर्व संलग्नित पत्रकारिता महाविद्यालये, प्रस्तुत विद्यापीठ.
- ६) सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ यांना देवून कळविण्यात येते की, सदरील परिपत्रक विद्यापीताच्या संकेत स्थळावर प्रकाशित करावे.

# Swami Ramanand Teerth Marathwada University, Nanded (NAAC Re-accredited with 'B++' Grade)



# Journalism and Mass Communication Bachelor of Journalism (BJ) Yearly pattern SYLLABUS

(Choice Based Credit System syllabus to be implemented from Academic Year 2021-2022)

Sr.No.		Course code	Title	Max. Marks		Credits	
511100				Practical	Theory		
1		CC-BJ-1	Development of Journalism		100	4	
2		CC-BJ-2	Print Media in India		100	4	
3		CC-BJ-3	Introduction to Multimedia		100	4	
4	Core Course	CC-BJ-4	Basics of Radio and Television Production		100	4	
5		CC-BJ-5	Advertising and Public Relations		100	4	
6		CC-BJ-6	Traditional Folk Media and Alternative Media		100	4	
7		SEC-BJ-7(A)	Media Management		100	4	
8	Ability/Skill Enhacement Course (Choose any one)	SEC-BJ-7(B)	OPEN ELECTIVE from SWAYAM/ MOOCS/ NPTEL/ Skill oriented courses		100	4	
9		Practical	·	300		12	
		Total Credits				40	

#### Journalism and Mass Communication **Bachelor of Journalism (BJ) Yearly pattern** (Theory 700 + Practical 300 =1000)

#### **Practical 300 Marks**

Media Survey & Report Writing - 100
 Desinging and Page Making( four pages ) -100
 Clipping file on various issues of the news papers.-100



Fax : (02462) 215572 Phone: (02462)215542 Academic-1 (BOS) Section

E-mail: bos.srtmun@gmail.com

website: srtmun.ac.in

प्रस्तुत विद्यापीठाच्या सर्व संलग्नित महाविद्यालयातील आंतर विद्याशाखेमधील एम.ए. शिक्षणशस्त्र या विषयाचा अभ्यासक्रम शैक्षणिक वर्ष २०२१–२२ पासून लागू करण्याबाबत.

स्वाक्षरित / —

सहा,कुलसचिव

शैक्षणिक (१—अभ्यासमंडळ) विभाग

### प रि प त्र क

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, दिनांक ०१ जुन २०२१ रोजीच्या अंतरविद्याशाखेच्या बैठकीतील शिफारसी प्रमाणे व दिनांक १२/०६/२०२१ रोजी संपन्न झालेल्या ५१ व्या मा. विद्या परिषद बैठकीतील विषय क्र.२९/५१–२०२१ च्या ठरावानुसार प्रस्तुत विद्यापीठातील सर्व संलग्नित महाविद्यालयातील पद्व्युत्तर स्तरावरील M.A. Education प्रथम व द्वितीय वर्षाचा अभ्यासक्रम शैक्षणिक वर्ष २०२१–२२ पासून लागू करण्यात येत आहे.

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेत— स्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणून द्यावी.

'ज्ञानतीर्थ' परिसर,

विष्णुपुरी, नांदेड – ४३१ ६०६.

जा.क.: शैक्षणिक—१/पदव्युत्तर/एम.ए/सीबीसीएस अभ्यासक्रम/२०२१—२२/**१८२** 

दिनांक: ०९.११.२०२१.

प्रत माहिती व पुढील कार्यवाहीस्तव :

१) मा. अधिष्ठाता, आंतर विद्याशाखा, प्रस्तुत विद्यापीठ.

२) मा. सहयोगी, आंतर विद्याशाखा, प्रस्तुत विद्यापीठ.

- ३) मा. कुलसचिव,यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- ४) मा. संचालक, परीक्षा व मूल्यमापन मंडळ यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- ५) मा. प्राचार्य, सर्व संलग्नित शिक्षणशास्त्र महाविद्याये, प्रस्तुत विद्यापीठ.
- ६) सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ यांना देवून कळविण्यात येते की, सदरील परिपत्रक विद्यापीठाच्या संकेत स्थळावर प्रकाशित करावे.

