

# **PROSPECTUS**

**FOR** 

## **B.Voc Degree Programme**

UNDER

**VIDYASAGAR UNIVERSITY** 

ĺΝ

- > HEALTH CARE
- **> AUTOMOBILE**
- > HOSPITALITY MANAGEMENT
- > MEDICAL LABORATORY TECHNOLOGY
- > RETAIL MANAGEMENT & OPERATIONS

**COURSES ARE** 

(SPONSORED BY UNIVERSITY GRANTS COMMISSION)

## DEEN DAYAL UPADHYAY KAUSHAL KENDRA MAHISHADAL RAJ COLLEGE

(Govt. Sponsored)

NAAC accredited 'A' Grade College NSDC Training Partner

DST (FIST) Govt. of India Approved College MAHISHADAL : PURBA MEDINIPUR : PIN – 721628 : WEST BENGAL

Website: www.mahishadalrajcollege.com E.mail: rajcollegemahishadal@gmail.com

Bachelor of Vocation (B.Voc), a Bachelor level degree specified by UGC under section 22(3) of UGC Act, 1956 and notified in official Gazette of India dated 19th January, 2013 be recognized at par with other Bachelor level degrees for competitive exams conducted by Union/State Public Service Commission, Staff Selection Commission or other such bodies where the eligibility criteria is "Bachelor Degree in any discipline".

Mahishadal Rai College is among the first 100 Community Colleges in India, established by the Govt of India in December 2013 under the supervision of University Grants Commission, to materialise the dream of 'Skilling India' and expand vocational studies at the college level following the guideline of National Skills Qualification Framework (NSQF). However, in order to give further push to vocational education on a even larger scale, MHRD has established 46 'Deen Dayal Upadhyay Centres for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood (KAUSHAL). during the XII Plan period spreading all over the country. These Centres would take-up the vocational education to new levels and offer courses beyond B.Voc. Degree and formulate courses at postgraduate level keeping in mind the need of i) Industry in specialized areas; ii) Instructional design, curriculum design and contents in the areas of Skills Development; iii) Pedagogy, assessment for skills development education and training; iv) trained faculty in the areas of skill development; etc. These Centres would also embed and follow the guiding principles of NSQF, QPs, and NOSs of National Skill Development Corporation for their programmes and would not focus on skilling alone but also develop entrepreneurship traits. Mahishadal Raj College, is honoured by the University Grants Commission and Ministry of Human Resource and Development, Govt of India, as the only institution to establish *Deen* Dayal Upadhyay KAUSHAL Kendra, A Centre of Excellence in skill development, in the state of West Bengal. The college is also the registered Vocational Training Provider (VTP) of Paschim Banga Society for Skill Development (Govt of West Bengal) for imparting skill based training in as many as 19 Trades ranging from Agriculture to Health Care. Mahishadal Raj College, has become the first Govt Sponsored College in the state of West Bengal to become the official Training Partner of National Skill **Development Corporation (NSDC)** in the month of April ,2020.



### A Brief Understanding of B.Voc Programme

It has been a long felt necessity to align higher education with the emerging needs of the economy so as to ensure that the graduates of higher education system have adequate knowledge and skills for employment and entrepreneurship. The higher education system has to incorporate the requirements of various industries in its curriculum, in an innovative and flexible manner while developing a holistic and well groomed graduate.

Ministry of HRD, Government of India had issued an Executive Order in September 2011 for National Vocational Education Qualification Framework (NVEQF). Subsequently, Ministry of Finance, in pursuance of the decision of Cabinet Committee on Skill Development in its meeting held on 19th December, 2013, has issued a notification for National Skills Qualifications Framework (NSQF) which supersedes NVEQF.

Under the National Skills Development Corporation, many Sector Skill Councils representing respective industries have/are being established. One of the mandates of Sector Skill Councils is to develop National Occupational Standards (NOSs) for various job roles in their respective industries. It is important to embed the competencies required for specific job roles in the higher education system for creating employable graduates.

The University Grants Commission (UGC) has launched a scheme on skills development based higher education as part of college/university education, leading to Bachelor of Vocation (B.Voc.) Degree with multiple exits such as Diploma/Advanced Diploma under the NSQF. The B.Voc. programme is focused on universities and colleges providing undergraduate studies which would also incorporate specific job roles and their NOSs alongwith broad based general education. This would enable the graduates completing B.Voc. to make a meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge.

### **Objectives**

- 1. To provide judicious mix of skills relating to a profession and appropriate content of General Education.
- 2. To ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the programme.
- 3. To provide flexibility to the students by means of pre-defined entry and multiple exit points.
- 4. To integrate NSQF within the undergraduate level of higher education in order to enhance employability of the graduates and meet industry requirements. Such graduates apart from meeting the needs of local and national industry are also expected to be equipped to become part of the global workforce.
- 5. To provide vertical mobility to students coming out of 10+2 with vocational subjects.



## 1) B.Voc Degree Programme in Health Care

A graduate of B. Voc. in Healthcare is an all-rounder as far as patient care is concerned. The course envisages building an overall expertise in the student, of managing patients with care, whether it's an in-patient or someone in the OPD or anywhere else in the hospital. This student would be capable of offering a range of services from paediatric care to radiology or X-ray technician to physiotherapy assistant or care of patients at operation theatre.

Besides, skills related to personal care of patients, basic nursing procedures, patient ambulation and handling, store keeping, biomedical waste disposal, etc. in short we can say healthcare student manage entire patient life cycle. The need for such professionals has been expressed by not only the healthcare industry employers, but also the consumers of this industry, i.e., patients. The specialized skill training offered to the students makes them an asset not only to the doctors and nurses but the patients as well.

### **Structure and Components:**

- Bachelor Degree in Health Care has been framed following the guidelines of National Skill Qualification Framework (NSQF) and the B. Sc. programme of Vidyasagar University (VU).
- The B. Voc. Programme comprises of both vocational and academic components.
- Vocational or skill component of the curriculum shall be examined at the end of each semester by the Health Care Sector Skill Council (National Skill Development Corporation, Govt of India).
- Mahishadal Raj College is the only Govt sponsored college in West Bengal to become the NSDC Training Partner.
- The assessment for the General education component shall be done as per the schedule and guidelines of Vidyasagar University.





### Year wise Health Care Curriculum

First Year: NSQF Level - 5 (Diploma Standard)

I	Module No	Vocational Content (Module name)  Credits/ Hours Theoretical & Practical		General Content	Hours/Credits	
K	1	Anatomy & Physiology	1.4	40		
E	2	Pharmacy	1.7	40		
SEMESTER	3	Multipurpose Health Care & Community Medicine	1.00	45	Communication Skill	100/6.0
SE	4	Cell Biology	2.00	40		
	5	Basic Microbiology	2.7	40	G (	100/60
	6	Hereditary disease	2.2	20	Computer Skill	100/6.0

Terminal Competency: 1.The students get knowledge and skill about the basics physiology and anatomy. 2.Get knowledge on basic structure and function of cell which is the structural and functional unit if our body. 3 They will be familiar with the idea that what the microbes are. 4. There are many hereditary disease in our surroundings. That will be familiar about the hereditary disease. 5.Will be familiar with composition of various basic drug and ethics of use of common drug. 6.Will get required knowledge and practice about the idea about Multipurpose Health Care & Community Medicine .

