

# **AMITY MEDICAL SCHOOL**

## **FLEXILEARN**

**-Freedom to design your degree**



## **PROGRAMME STRUCTURES**

**2020**

**AMITY UNIVERSITY HARYANA**

**GURUGRAM**

# 13393 B.Sc.-Dietetics & Applied Nutrition (Total Credits-150)

## Programme Structure-2020

### FIRST SEMESTER

Course Code	Course Title	Lectures (L)Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
DAN2151	Principles of Nutrition	3	-	-	3
DAN2101	Food Science-I	3	-	-	3
DAN2102	Nutritional Biochemistry	4	-	-	4
DAN2103	Food Science- I Lab	-	-	4	2
DAN2104	Nutritional Biochemistry Lab	-	-	4	2
<b>Open Electives</b>					<b>*7+3</b>
LAN2151	Foreign Language-I French-I	3	-	-	3
LAN2152	German-I				
LAN2153	Spanish-I				
LAN2154	Russian-I				
LAN2155	Chinese-I				
LAN2156	Portuguese-I				
LAN2157	Korean-I				
LAN2158	Japanese-I				
LAN2159	Hindi-I **				
CSS2151	Effective Listening *	1	-	-	1
BEH2151	Understanding Self for Effectiveness*	1	-	-	1
ENV2151	Environmental Studies-I *	2	-	-	2
	Minor Track Course (Flexi)	-	-	-	3
<b>TOTAL</b>					<b>24</b>

\*\* Hindi as Foreign Language for Foreign National Students

### SECOND SEMESTER

Course Code	Course Title	Lectures (L)Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
DAN2251	Family Meal Management	2	-	2	3
DAN2201	Food Science-II	3	-	-	3
DAN2202	Food Microbiology	4	-	-	4
DAN2203	Food Science II Lab	-	-	4	2
DAN2204	Food Microbiology Lab	-	-	4	2
<b>Open Electives</b>					<b>*7+3</b>

LAN2251	Foreign Language-II French-II	3	-	-	3
LAN2252	German-II				
LAN2253	Spanish-II				
LAN2254	Russian-II				
LAN2255	Chinese-II				
LAN2256	Portuguese-II				
LAN2257	Korean-II				
LAN2258	Japanese-II				
LAN2259	Hindi-II				
CSS2251	Presentation Skills *	1	-	-	1
BEH2251	Problem Solving and Creative Thinking*	1	-	-	1
ENV2251	Environmental Studies-II*	2	-	-	2
	Minor Track Course (Flexi)	-	-	-	3
	<b>TOTAL</b>				<b>24</b>

### THIRD SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
DAN2351	Basic Dietetics	3	-	-	3
DAN2301	Quantity Food Services	3	-	-	3
DAN2302	Human Physiology	4	-	-	4
DAN2303	Human Physiology Lab	-	-	4	2
	<b>Concentration Electives</b>				<b>3</b>
DAN2331	Research Paper Writing	2			2
DAN2332	Project (with Presentation & Evaluation)	3			3
DAN2333	Workshop ( <b>1 credit per workshop</b> )	1	-	-	1
DAN2304	Food Processing	3	-	-	3
	<b>Open Electives</b>				<b>*4+3</b>
LAN2351	Foreign Language-III French-III	2	-	-	2
LAN2352	German-III				
LAN2353	Spanish-III				
LAN2354	Russian-III				
LAN2355	Chinese-III				
LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
CSS2351	Reading & Comprehension *	1	-	-	1
BEH2351	Group Dynamics and Team Building*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	3
	<b>TOTAL</b>				<b>22</b>