### SWAMI RAMANAND TEERTH MARATHWADA

### **UNIVERSITY, NANDED**



### STRUCTURE AND SYLLABUS

For award of degree of

### **MASTER OF ARTS**

### (Education)

Introduced from Academic year 2021 onwards for all affiliated

colleges and Subject to revise from time to time

2021-22

#### Introduction:

Swami Ramanand Teerth Marathwada University, Nanded is introducing a new post graduate course Master of Arts (Education) in the Faculty of Education from academic year 2009. This course is equivalent to M.Ed. program that already being run in the jurisdiction. M. A. Education will have good prospectus in teacher Education institutions and other Educational organizations. Course structure and syllabus for this is formed with following objectives.

The General Objectives of M.A.(Education) Course are as

- 1. To prepare professional personnel required for staffing of the Colleges of Education.
- To prepare administrators and supervisors for schools and for positions of responsibilities in the Education Department at Institutions engaged in Educational Research and Educational planning.
- 3. To prepare personnel for various educational services.
- 4. To enable to understand, analyze, evaluate Philosophical, Social, Economic, Cultural, Psychological concern of Education.

#### **Duration of the Course**

The course for the Master of Arts (M.A.-Education) Regular, semester Pattern shall be of two academic year having four semesters. The Terms and vacations of the course shall be as prescribed by the University from time to time.

#### **Eligibility for Admissions:**

- a. A candidate, who has passed the B.Ed., B. A. with Education Examination of this University or any other University recognized as equivalent there to shall be eligible for admission to the course, provided he/she has secured at least 50% of the marks in the theory part. In the case of SC/ST students this percentage of marks shall be at least 45%.
- b. Provisional admission of candidates shall be given based on the criteria and the guidelines issued by the university in this respect from time to time.
- c. The reservations will be given as per the policy and guidelines prescribed by University and government, subject to revision by the university from time to time.

#### Medium:

a. Medium of Instruction: -

The medium of instruction for this course will be Marathi or English. Concerned department can make arrangement and is permitted to do so by the University.

b. Medium of Dissertation: -

The students, with preceding permission, have option of medium for the submission of the dissertation as - Marathi or English irrespective of the medium of Instruction, but not different from the medium of the Examination.

- c. Medium of Examination:
  - -The medium of the Examination shall be Marathi or English.

#### Attendance

- a. A candidate desiring to appear for the M.A. (Education) examination must attend the College recognized for this purpose.
- b. In each semester in each paper/practical/ activities/seminar a student should put-in at least a minimum 75% attendance, subject to the general provisions existing in the University for condonation of attendance, provided a student who falls short of the required minimum of attendance in the first or second semester shall make good the same in the next year I semester and II semester term as the case may be.
- c. Student shall attend the lectures and undertake activities (Components under each Head) of the course in each semester as prescribed by the University.
- d. In case a student remains absent for a particular component he/she will have to make good the same in subsequent year.

#### **Course Structure:**

a ,	т
Semecter.	1.
Schloster	1.

Course code	Title	MSE		ESE		Total	
		Credits	marks	Credits	marks	Credits	marks
EDUCC-101	Philosophical Foundations of Education	2	50	2	50	4	100
EDUCC-102	Psychological Foundation of Education	2	50	2	50	4	100
EDUCC-103	Elementary Level School Education	2	50	2	50	4	100
EDUEC-104	Inclusive Education /Education Technology	2	50	2	50	4	100



Fax : (02462) 215572

Academic-1 (BOS) Section

### website: srtmun.ac

Phone: (02462)215542

E-mail: bos.srtmun@gmail.c

विद्यापीठ अनुदान आयोगाने शैक्षणिक वर्ष २०२०–२१ पासून मान्यता दिलेल्या बी. (व्होकेशनल कोर्सेसचे) व्होक पदवी अभ्यासकमाचे Syllabus शैक्षणिक वर्ष २०२१-२२ मध्ये द्वितीय वर्ष व शैक्षणिक वर्ष २०२२–२३ पासून तृतीय वर्षाचे अभ्यासकम लागु करणे बाबत.