	0.00	topuspose steator care ee community site				
	7	Pathology	1.4	40		
	8	Pharma Sales	2.7	30		
Ħ	9	Physiotherapy	1.7	35	Physiology	125/6.0
	10	Parasitology	3.0	25	rnysiology	123/0.0
ER	11	Immunology	1.7	25		
SEMESTER	12	Paediatric Nursing & Growth &	2.8	30		
Æ		Development	2.0	30		125/6.0
EN		Med.Surg.Nursing - Orthopaedics			Nutrition	123/0.0
<b>N</b>	13	,E.N.T., Skin & Communicable	2.7	40	rutition	
		diseases, Eye, Gynae General Med.				
	14	Bioinstrumentation and data handling	9	40		

Terminal Competency: 1.Get knowledge about the Differentiate between various types of immunity 2. Prepare immunization schedule chart. 3. Identify the key components of Universal Immunization Programme. 4. Describe the key components of a Universal Immunization Programme. 5. Describe the importance of immunization 6.Describe the side effects of immunization 7.Describe the various aspects of immunization schedule chart6.8. Explain the meaning of Bioinstrumentation and data handling, 9. They will be very efficient About medical surgical nursing in different trade Immunity.

initiality.								
Total Vocational Content	550/36.0	Total General	450/24.0					
		Content						
Grand Total	1000 Hrs./60.0 Credits							

Job Role after successful completion of Sem-I & II (Level-5) – Assistant pathologist, Operation Theatre Assistant, Pharmacy Assistant



#### Second Year: NSQF Level - 6 (Advance Diploma Standard)

Ш	Modu le No			/Credits etical & ctical	General Content	Hours/C redits
- 11	15	First Aid, Emergency & Dresser	2.7	40		
ER	16	Vaccination & Sterilisation	2.0	30		
SEMESTER	17	Medical Record Keeping	2.7	40	Communication Skill	75/5.0
EN	18	Basic Bio-chemistry	2.6	60		
S	19	Basic Endocrinology	1.7	25		
	20	Basic Medical Nursing and Surgical Nursing	2.3	75	Computer Skill	75/5.0

Terminal Competency: 1. Get knowledge on First Aid, Emergency & Dresser. 2. Get knowledge of the Vaccination & Sterilisation. 3. Will know about the various system of record keeping in the hospital management. 4. Biochemical structure and analytical ability of different basic bio molecule as carbohydrate, protein and fat, enzyme, vitamin and hormone. 5. Come to know the uses and functions of hormone therapy, hormone structure and function.6. Main benefit of this semester is the basic theoretical and applied knowledge of surgical nursing which must help a student to do something independently in their life.

	21	Radiology & X-Ray Technician	2.7	45		
	22	Operation Theatre (Technician)	2.0	40		
	23	Reproductive Biology & Family	2.7	35	Physiology	125/7.0
		Planning			(Elective-1)	
>	24	Introduction to Hospital Operations	3.3	50		
- I		Introduction to Cardiac care			Nutrition	
T.K		technology			(Elective-2)	125/7.0
STI	25	Paramedical training in cardiac care	3.3	50		
SEMESTER						
E	26	Staff safety infection control	1.5	10		
$\infty$						
	27	ECG	4.7	60		
	21	ECG	4.7	00		
	28	Biomedical waste	1.8	30		

Terminal Competency: 1. Will be skilled in understanding importance of Radiology & X-Ray(Technician). With this knowledge they can establish themselves as efficient X ray and radiation expertise in the market 2. Will be skilled in managing in BIOMEDICAL WASTE.. 3. Will know the different types of ECG technique and they perform ECG by their own hand. 4. Will be skilled in repairing different problems related to STAFF SAFETY INFECTION CONTROL in their working ambiance.5. Will be skilled in customer handling. 6. Will be able to work as an assistant in ECHNOLOGY PARAMEDICAL TRAINING IN CARDIOLOGY MEDICINE.

Total Vocational Content	640/36	Total General Content	400/24
Grand Total	1040 Hrs./60.0 Cred	dits	

Job Role after successful completion of Sem-III & IV (Level-6) – ECG Technician, Radiology Technician, Medical Record Keeper, OT Assistant



Third Year: NSQF Level - 7 (B.Voc Standard)

>	Modu le No	Vocational Content (Module name)	Theor	Credits etical &	General Content	Hours/Credits
SEMESTER -	29	Dialysis Technician	8	60	Communication Skill	60/6
SEM	30	Occupational Therapy	2	40	Physiology Gen	70/6
	31	Psychology and treatment	4	70		
Ter	minal Co	ompetency: Will be skilled in Oc	cupation	nal Therap	y, Psychology and trea	atment,
Occ	cupationa	al Therapist	•	- '		
I.	32	Nutrition and diet counsellor	4	60	Computer Skill	60/6
	33	Intensive care 1	3	40		
ER	34	Intensive care 2	3	50		
ST	35	Intensive care 3	3	50		
SEMESTER	36	Demonstration Lab,	2	30	Nutrition Gen	70/6
SEI		General medical and surgery ward:				
	37	Hematology	7	70		

Terminal Competency: Will be skilled to handle any type of problem in Dialysis. Nutrition and Diet 2. They alo efficient inas worker in the field of hematology and Counsellor in Demonstration Lab, General medical and surgery ward 3. ICU is most important part which exparties will be formed by this module

Total Vocational Content	750/36.0	Total General Content	250/24.0		
Grand Total	1000 Hrs./60.0 Credits				

Job Role after successful completion of Sem- V & VI – Dialysis Technician, Health care assistant and Technician



### 2) **B.Voc Degree Programme in Automobile**

The liberalization of the Indian industry has seen significant growth in the Indian Automotive Industry. The Indian Automotive Industry today is one of the largest Industry is manufacturing and expected to reach 10 million unit by 2020 - 21. India emerged as fourth largest exporter of automobiles.

The sector has moderate direct employment and significant indirect employment; it is estimated that the sector provides direct and indirect employment to over 25 million people. Projected additional human resource requirement in Auto and Auto Components sector is estimated to be approximately 35 million till 2022.

The country is the largest manufacturers of motorcycles and the fourth largest producer of commercial vehicle. Grown at a spectacular rate on an average of 17% for last few years. Attained a turnover of USD \$35.8 billion. India overtook china by emerging as the fourth largest exporter of cars in the Asia

### **Structure and Components:**

- Bachelor Degree in Automobile has been framed following the guidelines of National Skill Qualification Framework (NSQF) and the B. Sc. programme of Vidyasagar University (VU).
- The B. Voc. Programme comprises of both vocational and academic components.
- Vocational or skill component of the curriculum shall be examined at the end of each semester by the Automotive Skill Development Council (National Skill Development Corporation, Govt of India).
- Mahishadal Raj College is the only Govt sponsored college in West Bengal to become the NSDC Training Partner.
- The assessment for the General education component shall be done as per the schedule and guidelines of Vidyasagar University.



## Year wise Curriculum of B.Voc in Automobile

First Year: NSQF Level - 5 (Diploma Standard)

	Module No	Vocational Content (Module name)	Hours /Credits Theoretical &	General Content	Hours/Credits
			Practical		
_	1	Introduction to Automobiles	10/0.7		
<del>~</del>	2	Workshop & Safety	10/0.7	Communication	100/6.0
		Precaution		Skill	
SI	3	Equipments & Tools	15/1.00		
<b>E</b>	4	System of Measurement	30/2.00		
SEMESTER	5	Basic ideas on engineering	40/2.9		
<b>9</b> 1		practices			
	6	Mechanical machines used	40/2.9	Computer Skill	100/6.0
		in Automobile servicing and			
		repair			

**Terminal Competency:** 1.The students get knowledge and skill about the basics of automobiles-development, classification and anatomy. 2.Get knowledge on safety precaution at workshop and road safety while riding. 3.Will be familiar with the workshop equipments, tools and their uses. 4.Will become able to measure different parts required for servicing. 5.Will be familiar with workshop practices generally done in a garage. 6.Will get required knowledge and practice of the machining operation for repairing a vehicle.

	7	Introduction to	10/0.7		
		Automobiles Engines			
	8	Engine Construction	40/2.9	Geology	125/6.0
	9	Engine Operating	25/1.7	(General / Pass	
		System		Paper)	
ż	10	Ignition System	45/3.0		
<b>S</b> 5	11	Lubricating system	25/1.7		125/6.0
<b>\bar{2}</b>		and its Function		Economics	
SEMESTER	12	Cooling System	40/2.9	(General / Pass	
•2	Basic Driving Skill		40/2.9	Paper)	
	Internsh	ip at Industry Partners	180/10		
		Workshop			

**Terminal Competency:** 1.Get knowledge about the power units- automobile engines. 2. Become able to assemble & disassemble the engine. 3.Get the idea of finding and rectifying the problems of engine i.e. acquire diagnostic skills. 4. Get the knowledge of the necessity of car coolant and various type of coolant procedure and operation. 5. Will get the driving skill which is essential for a mechanic. 6.Through the internship the students will be able to act as Mechanic, Automobile repairs overhauls and services motor vehicle to keep them good running condition.

veinere to neep them good running condition.			
Total Vocational Content	550/36.0	Total General	450/24.0
		Content	
Grand Total	1	000 Hrs./60.0 Credits	