## FOURTH SEMESTER

Course Code	Course Title	Lectures (L)Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
DAN2451	Advanced Dietetics	2	-	2	3
DAN2401	Food Service Management	3	-	-	3
DAN2402	Quantity Food Production	3	-	-	3
DAN2403	Clinical Nutrition	3	-	-	3
DAN2404	Food Service Management Lab	-	-	2	1
<b>Concentration Electives</b>					<b>3</b>
DAN2431	Paper Writing	2	-	-	2
DAN2432	Project (with Presentation &Evaluation)	3	-	-	3
DAN2433	Workshop ( <b>1 credit per workshop</b> )	1	-	-	1
DAN2405	Foundation of Food Nutrition	3	-	-	3
<b>Open Electives</b>					<b>*4+3</b>
LAN2451	Foreign Language-IV	2	-	-	2
LAN2452	French-IV				
LAN2453	German-IV				
LAN2454	Spanish-IV				
LAN2455	Russian-IV				
LAN2456	Chinese-IV				
LAN2457	Portuguese-IV				
LAN2458	Korean-IV				
LAN2459	Japanese-IV				
LAN2459	Hindi-IV				
CSS2451	Corporate Communication *	1	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	<b>3</b>
<b>TOTAL</b>					<b>23</b>

## SUMMER INTERNSHIP

## FIFTH SEMESTER

Course Code	Course Title	Lectures (L)Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
DAN2551	Community Nutrition	3	-	-	3
DAN2501	Nutrition for Health & Fitness	5	-	-	5
DAN2502	Bakery	4	-	-	4
DAN2503	Food Quality Control	4	-	-	4
DAN2504	Bakery Lab	-	-	4	2
DAN2505	Food Quality Lab	-	-	4	2
DAN2535	Summer Internship Evaluation	-	-	-	6
<b>Open Electives</b>					<b>*4+3</b>

LAN2551	Foreign Language-V French-V	2	-	-	2
LAN2552	German-V				
LAN2553	Spanish -V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
CSS2551	Employability Skills *	1	-	-	1
BEH2551	Individual, Society and Nations*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	<b>3</b>
	<b>TOTAL</b>				<b>33</b>

## SIXTH SEMESTER

Course Code	Course Title	Lectures (L)Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
DAN2601	Food Preservation	4	-	-	4
DAN2602	Clinical & Therapeutic Nutrition	4	-	-	4
DAN2603	Food Preservation Lab	-	-	2	1
DAN2604	Clinical & Therapeutic Nutrition Lab	-	-	2	1
DAN2637	**Internship	-	-	-	9
	<b>Open Electives</b>				<b>*2+3</b>
CSS2651	Workplace Communication *	1	-	-	1
BEH2651	Interpersonal Communication and Relationship Management*	1	-	-	1
	Minor Track Course (Flexi)	-	-	-	<b>3</b>
	<b>TOTAL</b>				<b>24</b>

\*Compulsory

\*\*Internship period will begin from 15<sup>th</sup> Feb (tentative) for approximately 45 days.

# 13165 B.Sc.-Medical Lab Technology (Total Credits-150)

## Programme Structure-2020

### FIRST SEMESTER

Course Code	Course Title	Lecture(L) Hours Per Week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
MLT2107	Anatomy and Physiology-I	3	-	-	3
MLT2108	Haematology-I	3	-	-	3
MLT2109	General Microbiology	3	-	-	3
MLT2103	General Biochemistry-I	3	-	-	3
MLT2110	Anatomy and Physiology Lab-I	-	-	2	1
MLT2111	Haematology Lab-I	-	-	2	1
MLT2112	Clinical Training-I	-	-	4	2
<b>Open Electives</b>					<b>*7+3</b>
CSS2151	Effective Listening	1	-	-	1
BEH2151	Understanding Self for Effectiveness	1	-	-	1
ENV2151	Environmental Studies-I	2	-	-	2
LAN2151	Foreign Language-I	3	-	-	3
LAN2152	French-I				
LAN2153	German-I				
LAN2154	Spanish-I				
LAN2155	Russian-I				
LAN2156	Chinese-I				
LAN2157	Portuguese-I				
LAN2158	Korean-I				
LAN2159	Japanese-I				
LAN2159	Hindi-I **				
	Minor Track Course (Flexi)	-	-	-	3
<b>TOTAL</b>					<b>26</b>