### प रिपत्र क

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, विद्यापीठ अनुदान आयोगाने शैक्षणिक वर्ष २०२०–२१ पासून मान्यता दिलेल्या बी. व्होक (व्होकेशन कोर्सेस) पदवी अभ्यासकमाचे Syllabus शैक्षणिक वर्ष २०२१–२२ पासून द्वितीय वर्ष आणि २०२२–२३ मध्ये तृतीय वर्षांचे Syllabus लागू करण्यास मा. विद्यापरिषदेच्या मान्यतेच्या अधीन राहून मा. कुलगुरू महोदयांनी मान्यता दिली आहे. त्या नुसार खालील अभ्यासक्रम लागू करण्यात येत आहेत.

1. B. Voc Software Development. II & III year

- 2. B. Voc. Bachelor of Medical Laboratory Technology. II & III year
- 3. Advance Diploma in Rediological Physics II year

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणून द्यावी. ही विनंती.

जा.क.:शैक्षणिक—१/परिपत्रक/व्होकेशनल अभ्यासक्रम/N-

दिनांक: १७.०२.२०२२

प्रत माहिती व पुढील कार्यवाहीस्तव :

२०२१-२२/३२९

- १) मा. अधिष्ठाता, विज्ञान व तंत्रज्ञान विद्याशाखा, प्रस्तत विद्यापीठ.
- २) मा. संचालक, परीक्षा व मूल्यमापन मंडळ यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- ३) प्राचार्य, सर्व संबंधित संलग्नित महाविद्यालये, प्रस्तुत विद्यापीठ.
- ४) साहाय्यक कुलसचिव, पदव्युत्तर विभाग, प्रस्तुत विद्यापीठ.
- ५) उपकुलसचिव, पात्रता विभाग, प्रस्तुत विद्यापीठ.
- ६) सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ. याना देवुन कळविण्यात येते की, सदरील परिपत्रक विद्यापीठाच्या संकेतस्थळावर प्रसिध्द करण्यात यावे.

स्वाक्षरित

सहा.कूलसचिव

शैक्षणिक (१–अभ्यासमंडळ) विभाग

SwamiRamanandTeerthMarathwadaUniversity,

# Nanded(Maharashtra)

(NAAC Re-accredited with 'B++'Grade)



# Syllabusof

# B.Voc.Medical Laboratory Technology(SecondYear) (3yearsDegreeCourse)

# IntroducedfromAcademicYear2020-21

## **B.Voc. Medical Laboratory Technology**

#### 1. Preamble:

Skills and knowledge are the driving forces of economic growth and social development for any country.Presently, the country faces a demand – supply mismatch, as the economy needs more 'skilled' workforce thanthatisavailable.Inthehighereducationsphere,knowledgeandskillsarerequiredfordiverseforms of employment in the sectors of education, healthcare, manufacturing and other services.

Government of India, taking note of the requirement for skill development among students, launched NationalVocational Education Qualification Framework (NVEQF) which was later on assimilated into National SkillsQualifications Framework (NSQF). Various Sector Skill Councils (SSCs) are developing Qualification Packs(QPs), National Occupational Standards (NOSs) and assessment mechanisms in their respective domains, inalignmentwiththeneedsoftheindustry.

In view of this our University initiated to start skill based courses which are in demand of industries to be carryresponsibilities of society. The programme is highly relevant for all those who want to pursue a professionalcareerinsoftwaredevelopment.