#### Second Year: NSQF Level - 6 (Advance Diploma Standard)

	Module	Vocational Content	Hours/Credits	General Content	Hours/Credits
	No	(Module name)	Theoretical &		
			Practical		
	13	Electrical, Electronic	40/2.7		
Ħ		System and charging			
- I		system		Communication	75/5.0
Ä	14	Vehicle Axle &	30/2.0	Skill	
Ē		Steering System			
SEMESTER	15	Clutches and	40/2.7		
$\mathbf{Z}$		Transmission System			
S	16	Vehicle Suspension	30/2.0		
		System			
	17	Brakes System	25/1.7	Computer Skill	75/5.0
	18	Vehicle Chassis	35/2.3		
		System			

**Terminal Competency:** 1. Get knowledge on vehicle electrical & electronics system. 2. Get knowledge of the function of steering system & it components, axle & front wheel steering. 3. Will know about the transmission system, that is how gear sifting is done in to vehicles & its components function. 4. Can know the vehicle shock absorbing system & how it works, chassis spring suspension, fluid suspension and its parts & service. 5. Come to know the uses and functions of brake system. 6. Can know the base structure of vehicle

& its repairing, denting & painting.

e its repairing	6, 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	pumeng.			
	19	Intake and Exhaust	25/1.7		
		System			
	20	Fuel Feed System	30/2.0	Geology	
1	21	Fuel and Emission	25/1.7	(General / Pass	125/7.0
. 17		Control		Paper)	
R.	22	Vehicle Wheels,	20/1.3		
ľĒ		Rims, Tyres			
IS.	23	Customer Handling	20/1.3	Economics	
M		Managment		(General / Pass	
SEMESTER	24	Marketing and	20/1.3	Paper)	
•1		Insurance			125/7.0
	Internshi	p at Industry Partners	300/13.3		
		Workshop			

**Terminal Competency:** 1. Will be skilled in understanding importance of cleaned air required in engine and exhaust system, and how to overcome the pollution from the exhaust of an engine. 2. Will be skilled in fuel feeding system either by MPFI system or by CRDI system. 3. Will know the different types of fuel used in automobiles and their properties, how to control the emission and their norms. 4. Will be skilled in repairing different problems related to wheel and tyre. 5. Will be skilled in customer handling. 6. Will be able to work as an assistant in marketing of automobile.

Total Vocational Content	640/36.0	Total General Content	400/24.0
Grand Total	10	040 Hrs./60.0 Credits	

Job Role after successful completion of Sem-III & IV (Level-6) - Mechanic Automobile



Third Year: NSQF Level - 7 (B.Voc Standard)

K-V	Module No	Vocational Content (Module name)	Hours/Credits Theoretical & Practical	General Content	Hours/Credits		
SEMESTER -V	25	Engine Testing	230/12.8	Economics (General / Pass Paper)	100/12.0		
Terminal Co	ompetency:	Will be skilled in Engine	Testing and can p	erform Testing Jobs.			
SEMESTER - VI	26	Auto Electricals & Electronics	270/15.2	Geology (General / Pass Paper)	100/12.0		
SE	Internship	in Industry and Project	250/8.0	Communication /Personality Development	50/4.0		
<b>Terminal Competency:</b> Will be skilled to handle any type of servicing and repairing of electrical and electronics problem. Trainees will be skilled about the controllers function in detail and skilled on diagnosis while connecting any software on CAR.							
	otal Vocatio		750/36.0	Total General Content	250/24.0		
		Grand Total		1000 Hrs./60.0 Credit	S		
Job Role after successful completion of Sem- V & VI - Automobile Technician							



### 3) **B.Voc Degree Programme in Hospitality Management**

The hospitality industry is one of the most dynamic industries and continues to grow year after year. The World Travel Organization predicts that it will triple in size by the year 2020, becoming one of the largest industries in the world. This growth will provide many employment opportunities for people with the right qualifications. In the Indian context, the hospitality industry contributed only 2% of the GDP in 2003-04. However, it is projected to grow at a rate of 9.8% by 2020, which would place India as the second-fastest growing tourism market in the world. The total market size of the tourism and hospitality industry in India stood at US\$ 117.7 billion in 2011 and is anticipated to touch US\$ 418.9 billion by 2022. The manpower requirement in hospitality industry is 150,000 trained persons per annum while the availability is only 50,000 per annum.

Leading hotel brands have pepped up their investments and are in various stages of commencement of new proprieties in India, both in metro and non- metro cities. With the continued growth in India's GDP, improvement in the per capita income, and increased aspirational spending, the Indian hospitality sector is expected to grow faster than most countries around the world.

West Bengal is one of the most culturally and ethnically diverse states of India. West Bengal aims to become a preferred tourism and tourism-related investment destination by leveraging its unique geographical setting along with its various tourism-related assets. It will develop necessary infrastructure and promote hospitality industry in an integrated manner which will bring in more investment and further the socio-economic goals of the Government. Hospitality sector has been steadily gaining in prominence in West Bengal. The rich diversity and historical heritage that encompasses this state is drawing more tourists every year. The states policies on tourism are also providing a boost to the existing hotel and hospitality industry and offers great scope.

### **Structure and Components:**

- Bachelor Degree in Hospitality Management has been framed following the guidelines of National Skill Qualification Framework (NSQF) and the B. Sc. programme of Vidyasagar University (VU).
- The B. Voc. Programme comprises of both vocational and academic components.
- Vocational or skill component of the curriculum shall be examined at the end of each semester by the Tourism and Hospitality Skill Council (National Skill Development Corporation, Govt of India).
- Mahishadal Raj College is the only Govt sponsored college in West Bengal to become the NSDC Training Partner.

• The assessment for the General education component shall be done as per the schedule and guidelines of Vidyasagar University.



## Year wise Curriculum of B.Voc in Hospitality Management

First Year : NSQF Level - 5 (Diploma Standard)

<u>Subject</u>: Front Office Operation

<b>Total Number of Credits:</b>	30
Course Duration:	550 hrs
Role Description	Managing and controlling the front office operations
Applicable National Occupational Standards (NOS)	Compulsory:  1. THC/N0121: Manage the front office operations 2. THC/N0122: Manage the front office personnel 3. THC/N0123: Prepare front office periodical reports and budget 4. THC/N9901: Communicate with customer and colleagues 5. THC/N9902: Maintain customer-centric service orientation 6. THC/N9903: Maintain standard of etiquette and hospitable conduct 7. THC/N9904: Follow gender and age sensitive service practices 8. THC/N9906: Maintain health and hygiene 9. THC/N9907: Maintain safety at workplace Optional: 1. THC/N9905: Maintain IPR of company and customers 2. THC/N9909: Learn a foreign or local language(s) including English
Job Role	Front Office Manager
Role Description	Taking orders, getting it prepared and serving to customers, as per organization's policy
Applicable National Occupational Standards (NOS)	Compulsory:  1. THC/N2907 Receive customers and take orders  2. THC/N2908 Process customer's order  3. THC/N2909 Manage administrative work  4. THC/N9901 Communicate with customer and colleagues  5. THC/N9902 Maintain customer-centric service orientation  6. THC/N9903 Maintain standard of etiquette and hospitable conduct  7. THC/N9904 Follow gender and age sensitive service practices  8. THC/N9906 Maintain health and hygiene
Job Role	Counter Sales Executive / Counter Service Executive



<b>Total Number of Credits:</b>	30
Course Duration:	550 hrs
Role Description	Managing the front office operation during the shift; planning and scheduling work, manages the resource, supervising the process and ensuring guest satisfaction
Applicable National Occupational Standards (NOS)	1. THC/N0116: Plan and control day to day front office activities 2. THC/N0117: Assist in managing the front office operation 3. THC/N0118: Manage the front office staffing process 4. THC/N9901: Communicate with customer and colleagues 5. THC/N9902: Maintain customer-centric service orientation 6. THC/N9903: Maintain standard of etiquette and hospitable conduct 7. THC/N9904: Follow gender and age sensitive service practices 8. THC/N9905: Maintain IPR of organisation and customers 9. THC/N9906: Maintain health and hygiene 10. THC/N9907: Maintain safety at workplace 11. THC/N9909: Learn a foreign or local language(s) including English
Job Role	Duty Manager
Role Description	Establishing and monitoring soft facility services and its quality, as well as managing client and vendors at the facility as per organization's standards besides performing administrative work
Applicable National Occupational Standards (NOS)	<ol> <li>Compulsory:</li> <li>THC/N5712: Establish soft services and their quality</li> <li>THC/N5713: Monitor soft services and their quality at client's premises</li> <li>THC/N5714: Manage client and vendors</li> <li>THC/N5715: Perform administrative work at facility</li> <li>THC/N9901: Communicate with customer and colleagues</li> <li>THC/N9902: Maintain customer-centric service orientation</li> <li>THC/N9903: Maintain standard of etiquette and hospitable conduct</li> <li>THC/N9904: Follow gender and age sensitive service practices</li> <li>THC/N9905: Maintain IPR of organisation and customers</li> <li>THC/N9906: Maintain health and hygiene</li> <li>THC/N9907: Maintain safety at workplace</li> <li>THC/N9909: Learn a foreign or local language(s) including English</li> </ol>
Job Role	Facility Management Executive