\*\* Hindi as Foreign Language for Foreign National Students

### SECOND SEMESTER

Course Code	Course Title	Lecture(L) Hours Per Week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
MLT2207	Anatomy and Physiology-II	3	-	-	3
MLT2208	Haematology-II	3	-	-	3
MLT2209	Clinical Bacteriology	3	-	-	3

MLT2210	General Biochemistry-II	3	-	-	3
MLT2211	Haematology Lab-II	-	-	2	1
MLT2212	Clinical Training-II	-	-	4	2
<b>Concentration Electives</b>					<b>3</b>
MLT2205	Nutrition	3	-	-	3
MLT2206	Medical Terminology	3	-	-	3
MLT2234	Study Abroad	-	-	-	3
<b>Open Electives</b>					<b>*7+3</b>
ENV2251	Environmental Studies-II	2	-	-	2
CSS2251	Presentation Skills	1	-	-	1
BEH2251	Problem Solving & Creative Thinking	1	-	-	1
LAN2251	Foreign Language-II	3			3
LAN2252	French-II				
LAN2253	German-II				
LAN2254	Spanish-II				
LAN2255	Russian-II				
LAN2256	Chinese-II				
LAN2257	Portuguese-II				
LAN2258	Korean-II				
LAN2259	Japanese-II				
	Hindi-II				
	Minor Track Course (Flexi)	-	-	-	3
<b>TOTAL</b>					<b>28</b>

### THIRD SEMESTER

Course Code	Course Title	Lecture(L) Hours Per Week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
MLT2307	Immunology and Serology	3	-	-	3
MLT2308	Haematology-III	3	-	-	3
MLT2309	Clinical Parasitology	3	-	-	3
MLT2310	Metabolic Biochemistry	3	-	-	3
MLT2311	Haematology Lab-III	-	-	2	1
MLT2312	Clinical Biochemistry Lab	-	-	2	1
MLT2313	Clinical Training-III	-	-	4	2
<b>Concentration Electives</b>					<b>3</b>
MLT2305	Hospital Administration	3	-	-	3
MLT2306	Lab Management & Safety Process	2	-	2	3
MLT2334	Study Abroad	-	-	-	3
<b>Open Electives</b>					<b>*4+3</b>

CSS2351	Reading and Comprehension	1	-	-	1
BEH2351	Group Dynamics & Team Building	1	-	-	1
LAN2351	Foreign Language-III French-III	2	-	-	2
LAN2352	German-III				
LAN2353	Spanish -III				
LAN2354	Russian-III				
LAN2355	Chinese-III				
LAN2356	Portuguese-III				
LAN2357	Korean-III				
LAN2358	Japanese-III				
LAN2359	Hindi-III				
	Minor Track Course (Flexi)	-	-	-	3
	<b>TOTAL</b>				<b>26</b>

#### FOURTH SEMESTER

Course Code	Course Title	Lecture(L) Hours Per Week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
MLT2405	Clinical Pathology and Cytology	3	-	-	3
MLT2406	Clinical Virology and Mycology	3	-	-	3
MLT2407	Diagnostic Biochemistry-I	3	-	-	3
MLT2408	Diagnostic Biochemistry Lab-I	-	-	2	1
MLT2409	Clinical Training-IV	-	-	4	2
	<b>Concentration Electives</b>				<b>3</b>
MLT2410	Basics in Computers & PC Package	2	-	2	3
MLT2411	Mathematics and Biostatistics	3	-	-	3
MLT2434	Study Abroad	-	-	-	3
	<b>Open Electives</b>				<b>*4+3</b>
CSS2451	Corporate Communication	1	-	-	1
BEH2451	Stress & Coping Strategies	1	-	-	1
LAN2451	Foreign Language-IV French-IV	2	-	-	2
LAN2452	German-IV				
LAN2453	Spanish-IV				
LAN2454	Russian-IV				
LAN2455	Chinese-IV				
LAN2456	Portuguese-IV				
LAN2457	Korean-IV				
LAN2458	Japanese-IV				
LAN2459	Hindi-IV				
	Minor Track Course (Flexi)				
	<b>TOTAL</b>				<b>22</b>