2. Aim:

3. Objective:

4. Eligibility and Fees

5. Programoutcome:

FirstExitPoint(Diploma)andOutcomeof FirstYear

SecondExitPoint(AdvanceDiploma)andOutcomeof SecondYear

• ThirdExitPoint (B. Voc.Degree) andOutcomeofThirdYear

#### Studentswillbeawarded:

Certificate	Studentshallberequired toappearinexaminationsofallcourses.However,toawardthe					
	Certificate (Medical Laboratory Technology) a student shall study the minimum of					
	${\it 30} credits course and optiminimum passing credits a speruniversity rule.$					
Diploma:	Student shall be required to appear in examinations of all courses. However, to					
	awardthe Diploma (Medical Laboratory Technology) a student shall study the					
	minimum of 60 creditscourseandoptminimumpassingcreditsasperuniversityrule.					
AdvancedDiploma	Studentshallbe required to appear inexaminationsofall courses. However, to award the					
	Advanced Diploma (Medical Laboratory Technology) a student shall be required to					
	studyminimumof120creditscourseandoptminimumpassingcreditsasper					
	universityrule.					
<b>B.VocDegree</b>	Studentshallberequired to appear in examinations of all courses. However, to award					
	thedegreeastudentshallberequiredtostudyminimumof180creditscourseand					
	optminimumpassingcreditsasperuniversityrule					

#### 6. Assessment:

The Skill component of the course will be generally assessed by the respective Sector Skill Councils. In case, there is no Sector Skill Council for a specific trade, the assessment may be done by an allied Sector Council or the Industry partner. Further if Sector Skill Council in concerned / relevant trade has no approved QP which canbe mapped progressively or due to any other reason, if the SSC expresses its inability to conduct the assessmentor cannot conduct the skill assessment in stipulated time frames as per academic calendar, the institutions mayconduct skill assessment through a Skill Assessment Board by 'Certified Assessors' as per the provisionsenumerated in MHRD Skill Assessment Matrix for Vocational Advancement of Youth (SAMVAY). The SkillAssessment Board may have Vice-Chancellor/Principal/Director/Nodal officer/Coordinator of the programme /Centre, representativesofthe partner industy(s),

one nominee of the Controller of Examination or his/her Nominee of affiliating University / AutonomousCollege and at least one external expert. The affiliating university may nominate additional experts on the SkillAssessmentBoard, ifrequired.

Thecertifyingbodiesmay complywith/obtainaccreditationfrom theNationalAccreditationBoardforCertification Bodies (NABCB) set up under Quality Council of India (QCI). Wherever the university/collegemaydeemfit,itmayissueajointcertificateforthecourse(s)withtherespectiveSectorSkillCouncil(s).

The general education component will be assessed by the concerned university as per the prevailing standardsand procedures. General Education credit refers to a unit by which the course work is measured. It determines the number of hours of instructions required perweek.

One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/fieldworkper week. Accordingly, one Credit would mean equivalent of 14-15 periods of 60 minutes each or 28 - 30 hrs ofworkshops/ labs. For internship / field work, the credit weightage for equivalent hours shall be 50% of that forlectures/tutorials.Forself-learning,basedone-

contentorotherwise, the credit weight age for equivalent hours of study shall be 50% of that for lectures/tutorials.

Theinstitutions of fering B.Vocdegreeprogrammeshould adopt and integrate the guidelines and recommendations of the respective Sector Skill Councils (SSCs) for the assessment and evaluation of the vocational component, where very valuable.

Letter Grades and Grade Points: it is recommended to adopt 10- point grading system with the Letter grades asgivenbelow:

LetterGrade	GradePoint
O(Outstanding)	10
A+(Excellent)	9
A(VeryGood)	8
B+ (Good)	7
B(AboveAverage)	6
C(Average)	5
P (Pass)	4
F(Fail)	0
Ab(Absent)	0

GradesandGradePoints

॥ सा विद्या या विमुक्तये ॥



स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड 'ज्ञानतीर्थ', विष्णुप्री, नांदेड - ४३१ ६०६ (महाराष्ट्र राज्य) भारत

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED

'Dnyanteerth', Vishnupuri, Nanded - 431 606 (Maharashtra State) INDIA स्यामी रामानंद तीर्थ मराउवाडा विद्यापीठ, नांदेड Established on 17th September, 1994, Recognized By the UGC U/s 2(f) and 12(B), NAAC Re-accredited with'B++' grade

Fax : (02462) 215572 Phone: (02462)215542 Academic-1 (BOS) Section

#### E-mail: bos@srtmun.ac.

website: srtmun.ac.ir

विद्यापीठ अनुदान आयोगाने शैक्षणिक वर्ष २०२०-२१ पासून मान्यता (व्होकेशनल दिलेल्या बी. व्होक पदवी वर्षाचे तृतीय कोर्सेसचे) अभ्यासकमाचे (Syllabus) शौक्षणिक वर्ष २०२२–२३ पासून लागू करणे बाबत.