## $Second\ Year: NSQF\ Level\ \textbf{-}\ 6\ (\ Advance\ Diploma\ Standard)$

## Subject: Food & Beverage Production

Course module	Job role	Workplace/ INDUSTRY
1. PROFESSIONAL STANDARDS AND ETHICS	1. Kitchen	1. HOTEL
FOR FOOD HANDLERS.	executive trainee.	2. RESTAURENT
	2. Commie1	3. COMMERTIAL
2. FOOD COMMODITIES	3.Commie 2	CATERING
3. COOKING FUELS AND KITCHEN EQUIPMENT	4. Continental chef	4. FOOD CHAIN
4. PROCESSING OF COMMODITIES	5.Indian chef	5. RAILWAY
5. AIMS AND OBJECTIVES OF COOKING	6. Butcher	CATERING
FOOD  6. METHODS OF COOKING	7.Cold kitchen chef	6. AIRLINE CATERING
o. METHODS OF COOKING	8. Vegetable carver	7. HOSPITAL
7. INDIAN CUISINE	9. Pantry man	CATRING
9 APT OF COOKEDN	. 10.breakfast chef	8. CRUISE LINE
8. ART OF COOKERY	Etc	9. Industrial canteen
9. STOCKS, SAUCES AND SOUPS		. 10.fast food outlet
10. FOOD PRESERVATION, CHEESE, BAKERY		. Etc
11. MENU PLANNING, PASTRY, FOOD STANDARDS		
12. FRENCH CUISINE, ITALIAN CUISINE,		
SPANISH /MEXICAN CUISINE, ORIENTAL CUISINE, KITCHEN ORGANIZATION AND		
HUMAN RESOURCE		
13. GARDE MANGER (LARDER WORK), ACCOMPANIMENTS AND GARNISHES,		
KITCHEN PLANNING 14. FOOD PRODUCTION SYSTEMS.		
14. FOOD I RODUCTION STSTEMS.		

Third Year: NSQF Level - 7 (B.Voc Standard)

## **SUBJECT: FOOD AND BEVERAGE SERVICE**

Course module	Job Role	Industry
1.FOOD & BEVERAGE SERVICE INDUSTRY  2.ATTRIBUTES OF FOOD & BEVERAGE SERVICE PERSONNEL FOOD & BEVERAGE SERVICE ORGANIZATION  3.FOOD & BEVERAGE SERVICE AREAS WITH HIERARCHIES  4.KNOWING F & B SERVICE EQUIPMENT  5. TYPES OF SERVICE AND MENUS  6. MENU PLANNING  7. BREAK FAST  8. IN-ROOM DINING  9. FUNCTION CATERING  10. BUFFET  11. NON ALCOHOLIC BEVERAGES  12. NON ALCOHOLIC BEVERAGES  13. WINE & FOOD HARMONY	1.MANAGEMENT TRAINEE 2.TRAINEE STEWARD 3.STEWARD 4.F & B EXECUTIVES	1. HOTEL  2. RESTAURENT  3. COMMERTIAL CATERING  4. FOOD CHAIN  5. RAILWAY CATERING  6. AIRLINE CATERING  7. HOSPITAL CATRING  8. CRUISE LINE



## 4) **B.Voc Degree Programme in Medical Laboratory Technology**

Medical Laboratory Technician (MLT): also referred to as Clinical Laboratory Science professional, Medical Technologist and Medical Laboratory Scientist. The Medical laboratory technicians perform complex tests for diagnosis, treatment, and prevention of disease. These professionals are responsible for supporting and assisting doctors/ scientists in their day to day working in a variety of roles. They function as the main support to biomedical scientists in pathology laboratories. The objective of the course is to develop a pool of trained workforce which can be employed by diagnostic service providers to assist pathologists & microbiologists. This course is geared to prepare 10+2 children with science background and who desire to be employed as a technician in a diagnostic care facility on completion of the course. This program focuses on the acquisition of skills necessary to assume an auxiliary role in the diagnosis of medical conditions under the direct supervision.

Upon completion of the course, trainees will be able to:

- \* Demonstrate knowledge about the healthcare sector and diagnostic services
- \* Demonstrate the ability to perform clinical skills essential in providing basic diagnostic services such as Correctly collect, transport, receive, accept or reject and store blood /urine/stool and tissue samples, etc.;
- \* Conduct analysis of body fluids/ samples; Maintain, operate and clean laboratory equipment; Provide technical information about test results; Prepare and document medical tests and clinical results; etc.
- \* Demonstrate quality assurance in Laboratory works
- \* Practice infection control measures
- \* Demonstrate readily availability of medical and diagnostic supplies
- \* Demonstrate techniques to maintain the personal hygiene needs
- \* Demonstrate actions in the event of medical and facility emergencies
- \* Demonstrate professional behavior, personal qualities and characteristics of a Medical laboratory Technician
- \* Demonstrate good communication, communicate accurately and appropriately in the role of Medical laboratory Technician

### **Structure and Components:**

- Bachelor Degree in Medical Laboratory Technology has been framed following the guidelines of National Skill Qualification Framework (NSQF) and the B. Sc. programme of Vidyasagar University (VU).
- The B. Voc. Programme comprises of both vocational and academic components.
- Vocational or skill component of the curriculum shall be examined at the end of each semester by the Health Care Sector Skill Council (National Skill Development Corporation, Govt of India).
- Mahishadal Raj College is the only Govt sponsored college in West Bengal to become the NSDC Training Partner.
- The assessment for the General education component shall be done as per the schedule and guidelines of Vidyasagar University.

## Year wise Curriculum of B.Voc in Medical Laboratory Technology

First Year : NSQF Level - 5 (Diploma Standard)