**SUMMER INTERNSHIP  
FIFTH SEMESTER**

Course Code	Course Title	Lecture(L) Hours Per Week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
MLT2507	Histopathology	4	-	-	4
MLT2508	Immunohematology and Blood Transfusion	3	-	-	3
MLT2509	Biostatistics and Quality Assurance	3	-	-	3
MLT2510	Diagnostic Biochemistry-II	4	-	-	4
MLT2511	Diagnostic Biochemistry Lab-II	-	-	2	1
MLT2512	Clinical Training-V	-	-	4	2
MLT2535	Summer Internship Evaluation	-	-	-	3
<b>Concentration Electives</b>					<b>3</b>
MLT2505	Preventive & Social Medicine	3	-	-	3
MLT2532	Project (with presentation & evaluation)	3	-	-	3
MLT2534	Study Abroad	-	-	-	3
<b>Open Electives</b>					<b>*4+3</b>
CSS2551	Employability Skills	1	-	-	1
BEH2551	Individual, Society & Nations	1	-	-	1
LAN2551	Foreign Language-V French-V	2	-	-	2
LAN2552	German-V				
LAN2553	Spanish-V				
LAN2554	Russian-V				
LAN2555	Chinese-V				
LAN2556	Portuguese-V				
LAN2557	Korean-V				
LAN2558	Japanese-V				
LAN2559	Hindi-V				
	Minor Track Course (Flexi)				
<b>TOTAL</b>					<b>30</b>

**SIXTH SEMESTER**

Course Code	Course Title	Lecture(L) Hours Per Week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
MLT2637	Internship Evaluation	-	-	-	15
	Minor Track Course (Flexi)	-	-	-	3
<b>TOTAL</b>					<b>18</b>

**Note:** The Internship program is of 3.5 month duration. After completion of internship, student has to attend the flexi classes. A student doing internship has to work under supervision of experienced staff in the following areas for 15 days: (1) Clinical Pathology (2) Microbiology & Serology (3) Haematology (4) Clinical Biochemistry (5) Histopathology & Cytology (6) Transfusion Medicine and (7) Phlebotomy.

# 131127 Bachelor of Optometry (Total Credits-210)

## Programme Structure-2020

### FIRST SEMESTER

Course Code	Course Title	Lectures (L)Hours Per Week	Tutorial (T)Hours Per Week	Practical (P) Hours Per Week	Clinical Hours	Total Credits
OPT2101	General Anatomy	3	-	-	-	3
OPT2102	General Physiology	3	-	1	-	3
OPT2103	Basic Biochemistry-I	2	1	-	-	3
OPT2104	Physical Optics	2	1	-	-	3
OPT2105	Geometrical Optics-I	2	-	2	-	3
OPT2106	Optometric Procedures-I	-	-	2	-	1
<b>Concentration Electives</b>						<b>2</b>
OPT2107	Basics in Computers and PC	2	-	-	-	2
OPT2108	Mathematics and Biostatistics	2	-	-	-	2
<b>Open Electives</b>						<b>*7+3</b>
LAN2151	Foreign Language-I* French-I	3	-	-		3
LAN2152	German-I					
LAN2153	Spanish-I					
LAN2154	Russian-I					
LAN2155	Chinese-I					
LAN2156	Portuguese-I					
LAN2157	Korean-I					
LAN2158	Japanese-I					
LAN2159	Hindi-I **					
CSS2151	Effective Listening *	1	-	-	-	1
BEH2151	Understanding Self for Effectiveness*	1	-	-	-	1
ENV2151	Environmental Studies-I *	2	-	-	-	2
	Minor Track Course (Flexi)	-	-	-	-	<b>3</b>
<b>TOTAL</b>						<b>28</b>