कुलसचिव

शैक्षणिक (१–अभ्यासमंडळ) विभाग

#### प रिपत्र क

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, विज्ञान व तंत्रज्ञान विद्याशाखेतील विद्यापीठ अनुदान आयोगाने शैक्षणिक वर्ष २०२०–२१ पासून मान्यता दिलेल्या बी. व्होक (व्होकेशन कोर्सेस) पदवी अभ्यासकमाचे तृतीय वर्षांचे Syllabus शैक्षणिक वर्ष २०२२–२३ पासून लागू करण्यास मा. कुलगुरू महोदयांनी मा. विद्यापरिपदेच्या मान्यतेच्या अधीन राहून मान्यता दिलेली आहे. त्यानुसार खालील अभ्यासकम लागू करण्यात येत आहेत.

- 1. B. Voc Software Development III year
- 2. B. Voc. Bachelor of Medical Laboratory Technology. III year
- 3. B. Voc. Herbal Medicine III year
- 4. B. Voc. Agriculture/commercial Aquaculture III year

5. B. Voc. Horticulture and Post Harvest Technology III year

6. B. Voc. Food Processing /Food Processing Technology III year

7. B. Voc. Chemical & Petrochemical Applied Analytical Chemistry III year

8. B. Voc. Life Science/Skill Based Zoology III year

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणून द्यावी. ही विनंती.

जा.क.:शैक्षणिक-१/परिपत्रक/व्होकेशनल अभ्यासक्रम/N-

2022-23/624

दिनांक : २९.०९.२०२२

- प्रत माहिती <mark>व</mark> पुढील कार्यवाहीस्तव
- १) मा. अधिष्ठाता, विज्ञान व तंत्रज्ञान विद्याशाखा, प्रस्तृत विद्यापीठ.
- मा. संचालक, परीक्षा व मूल्यमापन मंडळ यांचे कार्यालय, प्रस्तुत विद्यापीठ. 2)
- प्राचार्य, सर्व संबंधित संलग्नित महाविद्यालये, प्रस्तुत विद्यापीठ.
- ४) साहाय्यक कुलसचिव, पदव्युत्तर विभाग, प्रस्तुत विद्यापीठ. उपकुलसचिव, पात्रता विभाग, प्रस्तुत विद्यापीठ. Կ)
- सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ. याना देवून कळविण्यात येते की, सदरील परिपत्रक विद्यापीठाच्या संकेतस्थळावर प्रसिधंद करण्यात यावे



# Swami Ramanand Teerth Marathwada University,

# Nanded (Maharashtra)

(NAAC Re-accredited with 'A' Grade)



# Syllabus of

# **B. Voc. Medical Laboratory Technology** (Third Year) (3 years Degree Course)

#### TITLE OF THE PROGRAMME

## **B. Voc. Medical Laboratory Technology**

#### 1. Preamble:

Skills and knowledge are the driving forces of economic growth and social development for any country. Presently, the country faces a demand – supply mismatch, as the economy needs more 'skilled' workforce than that is available. In the higher education sphere, knowledge and skills are required for diverse forms of employment in the sectors of education, health care, manufacturing and other services.

Government of India, taking note of the requirement for skill development among students, launched National Vocational Education Qualification Framework (NVEQF) which was later on assimilated into National Skills Qualifications Framework (NSQF). Various Sector Skill Councils (SSCs) are developing Qualification Packs (QPs), National Occupational Standards (NOSs) and assessment mechanisms in their respective domains, in alignment with the needs of the industry.

In view of this our University initiated to start skill based courses which are in demand of industries to be carry responsibilities of society. The programme is highly relevant for all those who want to pursue a professional career in software development.