## Semester I

BMLT101	Course Code	Component	Unit	Topic	Credits	L / Week
Skill					Cicuits	
Human					04	
Anatomy   Physiology -1   Skill   IV   Human Values and Professional Ethics   01						
Physiology -I)						
BMLT102   Skill   I   Human Healthcare and Safety Regulations (Routine Laboratory   Skill   II   Introduction to Haematology and Routine tests   01   01   01   01   01   01   01   0	• ,	SKIII	- 1	Truman varues and Frotessional Lenies		01
Routine   Laboratory   Techniques-I)   Skill   II   Introduction to Haematology and Routine tests	, Gu					
Laboratory Techniques-I)   Skill   III   Specimen Collection   O1	BMLT102	Skill	I	Human Healthcare and Safety Regulations		01
Skill   III   Specimen Collection   O1	(Routine	Skill	II	Introduction to Haematology and Routine	04	01
Skill   IV   Laboratory Preparation in Hematology   01	Laboratory			tests		
BMLT103   Skill   I   Biochemical Test Profile - I   04   01   Laboratory   Skill   II   Biochemical Test Profile - II   01   Laboratory   Skill   III   Elementary Knowledge of Chemistry- I   01    BMLT104   General   I   Microscopy and Organization of Cell - I   01    (Cell Biology and   General   III   Microscopy and Organization of Cell - II   03   01    General   III   Systematic study of Animals - II   01    BMLT105   General   II   Structure, Functions and Classification of Amino Acids and Proteins   03   01    General   III   Structure, Functions and Classification of Carbohydrates   General   III   Structure, Functions and Classification of Lipids   01    General   IV   Structure, Functions and Classification of Carbohydrates   01    General   IV   Physical and Chemical Properties of Nucleic Acids   01    BMLT106   General   II   Introductory Microbiology-1   01    General   IV   Microbial Ecology and Biotic Interactions   01    BMLT106   General   IV   Practicals of Course BMLT101   02   06    BMLTP101   Practicals of Course BMLT102   02   06    BMLTP103   Practicals of Course BMLT104   01   06    BMLTP105   Practicals of Course BMLT105   01   06    BMLTP105   Practicals of Course BMLT105   01   06    BMLTP105   Practicals of Course BMLT106   01   06    BMLTP105   Practicals of Course BMLT106   01   06	Techniques-I)	Skill	III	Specimen Collection		01
Special Laboratory   Skill   II   Biochemical Test Profile - II   01   01   01   01   01   01   01		Skill	IV	Laboratory Preparation in Hematology		01
Special Laboratory   Skill   II   Biochemical Test Profile - II   01   01   01   01   01   01   01						
Columbia   Skill   III   Elementary Knowledge of Chemistry-I   O1				Biochemical Test Profile -I		01
BMLT104   General   I   Microscopy and Organization of Cell -I   03   01		Skill	II	Biochemical Test Profile - II	04	01
BMLT104 (Cell Biology and General II Microscopy and Organization of Cell -I (Cell Biology and General III Microscopy and Organization of Cell -II (Cell Biology and General III Systematic study of Animals - II (Cell Biology and General III Systematic study of Animals - II (Cell Biology and General III Systematic study of Animals - II (Cell Biology and Classification of Amino Acids and Proteins (Cell Biology and Classification of Cell -II (Cell Biology and Classification of Cell Biology and Classification of Cell -II (Cell Biology and Classification of Cell Biology and Classification of Cell Biology and Classification of Course Biology and Classification of Cell Biology and Classification of Course Biology and Classification of Cell Biology and Classification of Course Biology and Classification of Course Biology and Classification of Cell Biology and Classification of Course Biology and Classification of Cell Biology and Classification of Course Biology and Classification of Cell Biology and Classification of Cell Biology and Classification of Cell Biology and Classifica		Skill	III	Elementary Knowledge of Chemistry- I		01
Cell Biology and   General   II   Microscopy and Organization of Cell -II   01   01   01   01   01   01   01	Techniques-I)	Skill	IV	Elementary Knowledge of Chemistry- II		01
Cell Biology and   General   II   Microscopy and Organization of Cell -II   01   01   01   01   01   01   01				·		
and Biodiversity-I) General III Systematic study of Animals - I 01  BMLT105 General II Structure, Functions and Classification of Amino Acids and Proteins (Biomolecules) General II Structure, Functions and Classification of Carbohydrates  General III Structure, Functions and Classification of Lipids  General IV Physical and Chemical Properties of Nucleic Acids  BMLT106 General II Introductory Microbiology-1  (Fundamentals of Microbroganisms  Microbiology) General III Recombinant DNA Technology  General IV Microbial Ecology and Biotic Interactions  BMLTP101 Practicals of Course BMLT101 02 06  BMLTP102 Practicals of Course BMLT101 02 06  BMLTP103 Practicals of Course BMLT103 02 06  BMLTP104 Practicals of Course BMLT104 01 06  BMLTP105 Practicals of Course BMLT105 01 06  BMLTP106 Practicals of Course BMLT105 01 06  BMLTP107 Practicals of Course BMLT106 01 06						01
Biodiversity-I)   General   IV   Systematic study of Animals - II   01					03	01
BMLT105 (Biomolecules)  General II Structure, Functions and Classification of Amino Acids and Proteins  General III Structure, Functions and Classification of Carbohydrates  General III Structure, Functions and Classification of Lipids  General IV Physical and Chemical Properties of Nucleic Acids  BMLT106 (Fundamentals of Microorganisms  Microbiology)  General III Recombinant DNA Technology  General IV Microbial Ecology and Biotic Interactions  BMLTP101 Practicals of Course BMLT101  BMLTP102 Practicals of Course BMLT102  BMLTP103 Practicals of Course BMLT103  BMLTP104 Practicals of Course BMLT104  BMLTP105 Practicals of Course BMLT105  BMLTP106 Practicals of Course BMLT105  BMLTP106 Practicals of Course BMLT106  BMLTP107 Practicals of Course BMLT106  BMLTP108 Practicals of Course BMLT106  BMLTP109 Practicals of Course BMLT109						01
BMLT105   General   II   Structure, Functions and Classification of Carbohydrates   General   III   Structure, Functions and Classification of Lipids   O1	Biodiversity-I)	General	IV	Systematic study of Animals - II		01
BMLT105   General   II   Structure, Functions and Classification of Carbohydrates   General   III   Structure, Functions and Classification of Lipids   O1						
(Biomolecules)  General II Structure, Functions and Classification of Carbohydrates  General III Structure, Functions and Classification of Lipids  General IV Physical and Chemical Properties of Nucleic Acids  BMLT106 General I Introductory Microbiology-1  (Fundamentals General II Morphology and Structure of Microorganisms  Microbiology)  General III Recombinant DNA Technology  General IV Microbial Ecology and Biotic Interactions  BMLTP101 Practicals of Course BMLT101 02 06  BMLTP102 Practicals of Course BMLT102 02 06  BMLTP103 Practicals of Course BMLT103 02 06  BMLTP104 Practicals of Course BMLT104 01 06  BMLTP105 Practicals of Course BMLT105 01 06  BMLTP106 Practicals of Course BMLT106 01 06		General	I			01
Carbohydrates   General   III   Structure, Functions and Classification of Lipids   O1					0.2	
General III Structure, Functions and Classification of Lipids  General IV Physical and Chemical Properties of Nucleic Acids  BMLT106 General I Introductory Microbiology-1 (Fundamentals of Microbiology) General III Recombinant DNA Technology General IV Microbial Ecology and Biotic Interactions  BMLTP101 Practicals of Course BMLT101 02 06 BMLTP102 Practicals of Course BMLT102 02 06 BMLTP103 Practicals of Course BMLT103 02 06 BMLTP104 Practicals of Course BMLT104 01 06 BMLTP105 Practicals of Course BMLT105 01 06 BMLTP106 Practicals of Course BMLT106 01 06	(Biomolecules)	General	II		03	01
Lipids   O1   O1						
BMLT106   General   I		General	III			01
BMLT106   General   I   Introductory Microbiology-1   03   01		-				
BMLT106 General I Introductory Microbiology-1 (Fundamentals of Microbiology) General III Recombinant DNA Technology General IV Microbial Ecology and Biotic Interactions  BMLTP101 Practicals of Course BMLT101 02 06 BMLTP102 Practicals of Course BMLT102 02 06 BMLTP103 Practicals of Course BMLT103 02 06 BMLTP104 Practicals of Course BMLT104 01 06 BMLTP105 Practicals of Course BMLT105 01 06 BMLTP106 Practicals of Course BMLT106 01 06		General	IV			01
(Fundamentals of of Microbiology)General of MicrobiologyIII Morphology and Structure of Microbiology0301Microbiology)General III Recombinant DNA Technology01General IV Microbial Ecology and Biotic Interactions01BMLTP101 Practicals of Course BMLT101 Practicals of Course BMLT102 O2 O6BMLTP102 Practicals of Course BMLT102 O2 O6BMLTP103 Practicals of Course BMLT103 O2 O6BMLTP104 Practicals of Course BMLT104 O1 O6BMLTP105 Practicals of Course BMLT105 O1 O6BMLTP106 Practicals of Course BMLT106 O1 O6				Nucleic Acids		
(Fundamentals of of Microbiology)General of MicrobiologyIII Morphology and Structure of Microbiology0301Microbiology)General III Recombinant DNA Technology01General IV Microbial Ecology and Biotic Interactions01BMLTP101 Practicals of Course BMLT101 Practicals of Course BMLT102 O2 O6BMLTP102 Practicals of Course BMLT102 O2 O6BMLTP103 Practicals of Course BMLT103 O2 O6BMLTP104 Practicals of Course BMLT104 O1 O6BMLTP105 Practicals of Course BMLT105 O1 O6BMLTP106 Practicals of Course BMLT106 O1 O6	DMI T104	Conoral	Т	Introductory Microbiology 1		Λ1
Microbiology   General   III   Recombinant DNA Technology   O1					03	
Microbiology General III Recombinant DNA Technology 01  General IV Microbial Ecology and Biotic Interactions 01  BMLTP101 Practicals of Course BMLT101 02 06  BMLTP102 Practicals of Course BMLT102 02 06  BMLTP103 Practicals of Course BMLT103 02 06  BMLTP104 Practicals of Course BMLT104 01 06  BMLTP105 Practicals of Course BMLT105 01 06  BMLTP106 Practicals of Course BMLT106 01 06	× .	General	11	1 0	00	U1
GeneralIVMicrobial Ecology and Biotic Interactions01BMLTP101Practicals of Course BMLT1010206BMLTP102Practicals of Course BMLT1020206BMLTP103Practicals of Course BMLT1030206BMLTP104Practicals of Course BMLT1040106BMLTP105Practicals of Course BMLT1050106BMLTP106Practicals of Course BMLT1060106	~ -	Canaral	TIT			Λ1
BMLTP101         Practicals of Course BMLT101         02         06           BMLTP102         Practicals of Course BMLT102         02         06           BMLTP103         Practicals of Course BMLT103         02         06           BMLTP104         Practicals of Course BMLT104         01         06           BMLTP105         Practicals of Course BMLT105         01         06           BMLTP106         Practicals of Course BMLT106         01         06	Wile obloidgy)					
BMLTP102         Practicals of Course BMLT102         02         06           BMLTP103         Practicals of Course BMLT103         02         06           BMLTP104         Practicals of Course BMLT104         01         06           BMLTP105         Practicals of Course BMLT105         01         06           BMLTP106         Practicals of Course BMLT106         01         06		General	1 V	MICTORIAL ECOLOGY AND DIVING INTERACTIONS		U1
BMLTP102         Practicals of Course BMLT102         02         06           BMLTP103         Practicals of Course BMLT103         02         06           BMLTP104         Practicals of Course BMLT104         01         06           BMLTP105         Practicals of Course BMLT105         01         06           BMLTP106         Practicals of Course BMLT106         01         06	RMLTI	P101		Practicals of Course RMLT101	02	06
BMLTP103Practicals of Course BMLT1030206BMLTP104Practicals of Course BMLT1040106BMLTP105Practicals of Course BMLT1050106BMLTP106Practicals of Course BMLT1060106						
BMLTP104Practicals of Course BMLT1040106BMLTP105Practicals of Course BMLT1050106BMLTP106Practicals of Course BMLT1060106						
BMLTP105 Practicals of Course BMLT105 01 06 BMLTP106 Practicals of Course BMLT106 01 06						
BMLTP106 Practicals of Course BMLT106 01 06						
	Total Credits				30	,,,