\*\* Hindi as Foreign Language for Foreign National Students

## SECOND SEMESTER

Course Code	Course Title	Lectures (L)Hours Per Week	Tutorial (T)Hours Per Week	Practical (P) Hours Per Week	Clinical Hours	Total Credits
OPT2201	Basic Biochemistry-II	2	1	-	-	3
OPT2202	Ocular Anatomy	3	-	1	-	3
OPT2203	Ocular Physiology	4	-	1	-	4
OPT2204	Geometrical Optics-II	3	-	2	-	4
OPT2205	Optometric Procedures-II	1	-	2	-	2
OPT2206	Clinics-I	-	-	-	3hours/week	1
<b>Concentration Electives</b>						<b>3</b>
OPT2207	Nutrition	2	-	2	-	3
OPT2209	Medical Psychology	3	-	-	-	3
OPT2232	Project (with Presentation & Evaluation)	-	-	-	-	3
<b>Open Electives</b>						<b>7*+3</b>
LAN2251	Foreign Language-II* French-II	3	-	-	-	3
LAN2252	German-II					
LAN2253	Spanish-II					
LAN2254	Russian-II					
LAN2255	Chinese-II					
LAN2256	Portuguese-II					
LAN2257	Korean-II					
LAN2258	Japanese-II					
LAN2259	Hindi-II					
CSS2251	Presentation Skills*	1	-	-	-	1
BEH2251	Problem Solving and Creative Thinking*	1	-	-	-	1
ENV2251	Environmental Studies-II *	2	-	-	-	2
	Minor Track Course (Flexi)	-	-	-	-	<b>3</b>
<b>TOTAL</b>						<b>30</b>

### THIRD SEMESTER

Course Code	Course Title	Lectures (L)Hours Per Week	Tutorial (T)Hours Per Week	Practical (P) Hours Per Week	Clinical Hours	Total Credits
OPT2301	Ocular Microbiology	2	-	-	-	2
OPT2302	Applied Optics-I (Optometric Optics)	3	-	1	-	3
OPT2303	Visual Optics-I (Visual Perception & Neurophysiology)	3	-	2	-	4
OPT2304	Pathology	2	-	-	-	2
OPT2305	Ocular Diseases-I	3	-	2	-	4
OPT2306	Clinical Optometric Procedures	2	-	2	-	3
OPT2307	Clinics-II	-	-	-	3hrs/week	1
<b>Concentration Electives</b>						<b>3</b>
OPT2331	Term Paper	-	-	-	-	2
OPT2332	Project (with Presentation & Evaluation)	-	-	-	-	2
OPT2333	Workshop / Certification (1credit per workshop)	-	-	-	-	1
OPT2308	Hospital Administration	2	-	-	-	2
OPT2309	Basic Accountancy	2	-	-	-	2
OPT2310	Medical Law and Ethics	2	-	-	-	2
<b>Open Electives</b>						<b>*4+3</b>
LAN2351	Foreign Language–III* French- III	2	-	-	-	2
LAN2352	German-III					
LAN2353	Spanish-III					
LAN2354	Russian -III					
LAN2355	Chinese-III					
LAN2356	Portuguese-III					
LAN2357	Korean-III					
LAN2358	Japanese-III					
LAN2359	Hindi-III					
CSS2351	Reading and Comprehension*	1	-	-	-	1
BEH2351	Group Dynamics and Team Building *	1	-	-	-	1
	Minor Track Course (Flexi)	-	-	-	-	<b>3</b>
<b>TOTAL</b>						<b>29</b>