2. Aim:

3. Objective:

4. Eligibility and Fees

5. Program outcome:

First Exit Point (Diploma) and Outcome of First Year

Second Exit Point (Advance Diploma) and Outcome of Second Year

• Third Exit Point (B. Voc. Degree) and Outcome of Third Year

#### Students will be awarded:

Certificate	Student shall be required to appear in examinations of all courses. However, to award					
	the Certificate (Medical Laboratory Technology) a student shall study the minimum of					
	30 credits course and opt minimum passing credits as per university rule.					
Diploma:	Student shall be required to appear in examinations of all courses. However, to award					
	the Diploma (Medical Laboratory Technology) a student shall study the minimum of					
	60 creditscourse and opt minimum passing credits as per university rule.					
Advanced Diploma	Student shall be required to appear in examinations of all courses. However, to award					
	the Advanced Diploma (Medical Laboratory Technology) a student shall be required					
	to study minimum of <b>120 credits course and opt minimum passing credits as per</b>					
	university rule.					
B.Voc Degree	Student shall be required to appear in examinations of all courses. However, to award					
	the degree a student shall be required to study minimum of <b>180 credits course and</b>					
	opt minimum passing credits as per university rule					

#### 6. Assessment:

The Skill component of the course will be generally assessed by the respective Sector Skill Councils. In case, there is no Sector Skill Council for a specific trade, the assessment may be done by an allied Sector Council or the Industry partner. Further if Sector Skill Council in concerned / relevant trade has no approved QP which can be mapped progressively or due to any other reason, if the SSC expresses its inability to conduct the assessment or cannot conduct the skill assessment in stipulated time frames as per academic calendar, the institutions may conduct skill assessment through a Skill Assessment Board by 'Certified Assessors' as per the provisions enumerated in MHRD Skill Assessment Matrix for Vocational Advancement of Youth (SAMVAY). The Skill Assessment Board may have Vice-Chancellor/Principal/Director/Nodal officer/Coordinator of the programme / Centre, representatives of the partner industy(s),

one nominee of the Controller of Examination or his/her Nominee of affiliating University / Autonomous College and at least one external expert. The affiliating university may nominate additional experts on the Skill Assessment Board, if required.

The certifying bodies may comply with / obtain accreditation from the National Accreditation Board for Certification Bodies (NABCB) set up under Quality Council of India (QCI). Wherever the university/college may deem fit, it may issue a joint certificate for the course(s) with the respective Sector Skill Council(s).

The general education component will be assessed by the concerned university as per the prevailing standards and procedures. General Education credit refers to a unit by which the course work is measured. It determines the number of hours of instructions required per week.

One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week. Accordingly, one Credit would mean equivalent of 14-15 periods of 60 minutes each or 28 - 30 hrs of workshops/ labs. For internship / field work, the credit weightage for equivalent hours shall be 50% of that for lectures /tutorials. For self-learning, based on e-content or otherwise, the credit weightage for equivalent hours of study shall be 50% of that for lectures / tutorials.

The institutions offering B.Voc degree programme should adopt and integrate the guidelines and recommendations of the respective Sector Skill Councils (SSCs) for the assessment and evaluation of the vocational component, wherever available.

Letter Grades and Grade Points: it is recommended to adopt 10- point grading system with the Letter grades as given below:

Letter Grade	Grade Point
O (Outstanding)	10
A+ (Excellent)	9
A (Very Good)	8
B+ (Good)	7
B (Above Average)	6
C (Average)	5
P (Pass)	4
F(Fail)	0
Ab (Absent)	0

Grades and Grade Points

Passing percentage for each paper each course is 40%. Separate passing for continuous assessment and end semester examination and/or as per time to time guidelines of the university.

A student obtaining Grade F and Ab shall be considered failed and he/she will be required to reappear in the examination.

Computation of Semester Grade Point Average System (SGPA) and Cumulative Grade Point Average (CGPA):

The SGPA is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the course components taken by a student and the sum of the number of credits of all the courses undergone by a student in a semester, i.e

SGPA (Si) =  $\Sigma$ (Ci x Gi) /  $\Sigma$ Ci

where 'Ci'is the number of credits of the ith course component and 'Gi' is the grade point scored by the student in the ith course component.

The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

 $CGPA = \Sigma(Ci \times Si) / \Sigma Ci$ 

Where 'Si' is the SGPA of the ith semester and Ci is the total number of credits in that semester.