### Semester II

Course Code	Component	Unit	Topic	Credits	L / Week	
BMLT107	Skill	I	Basics of Human Anatomy-II		01	
(General &	Skill	II	Basics of Physiology-II	04	01	
Human	Skill	III	Basics of Computer Skills		01	
Anatomy,	Skill	IV	Communication Skills		01	
Physiology -						
II)						
DMI 7100	CI 1II	-			0.1	
BMLT108	Skill	I	Routinue Haematological Tests	04	01	
(Routine	Skill	II	Urine Examination	04	01	
Laboratory	Skill	III	Stool Examination		01	
Techniques-II)	Skill	IV	Sputum and Semen Examination		01	
BMLT109	Skill	I	Dasia Miawahialam		01	
	Skill	II	Basic Microbiology	04		
(Special			Introduction to serology	04	01	
Laboratory Techniques-II)	Skill	III	Serological Tests		01	
rechniques-11)	Skill	IV	Staining Techniques		01	
BMLT110	General	I	Systematic study of Animals - III		01	
(Ecology and	General	II	Systematic study of Animals - IV		01	
Biodiversity-	General	III	Ecosystem-I	03	01	
II)	General	IV	Ecosystem-II		01	
11)	General	1 V	Ecosystem-11		U1	
BMLT111	General	I	Enzymes		01	
(Enzymology	General	II	Enzyme Purification and Chromatography		01	
and			Techniques	03		
<b>Bioenergetics</b> )	General	III	Enzyme Kinetics		01	
	General	IV	Bioenergetics		01	
BMLT112	General	I	Microbial Nutrition, Cultivation, Isolation		01	
Microbial			and Preservation	0.2		
Physiology -	General	II	Enzyme Regulation	03	01	
Metabolism	General	III	Microbial Metabolism -I		01	
	General	IV	Microbial Metabolism -II		01	
BMLT			Practicals of Course BMLT107	02	06	
BMLTP108			Practicals of Course BMLT108	02	06	
BMLT			Practicals of Course BMLT109	02	06	
BMLT			Practicals of Course BMLT110	01	06	
BMLTI			Practicals of Course BMLT111	01	06	
BMLT	BMLTP112		Practicals of Course BMLT112	01	06	
		Tot	al Credits	30		
On Job Training						

## Second Year: NSQF Level - 6 ( Advance Diploma Standard)

## Semester III

Course Code	Component	Unit	Торіс	Credits	L / Week
BMLT201	Skill	I	Special Heamatological Tests	Cicuits	01
(Hematology	Skill	II	Haemostasis & Bleeding Disorders	04	01
and Blood	Skill	Ш	Immunohaematology & Blood Transfusion		01
Banking-I)	Skill	IV	Routine Lab Procedures in Blood Bank		01
- ···	SKIII	17	Routine Lab 110ccuares in blood bank		01
BMLT202	Skill	I	Laboratory Diagnosis of Mycotic and		01
(Microbiology	SKIII	-	Emerging Infections	04	01
and Serology)	Skill	II	Diagnostic Microbiology		01
	Skill	III	Serology Serology		01
	Skill	IV	Bacteriology		01
	SHIII	<u> </u>	2000101010		<b>V1</b>
BMLT203	Skill	I	Miscellaneous Body Fluids		01
(Clinical	Skill	II	Biochemical Test Profile	04	01
Pathology and	Skill	III	Analytical Techniques		01
Biochemistry)	Skill	IV	Biochemical Processes		01
	~ <b>1111</b>		210011011111111111111111111111111111111		VI
BMLT204	General	I	Carbohydrate Metabolism		01
(Metabolism)	General	II	Lipid Metabolism	04	01
,	General	III	Protein Metabolism		01
	General	IV	Nucleic Acids		01
BMLT205	General	I	Infectious Diseases		01
(Pathogenic	General	II	Microbes of Medical Importance		01
Microbiology)	General	III	Mode of Microbial Infections	04	01
	General	IV	Antimicrobial Drugs		01
BMLTI	P201		Practicals of Course BMLT201	02	06
BMLTI	2202		Practicals of Course BMLT202	02	06
BMLTI	BMLTP203		Practicals of Course BMLT203	02	06
BMLTI	BMLTP204		Practicals of Course BMLT204	02	06
BMLTP205			Practicals of Course BMLT205	02	06
		Tota	al Credits	30	



## Semester IV

Course Code	Component	Unit	Topic	Credits	L / Week
BMLT206	Skill	I	Metabolic Disorders & Deficiency		01
(Clinical	Skill	II	Clinical Endocrinology	04	01
Biochemistry	Skill	III	Body Fluid Specimen Processing		01
and	Skill	IV	Blood Banking		01
Microbiology-			8		
I)					
BMLT207	Skill	I	Introduction to Histology		01
(Histolohy-	Skill	II	Tissue Processing	04	01
Cytology -I)	Skill	III	Staining Procedures		01
	Skill	IV	Instrumentation in Histocytotechnology		01
BMLT208	Skill	I	Medical Parasitology		01
(Parasitology	Skill	II	Common Intestinal worms	04	01
and Blood Cell	Skill	III	Malarial parasites, Filarial parasites		01
Disirders-I)	Skill	IV	Lab. diagnosis of Parasitic infections		01
BMLT209	General	I	Spectroscopic Techniques		01
(Biochemical	General	II	Electrophoretic Techniques	04	01
Techniques)	General	III	Chromatographic Techniques		01
	General	IV	Radio Isotopic Techniques		01
BMLT210	General	I	Introduction to Immunology		01
(Immunology)	General	II	Humoral Immunity	04	01
	General	III	Cell Mediated Immunity		01
	General	IV	Antigen-Antibody Interactions		01
BMLTI	P206		Practicals of Course BMLT206	02	06
BMLTI			Practicals of Course BMLT207	02	06
	BMLTP208		Practicals of Course BMLT208	02	06
BMLTP209			Practicals of Course BMLT209	02	06
BMLT	BMLTP210		Practicals of Course BMLT210	02	06
		Tota	l Credits	30	