## FOURTH SEMESTER

Course Code	Course Title	Lectures (L)Hours Per Week	Tutorial (T)Hours Per Week	Practical (P) Hours Per Week	Clinical Hours	Total Credits
OPT2401	Applied Optics-II (Dispensing Optics)	3	-	2	-	4
OPT2402	Visual Optics-II	3	-	-	-	3
OPT2403	Ocular Diseases-II	3	-	2	-	4
OPT2404	Basic Pharmacology	2	-	-	-	2
OPT2405	Optometric Instruments	2	-	-	-	2
OPT2406	Clinics-III	-	-	-	9 hrs/week	3
<b>Concentration Electives</b>						<b>3</b>
OPT2407	Ophthalmic imaging	1	-	-	60hrs/se mester	3
OPT2408	Ophthalmic Electrodiagnostic Procedures	1	-	-	60hrs/se mester	3
OPT2409	Perimetry	1	-	-	60hrs/se mester	3
OPT2431	Term Paper	-	-	-	-	2
OPT2432	Project (with Presentation & Evaluation)	-	-	-	-	3
OPT2433	Workshop / Certification (1credit per workshop)	-	-	-	-	1
<b>Open Electives</b>						<b>*4+3</b>
LAN2451	Foreign Language-IV* French- IV	2	-	-	-	2
LAN2452	German-IV					
LAN2453	Spanish-IV					
LAN2454	Russian -IV					
LAN2455	Chinese-IV					
LAN2456	Portuguese-IV					
LAN2457	Korean-IV					
LAN2458	Japanese-IV					
LAN2459	Hindi-IV					
CSS2451	Corporate Communication*	1	-	-	-	1
BEH2451	Stress and Coping Strategies*	1	-	-	-	1
	Minor Track Course (Flexi)	-	-	-	-	<b>3</b>
<b>TOTAL</b>						<b>28</b>

## FIFTH SEMESTER

Course Code	Course Title	Lectures (L)Hours Per Week	Tutorial (T)Hours Per Week	Practical (P) Hours Per Week	Clinical Hours	Total Credits
OPT2501	Contact Lens-I	3	-	-	-	3
OPT2502	Low Vision Care	3	-	-	-	3
OPT2503	Public Health, Community Optometry	2	-	-	-	2
OPT2504	Binocular Vision-I	3	-	-	-	3
OPT2505	Diseases of the Eye and Clinical Medicine	2	-	-	-	2
OPT2506	Occupational Optometry	2	-	-	-	2
OPT2507	Clinics-IV	-	-	-	9 hrs/week	3
OPT2535	Summer Internship Evaluation-I	-	-	-	-	2
<b>Concentration Electives</b>						<b>3</b>
OPT2508	Ocular Prosthesis	1	-	-	30hrs/semester	3
OPT2509	Refractive Surgery	1	-	-	30hrs/semester	3
OPT2510	Research Methodology	2	1	-	-	3
OPT2531	Term Paper	-	-	-	-	2
OPT2532	Project (with Presentation & Evaluation)	-	-	-	-	3
OPT2533	Workshop / Certification (1credit per workshop)	-	-	-	-	1
<b>Open Electives</b>						<b>*4+3</b>
LAN2551	Foreign Language-V* French-V	2	-	-	-	2
LAN2552	German-V					
LAN2553	Spanish-V					
LAN2554	Russian -V					
LAN2555	Chinese-V					
LAN2556	Portuguese-V					
LAN2557	Korean-V					
LAN2558	Japanese-V					
LAN2559	Hindi-V					
CSS2551	Employability Skills*	1	-	-	-	1
BEH2551	Individual ,Society and Nations*	1	-	-	-	1
	Minor Track Course (Flexi)	-	-	-	-	3
<b>TOTAL</b>						<b>30</b>

## SIXTH SEMESTER

Course Code	Course Title	Lectures (L)Hours Per Week	Tutorial (T)Hours Per Week	Practical (P) Hours Per Week	Clinical Hours	Total Credits
OPT2601	Contact Lens-II	3	-	2	-	4
OPT2602	Binocular Vision-II	3	-	2	-	4
OPT2603	Geriatric Optometry	3	-	-	-	3
OPT2604	Pediatric Optometry	3	-	1	-	3
OPT2605	Clinic-V	-	-	-	12 hrs/week	3
<b>Concentration Electives</b>						<b>3</b>
OPT2606	Visual Rehabilitation	1	-	-	60hrs/se mester	3
OPT2607	Vision Therapy and Learning Disabilities	1	-	-	60hrs/se mester	3
OPT2608	Eye Banking	1			60hrs/se mester	3
OPT2609	Introduction to Biostatistics	2	1	-	-	3
OPT2632	Project (with Presentation & Evaluation)	-	-	-	-	3
<b>Open Electives</b>						<b>*2+3</b>
CSS2651	Workplace Communication *	1	-	-	-	1
BEH2651	Interpersonal Communication & Relationship Management*	1	-	-	-	1
	Minor Track Course (Flexi)	-	-	-	-	<b>3</b>
<b>TOTAL</b>						<b>25</b>