The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

The skill	component would be	taken as one of the course	components in	calculation of SGPA	and CGPA with
given	credit	weightage	at	respective	leve

# Swami Ramanand Teerth Marathwada University, Nanded B. Voc. Medical Laboratory Technology

Syllabus with effective from 2020-2021

### Semester I

Sr. No	Course Code	Course Title	Continuous Assessment Credits(CA)			End Semester Exam Credits (ESE)			Total Credits / Marks	
	Conorol E	ducation	Credits	Marks	Min	Credits	Marks	Min	Cradits	Marks
	General E	aucation	creuts	1 <b>1111 K</b> 3	Marks	creatio	iviai ko	Marks	Cicuits	1 <b>11</b> 11 K5
1	BMLT101	English language and communicative skills	2	50	20	2	50	20	4	100
2	BMLT102	Computer Fundamentals & IT	2	50	20	2	50	20	4	100
3	BMLT103	Fundamentals of Microbiology-I	2	50	20	2	50	20	4	100
	Skill Courses									
4	BMLT104	Fundamentals of Anatomy and Physiology	2	50	20	2	50	20	4	100
5	BMLT105	Laboratory Science & Human body	2	50	20	2	50	20	4	100
6	BMLT106	Hematology	2	50	20	2	50	20	4	100
	Practical Skill Courses									
7	BMLT 107	7 LAB1:Fundamentals of anatomy and physiology	1	25	10	1	25	10	2	50
8	BMLT 108	<ul><li>8 LAB2:Laboratory Science</li><li>&amp; Human body</li></ul>	1	25	10	1	25	10	2	50
9	BMLT 109	AB3:Hematology	1	25	10	1	25	10	2	50
	Total			•	•		•		30	750

### Semester II

Sr. No.	Course Code		Course Title		Continuous Assessment Credits(CA)			End Semeser Exam Credits (ESE)		Total Credits / Marks		
	General Education			Credits	Marks	Min. Marks	Credits	Marks	Min. Marks	Credits	Marks	
1	BMLT	Soft Person	Skill &		2	50	20	2	50	20	4	100
	201	Develo	opment I									
2	BMLT 202	Enviro	nmental Stud	dies	2	50	20	2	50	20	4	100
3	BMLT 203	Microl	Microbiology-II		2	50	20	2	50	20	4	100
	Skill Courses											
4	BMLT 204	Advar Science &Test	Advanced Laboratory Science Techniques		2	50	20	2	50	20	4	100
5	BMLT 205	Bioch	emistry-I		2	50	20	2	50	20	4	100
6	BMLT 206	Bioins Haem Techr	Bioinstrumentation, Haematological Techniques		2	50	20	2	50	20	4	100
	Practical S	Practical Skill Courses										
7	BMLT 207	LAB4 Labora Techn Proces	Advanced atory S iques & T ss	cience Festing	1	25	10	1	25	10	2	50
8	BMLT 208	LAB5	:Biochemistr	y-I	1	25	10	1	25	10	2	50
9	BMLT 209 Total	LAB Bioins Hemat Techn	trumentation cological iques	6	1	25	10	1	25	10	2	50 750
	i Otal										50	150

Semester III											
Sr. No.	Course Code	Course Title	Continuous Assessment Credits(CA)			End Exam (ESE	Semest 1 Credi )	Total Credits			
	General Ed	lucation	Credits	Marks	Min. Marks	Credits	Marks	Min. Marks	Credits	Marks	
1	BMLT 301	Value Education	2	50	20	2	50	20	4	100	
2	BMLT 302	Biostatistics	2	50	20	2	50	20	4	100	
3	BMLT 303	Soft Skills & Personality Development - II	2	50	20	2	50	20	4	100	
	Skill Courses										
4	BMLT304	Advanced Virology	2	50	20	2	50	20	4	100	
5	BMLT 305	Medical Pathology - I	2	50	20	2	50	20	4	100	
6	BMLT 306	Essentials of Immunology	2	50	20	2	50	20	4	100	
	Practical Skill Courses										
7	BMLT 307	LAB 7- Advanced Virology	1	25	10	1	25	10	2	50	
8	BMLT 308	LAB 8 : Medical Pathology - I	1	25	10	1	25	10	2	50	
9	BMLT 309	LAB 9 Essentials of Immunology	1	25	10	1	25	10	2	50	
	Total								30	750	