## Third Year: NSQF Level - 7 (B.Voc Standard)

### Semester V

Course Code	Component	Unit	Topic	Credits	L / Week
BMLT301	Skill	I	Genetics		01
(Medical	Skill	II	CLIA techniques	04	01
Genetics and	Skill	III	Immunology and Virology		01
Microbiology-II)	Skill	IV	Toxicology		01
<i>30</i>					
BMLT302	Skill	I	Exfoliative Cytology-Specimen		01
(Histology-			Preparation Treparation	04	
Cytology -II)	Skill	II	Exfoliative Cytology- Staining		01
			Techniques		
	Skill	III	Exfoliative Cytology- Benign and		01
			Malignant Cells		
	Skill	IV	Advanced Instrumentation		01
BMLT303	Skill	I	Descriptive study of RBC abnormalities		01
(Parasitology	Skill	II	Disorders related to RBC	04	01
and Blood Cell	Skill	III	Normal White Cell Count &		01
Disorders-II)			Physiological variation		
	Skill	IV	Disorders related to WBC		01
					1
BMLT304	General	I	Pathogenic Microbes, Diagnosis,		01
(Pathogenic			Prevention and Control	10	
Microbiology)	General	II	<b>Prevention and Control of Viral Diseases</b>	10	01
	General	III	Human Mycotic Infections		01
	General	IV	Mechanisms and Control of Parasitic		01
			Infections		
P1	201		D 4 1 4 G DM T204	0.0	0.6
BMLTF			Practicals of Course BMLT301	02	06
BMLTF			Practicals of Course BMLT302	02	06
	BMLTP303		Practicals of Course BMLT303	02	06
BMLTF	304		Practicals of Course BMLT304	02	06
		TD ( -1-		20	
		Total (	Credits	30	



## Semester VI

Course Code	Component	Unit	Topic	Credits	L / Week
BMLT305 (Clinical Laboratory Operations and Management)	Skill	I	Clinical Laboratory Operations and Management	04	04
wianagement)					
BMLT306 (Professional Training)	Skill	I	Professional Training for three (3) months at reputed hospital, diagnostic centre, pathology laboratory, research institute, pharmaceutical industry, etc.	04	
BMLT307 (Project Work)	Skill	I	Student shall carry out the project work in consultation with faculty and industrial partner organizations.	04	
BMLT308	General	I	Food Microbiology		01
(Food and Industrial	General	II	Contamination, Preservation and Spoilage of Food	10	01
Microbiology)	General	III	Production Strains Isolation and Screening Techniques		01
	General	IV	Fermentation Products		01
BMLT	P305		Practicals of Course BMLT305	02	06
BMLT	P306		Practicals of Course BMLT306	02	06
BMLTP307			Practicals of Course BMLT307	02	06
BMLTP308			Practicals of Course BMLT308	02	06
		Tot	al Credits	30	



### 5) **B.Voc Degree Programme in Retail Management & Operations**

B.Voc. (Retail Management) course is being run by the college under Deen Dayal Upadhyay KAUSHAL Kendra scheme of University Grants Commission, New Delhi. Retailing is a vital part of the business industry that involves selling products and services to consumers. With the tremendous growth of the economy, retail management has emerged as one of the fastest growing careers in India. The enormous expansion of the sector has thrown up a big demand for skilled professionals in the field. Job prospects in the retail sector include but are not limited to Customer Sales Associate, Team Leader, Departmental Manager, Floor Manager, Store Manager, Retail Operations Manager, Retail Buyers and Merchandisers, Visual Merchandisers, Logistic Managers, Warehouse Managers and many more.

In simple terms, retailing deals with the process of selling consumer goods or services to customers through multiple channels of distribution to earn a profit. Retailing has been around the block for quite some time now. Retail markets, shops and door to door selling have been around the block for quite some time. Retailers play an important role in bridging demand and supply gap of products and services. It is the final stage of distribution of a product or service (from manufacturing to reaching the customer in the end). Earlier, brick and mortar firms (shops and stores) and door to door sales used to be the only forms of retailing. With the rise of modern technology, E-Commerce has caught retailing by storm!

With time, retailing has evolved. Shopping malls, E-Commerce websites and other multichannel distribution systems have made retailing sector bigger and better! What is retail management, you may ask. Retail management deals with the techniques, processes and methods that helps drive greater sales and customer satisfaction by gaining a better understanding of the consumers of goods and services produced by a company

The programme curriculum has been designed as per the Qualification Packs/Model Curriculum released by Retailers' Association Skill Council of India (RASCI), Mumbai and in close consultation with Vidyasagar University having experts from the industry and university. The curriculum includes general education and skill development components having extensive practical and on-the job training along with periodic industrial visits and industry interactions. The college has industry partnerships with leading retail companies which are renewed from time to time.



## Year wise Curriculum of B.Voc in Retail Management & Operations

The topics which are marked in (\*) will be under Internal Assessment purview (Formative Assessment)

The topics with National Occupation Standards (NOS) codes will be under External Assessment purview (Summative Assessment). Refer to RASCI Qualification Packs (QP) for details on topics.

The General Components (GC) are suggestive and subject to change as per UGC Guidelines. The University will be responsible for development of developing the syllabus, imparting training and conducting assessments for the students.

## SEMESTER I

PAPER	UNIT	GC/SC	CATEGORY	NO. OF CREDITS	NO. OF HOURS
GENERAL PAPER I	Section A Business Communication (Verbal / Nonverbal) - Writing Skills including Resume Writing, Project Report writing - Reading Skills Oral Communication (Internal & External) Section B Professional Skills -Personal Hygiene & Grooming, Job Interview readiness -Planning & Organizing (in capacity of the Role) - Problem Solving	GC	Theory	6	90
GENERAL Paper II	Section A Fundamentals in Accounting (Calculation of Discounts/Offers/margins/Financial Schemes/Basic Accounting etc.) Section B Fundamentals in Technology (Computer Skills) -Basics of MS Office			6	90
General Cor	nponent Total	-1	57	12	180

SKILL	Introduction to Retail and Retail Store		Ĭ	1	15
PAPER I	*Define Retailing  *Evolution of Retail in India  *Indian Retail Industry  *Organized and Unorganized Retail Sector  *Types of Retail Formats  *Pre-Store Opening  *Store Opening and Closing  *Loss Prevention & Shrinkage  *Store Merchandise Handling  *Basics of Visual Merchandising  Processing of credit applications for purchases (RAS/N0114)	sc	Theory		
	Health, Safety & Security Store Safety & Security (RAS/N0120) Health and Safety (RAS/N0122)			1	15
	Team and Organizational Dynamics  *Job responsibilities of a Sales Associate  * Skills of a competent Sales Associate  Working effectively in a Team (RAS/N0137)  Working effectively in an Organization (RAS/N0138)			1	15
SKILL PAPER II	Consumer Buying Behaviour and Retail Sales  *Basics of Consumer Shopping Behaviour  *Knowledge of Products & Services  *Retail Selling techniques Importance of Product Demonstration (RAS/N0125) Help customers choose right products and provide (RAS/N0126) Specialist Support in facilitating Purchases (RAS/N0127) Techniques to maximize sale of goods and services (RAS/N0128)	sc	Theory	3	45
	Understanding Consumer Buying Behaviour and Retail Sales	sc	Practical - Retail Lab	1	30



SKILL	Customer Service and Customer	Ť		3	45
PAPER III	Relationship Management Positive Image Building (RAS/N0130) Monitoring and Solving Customer Service Issues (RAS/N0135) Continuous Service Improvement (RAS/N0136) Customer Relationship Management (RAS/N0134) Personalized and Post-Sales Service Support (RAS/N0129) To resolve customer concerns (RAS/N0132) Organizing Service Delivery (RAS/N0133)	SC	Theory		
	Customer Service and Customer Relationship Management	SC	Practical - Retail Lab	1	30
	Internship Project	SC	Internship	7	210
	Skill Component Total			18	405
	SEMESTER I TOTAL			30	585
	SEMEST	ER II			
PAPER	SUBJECT	GC/SC	CATEGORY	NO. OF CREDITS	NO. OF HOURS
GENERAL PAPER I	Section A Business Communication (Verbal / Nonverbal) -Writing Skills including Resume Writing, Project Report writing -Reading Skills including Report Reading - Oral Communication (Internal & External) Section B Professional Skills -Decision Making -Interpersonal Skills -Personality Development including Job Readiness	GC	Theory	6	90