**Research Project:** The student needs to start with project in the third year. Part evaluation of final evaluation will be part of the semester (100 hours/ third year)

## SEVENTH SEMESTER (INTERNSHIP-I)

Course Code	Course Title	Lectures (L)Hours Per Week	Tutorial (T)Hours Per Week	Practical (P) Hours Per Week	Clinical Hours	Total Credits
<b>Clinics-VI (Total 750 clinical hours/semester)</b>						
OPT2701	(Clinics-VI A.) Retina, Glaucoma, Low Vision	1	-	-	-	3
OPT2702	(Clinics-VI B.) Pediatric & Binocular Vision	1	-	-	-	3
OPT2703	(Clinics-VI C.) Cornea and Contact Lenses	1	-	-	-	3

OPT2704	(Clinics-VI D.) Primary Eye Care	1	-	-	-	3
OPT2735	Summer Internship Evaluation-II	-	-	-	-	6
OPT2737	Research Project (Mid-Term Evaluation)	-	-	-	100 hours	-
	<b>TOTAL</b>					<b>18</b>

### **EIGHTH SEMESTER (INTERNSHIP-II)**

<b>Course Code</b>	<b>Course Title</b>	<b>Lectures (L)Hours Per Week</b>	<b>Tutorial (T)Hours Per Week</b>	<b>Practical (P) Hours Per Week</b>	<b>Clinical Hours</b>	<b>Total Credits</b>
OPT2801	Clinics VII ( Comprehensive Eye Care and Refraction )	1	-	-	300 hours	5
OPT2802	Clinics VIII ( Optometric Procedures and Instruments)	1	-	-	300 hours	5
OPT2837	Project - Dissertation	-	-	-	-	12
	<b>TOTAL</b>					<b>22</b>



# 13389 Bachelor in Audiology & Speech Language Pathology (BASLP) (Total Credits-290)

## Programme Structure - 2020

### FIRST SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Hours Per Week (RCI-Guidelines)	Total Credits
ASL2106	Communication Sciences	3	1	-	4 hours x 16 weeks	5
ASL2107	Anatomy and Physiology of Speech & Hearing	3	1	-	4 hours x 16 weeks	5
ASL2108	Clinical Psychology	3	1	-	4 hours x 16 weeks	5
ASL2109	Linguistics and Phonetics	3	1	-	4 hours x 16 weeks	5
ASL2110	Electronics and Acoustics	3	1	-	4 hours x 16 weeks	5
ASL2111	Research Methods and Statistics	3	1	-	4 hours x 16 weeks	5
ASL2105	Clinical Practicum	-	-	12	12 hours x 16 weeks	8
<b>Open Electives</b>						<b>7</b>
LAN2151	Foreign Language-I French-I	3	-	-	-	3
LAN2152	German-I					
LAN2153	Spanish-I					
LAN2154	Russian-I					
LAN2155	Chinese-I					
LAN2156	Portuguese-I					
LAN2157	Korean-I					
LAN2158	Japanese-I					
LAN2159	Hindi-I **					
CSS2151	Effective Listening *	1	-	-	-	1
BEH2151	Understanding Self for Effectiveness*	1	-	-	-	1
ENV2151	Environmental Studies-I	2	-	-	-	2
<b>TOTAL</b>						<b>45</b>