# **B.Voc.Medical Laboratory Technology, Second Year**

Sr. No.	Course Code	rse Course Title		Continuous Assessment Credits(CA)			Semest 1 Credi )	Total Credits		
	General E	ducation	Credits	Marks	Min. Marks	Credits	Marks	Min. Marks	Credits	Marks
1	BMLT 401	Medical Ethics	2	50	20	2	50	20	4	100
2	BMLT402	Biomedical Waste Management	2	50	20	2	50	20	4	100
3	BMLT403	Metabolism - I	2	50	20	2	50	20	4	100
	Skill Courses									
4	BMLT 404	Bioinstrumentation Techniques - II	2	50	20	2	50	20	4	100
5	BMLT 405	Microbial Physiology	2	50	20	2	50	20	4	100
6	BMLT 406	Diagnostic Microbiology	2	50	20	2	50	20	4	100
	Practical Skill Courses									
7	BMLT 407	<ul> <li>LAB 10-Bioinstrumentation</li> <li>Techniques - II</li> </ul>	1	25	10	1	25	10	2	50
8	BMLT 408	LAB 11:Microbial Physiology	1	25	10	1	25	10	2	50
9	BMLT LAB 12: Diagnostic 409 Microbiology		1	25	10	1	25	10	2	50
	Total				4				30	750

## B.Voc.Medical Laboratory Technology, Second Year Semester - IV

# B.Voc.Medical Laboratory Technology, Third Year Semester - V

Sr. No.	Course Course Title • Code		Continuous Assessment Credits(CA)			End S Exam (ESE)	Semest ı Credi )	Total Credits		
	General E	ducation	Credits	Marks	Min. Marks	Credits	Marks	Min. Marks	Credits	Marks
1	BMLT 501	Human Psychology	2	50	20	2	50	20	4	100
2	BMLT 502	2 Advanced Biotechnology	2	50	20	2	50	20	4	100
3	BMLT 503	Laboratory Management & Ethics	2	50	20	2	50	20	4	100
	Skill Courses									
4	BMLT 504	Histopathology & Cytopathology	2	50	20	2	50	20	4	100
5	BMLT 505	Parasitology & Mycology	2	50	20	2	50	20	4	100
6	BMLT 506	Microbiology - III	2	50	20	2	50	20	4	100
	Practical Skill Courses									
7	BMLT 507	LAB 13- Histopathology & Cytopathology	1	25	10	1	25	10	2	50
8	BMLT 508	LAB 14: Parasitology & Mycology	1	25	10	1	25	10	2	50
9	BMLT 509	LAB 15: Microbiology - III	1	25	10	1	25	10	2	50
	Total			1	1	1	I	1	30	750

## B.Voc.Medical Laboratory Technology, Third Year Semester - VI

Sr. No	Course Code	Course Title		Continuous Assessment Credits(CA)			Semest 1 Credi )	Total Credits		
	General E	ducation	Credits	Marks	Min. Marks	Credits	Marks	Min. Marks	Credits	Marks
1	BMLT 601	R–DNA Technology	2	50	20	2	50	20	4	100
2	BMLT 602	2 Entrepreneurship Program	2	50	20	2	50	20	4	100
3	BMLT 603 Research Methodology		2	50	20	2	50	20	4	100
	Skill Courses									
4	BMLT 604	Hematology - III	2	50	20	2	50	20	4	100
5	BMLT 605	Pathology - III	2	50	20	2	50	20	4	100
	Practical Skill Courses									
7	BMLT 606	5 LAB 16- Hematology - III	1	25	10	1	25	10	2	50
8	BMLT 607	LAB 17: Pathology - III	1	25	10	1	25	10	2	50
9	BMLT 608	LAB 18 : Project & Seminar on Hospital Training	6	150	60	-	-	-	6	150
	Total			-1		1			30	750