GENERAL PAPER II	Section A Fundamentals in Accounting (Basic Accounting, Cost Accounting) Section B Fundamentals in Technology (Computer Skills) (MS Office, Orientation to POS software(s))			6	90
7	mponent Total	-		12	180
SKILL Paper I	*Store Display and Visual Merchandising  *Store Hygiene and Cleanliness Organize the display of products at the store (RAS/N0146) Plan visual merchandising (RAS/N0139)	SC	Theory	3	45
	Store Display and Visual Merchandising		Practical - Retail Lab	1	30
SKILL S PAPER II  P A (I P G I I I I I I I I I I I I I I I I I	*Product and Service Knowledge *Retail markets - Competition and Best Practices Availability of goods for sale to customers (RAS/N0148) Process Sale of Products (RAS/N0147) Goal Setting / Target Allocation & Monitoring (RAS/N0131) Customer Experience Management Establish and satisfy customer needs (RAS/N0140) Monitor and solve customer service problems (RAS/N0150) Effective Stakeholder communication (RAS/N0145) *Effective After Sales Service *Customer feedback Management	SC	Theory	4	60
	Customer Experience Management		Practical - Retail Lab	1	30

SKILL PAPER III	Organization & Team Dynamics  *Company Vision, Mission, Values  *Job Role of Team Leader and skill sets of a competent Team Leader  *Understanding Company Policies and Procedures  Work effectively in your Team (RAS/N0137)  Work effectively in your organization (RAS/N0138)  Health and safety (RAS/N0122)  Internship Project  Skill Component Total	SC	Internship	7 18	210 405
	SEMESTER 2 TOTAL	1		30	585
	1st YEAR TOTAL	3	1	60	1170
	SEMEST	FR III	10	100	1170
PAPER	UNIT	GC/SC	CATEGORY	NO. OF CREDITS	NO. OF HOURS
GENERAL PAPER I	Section A Planning and Organizing (in capacity of the Role) Section B Problem Solving & Decision Making	GC	Theory	6	90
GENERAL PAPER II	Financial Management and Retail Accounting	GC		6	90
General Co	mponent Total	35.	27	12	180
SKILL Paper I	Retail Store Operations and Profitability Management *Inventory Management * Merchandise Management * Develop Sales Strategy and Campaigns Plan visual merchandise (RAS/N0139) Monitor and manage store performance (RAS/N0141) Manage a budget (RAS/N0151)	sc	Theory	5	75
	Retail Store Operations and Profitability Management		Practical - Retail Lab	2	60



SKILL Paper II	Customer Experience Management Establish and satisfy customer needs (RAS/N0140) Communicate effectively with stake- holders (RAS/N0145) Develop individual retail service opportunities (RAS/N0144) *Customer Experience Innovation	SC		5	75
*	Internship Project	SC	Internship	4	120
9	Skill Component Total	72	(F)	16	330
	SEMES	TER IV		2	12
PAPER	UNIT	GC/SC	CATEGORY	NO. OF CREDITS	NO. OF HOURS
GENERAL PAPER I	Section A Personal Effectiveness / Personality Development Section B Analytical Skills & Negotiation Skills	GC	Theory	6	90
GENERAL Paper II	Project Management	GC		6	90
General Co	mponent Total	20	, l	12	180
SKILL Paper i	Understanding Leadership Provide leadership for your team (RAS/N0142) Build and manage store team (RAS/N0143)	SC	Theory	4	60
	Application of Leadership Principles (Situational Leadership Styles)		Practical - Retail Lab	2	60
SKILL Paper II	Team and Organizational Dynamics Allocate and check work in your team (RAS/N0131) To work effectively in your team (RAS/N0137) To work effectively in your organisation (RAS/N0138)	sc	Theory	4	60
(S) /*	Internship Project	SC	Internship	10	300
il.	Skill Component Total	0.0		20	480
	2nd YEAR TOTAL			60	1170

	SEMEST	ER V			
PAPER	UNIT	GC/SC	CATEGORY	NO. OF CREDITS	NO. OF HOURS
GENERAL Paper i	Section A Leadership and Effective Communication Section B Human Resource Management	GC	Theory	6	90
GENERAL PAPER II	Business Strategy and Financial Management			6	90
General Co	mponent Total	(c)	69	12	180
SKILL Paper I		Theory	4	60	
	Retail Store Operations and Sales		Practical - Retail Lab	2	60
SKILL Paper II	Process Compliance, Safety and Security Adhere to standard operating procedures, processes and policies at the store while ensuring timely and accurate reporting (RAS/N0153) Ensure overall safety, security and hygiene of the store (RAS/N0156)	SC		4	60
	Internship Project	SC	Internship	4	120
	Skill Component Total	1		14	300

	SEMESTE	R VI			
PAPER	UNIT	GC/SC	CATEGORY	NO. OF CREDITS	NO. OF HOURS
GENERAL PAPER I	Marketing Management	GC	Theory	6	90
GENERAL Paper II	Section A Business Ethics and Corporate Responsibility Section B Project Management	GC		6	90
General Component Total				12	180
SKILL Paper I	People, Process and Profitability Management *Develop Retail Store Strategy to increase Market share and Profitability *Technology in Retail *Customer Relationship Management Lead and manage the team for developing store capability (RAS/N0158) Manage sales and service delivery to increase store profitability (RAS/N0154)	re Strategy to are and Profitability ail ship Management ne team for developing S/N0158) ervice delivery to increase		5	75
	Profitability Management	8	Practical -	2	60
	Internship Project	SC	Internship	15	450
	Skill Component Total			22	585
3rd YEAR T	OTAL			60	1245



## **General Rules**

#### **Continuous Assessment**

The course is based on Choice Based Credit system as per UGC Guidelines. The 60% skill component (18 credits in each semesters) of the course will be assessed and certified by the respective Sector Skill Councils and 40% general education component will be assessed by the university on choice based credit system (12 credits in each semester). One credit will be awarded in terms of NSQF level certification which will have 60% weightage of total credits in the course in the following manner.

Name of the course	NSQF Level Certificate	Cumulative Credits
Diploma	Level - 5	36 Credits
Advance Diploma	Level - 6	72 Credits
B.Voc Degree	Level - 7	108 Credits

#### **Eligibility Criteria:**

The minimum Educational Qualification for admission to B.Voc Courses in any of the above five stream is Higher Secondary or Equivalent (10 + 2) pass from any recognized board. Those who have successfully cleared NSQF Level -4 (Vocational) are also eligible for application.

Maximum age limit for admission to any course is 35

#### **Reservation Policy:**

The reservation procedure is followed as per norms of Vidyasagar University.

#### **Fees Structure:**

Above B.Voc Courses are partially sponsored by the University Grants Commission. However, One time Annual Course Fee is Rs. 10,000 (Rupees Ten Thousand) is payable to " *Deen Dayal Upadhyay KAUSHAL Kendra, Mahishadal Raj College*" through any online mode (PayTm/ Google Pay/ NEFT etc) to *SBI A/c No: 39519103556, IFSC Code: SBIN0001298*. The above Course Fee includes University Registration Fee, Assessment and Certification Fees, Consumable Cost for practical's, re-imbursement of cost to industry partner during internship etc.)

### **Application Procedure:**

- 1. Application Forms for Admission to B.Voc Courses can be downloaded from College website on & from 24.07.2020.
- 2. Fill up the forms with blue / black pen in capital letters. Keep no points blank
- Please pay Application Processing Fee Rs. 100 to "Deen Dayal Upadhyay KAUSHAL Kendra, Mahishadal Raj College" through any online mode (PayTm/ Google Pay/ NEFT etc) to SBI A/c No: 39519103556, IFSC Code: SBIN0001298 (Keep the receipt intact for verification later on).
- 4. Please scan duly filled up Application form in either pdf or jpg format and send to our Email: <u>bvoc2020admission@gmail.com</u> or whatsapp the same to: 9733038150 or 7908558567. One may physically submit the form to our KAUSHAL Kendra office between 11 am to 3 pm from 25.07.2020
- 5. After submission of Application form applicant will receive a 'Submission and verification SMS' to his /her registered Mobile Number.
- 6. No physical verification of mark sheet will be conducted at the time admission as per instructions received from Dept. of Higher Education, Govt of West Bengal.
- 7. First Merit List will be Published in the College Website on 08.08.2020. Selected Candidates will also be intimated by SMS to their registered mobile number.