\*\* Hindi as Foreign Language for Foreign National Students

## SECOND SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Hours Per Week (RCI-Guidelines)	Total Credits
ASL2206	Neurology	3	1	-	4 hours x 16 weeks	5
ASL2207	Otolaryngology	3	1	-	4 hours x 16 weeks	5
ASL2208	Speech Language Pathology	3	1	-	4 hours x 16 weeks	5
ASL2209	Audiology	3	1	-	4 hours x 16 weeks	5
ASL2210	Practicals in Speech Language Pathology	-	-	10	10 hours x 16 weeks	7
ASL2211	Practicals in Audiology	-	-	10	10 hours x 16 weeks	7
<b>Open Electives</b>						<b>7</b>
LAN2251	Foreign Language-II French-II	3	-	-		3
LAN2252	German-II					
LAN2253	Spanish-II					
LAN2254	Russian-II					
LAN2255	Chinese-II					
LAN2256	Portuguese-II					
LAN2257	Korean-II					
LAN2258	Japanese-II					
LAN2259	Hindi-II					
CSS2251	Presentation Skills *	1	-	-	-	1
BEH2251	Problem Solving and Creative Thinking*	1	-	-	-	1
ENV2251	Environmental Studies-II	2	-	-	-	2
<b>TOTAL</b>						<b>41</b>

## THIRD SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Hours Per Week (RCI-Guidelines)	Total Credits
ASL2307	Voice and its Disorders	3	1	-	4 hours x 16 weeks	5
ASL2308	Speech Sound Disorders	3	1	-	4 hours x 16 weeks	5
ASL2309	Diagnostic Audiology Behavioral Test	3	1	-	4 hours x 16 weeks	5

ASL2310	Amplification Devices	3	1	-	4 hours x 16 weeks	5
ASL2311	Clinicals in Speech Language Pathology-I	-	-	10	10 hours x 16 weeks	7
ASL2312	Clinicals in Audiology-I	-	-	10	10 hours x 16 weeks	7
ASL2335	Summer Internship Evaluation-I (Community Outreach Programs)	-	-	-	-	3
<b>Open Electives</b>						<b>4</b>
LAN2351	Foreign Language-III French-III	2	-	-		2
LAN2352	German-III					
LAN2353	Spanish-III					
LAN2354	Russian-III					
LAN2355	Chinese-III					
LAN2356	Portuguese-III					
LAN2357	Korean-III					
LAN2358	Japanese-III					
LAN2359	Hindi-III					
CSS2351	Reading & Comprehension *	1	-	-		1
BEH2351	Group Dynamics and Team Building*	1	-	-		1
<b>TOTAL</b>						<b>41</b>

#### FOURTH SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Hours Per Week (RCI-Guidelines)	Total Credits
ASL2402	Motor Speech Disorders in Children	3	1	-	4 hours x 16 weeks	5
ASL2406	Child Language Disorders	3	1	-	4 hours x 16 weeks	5
ASL2407	Diagnostic Audiology – Physiological Tests	3	1	-	4 hours x 16 weeks	5
ASL2408	Implantable Hearing Devices	3	1	-	4 hours x 16 weeks	5
ASL2409	Clinicals in Speech Language Pathology-II	-	-	10	10 hours x 16 weeks	7
ASL2410	Clinicals in Audiology-II	-	-	10	10 hours x 16 weeks	7
<b>Open Electives</b>						<b>4</b>

LAN2451	Foreign Language-IV French-IV	2	-	-		2
LAN2452	German-IV					
LAN2453	Spanish-IV					
LAN2454	Russian-IV					
LAN2455	Chinese-IV					
LAN2456	Portuguese-IV					
LAN2457	Korean-IV					
LAN2458	Japanese-IV					
LAN2459	Hindi-IV					
CSS2451	Corporate Communication *	1	-	-		1
BEH2451	Stress and Coping Strategies*	1	-	-		1
	<b>TOTAL</b>					<b>38</b>

## FIFTH SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Hours Per Week (RCI-Guidelines)	Total Credits
ASL2501	Fluency and its Disorders	3	1	-	4 hours x 16 weeks	5
ASL2507	Structural Anomalies & Speech Disorders	3	1	-	4 hours x 16 weeks	5
ASL2508	Pediatric Audiology	3	1	-	4 hours x 16 weeks	5
ASL2509	Aural Rehabilitation in Children	3	1	-	4 hours x 16 weeks	5
ASL2510	Clinicals in Speech Language Pathology-III	-	-	10	10 hours x 16 weeks	7
ASL2511	Clinicals in Audiology-III	-	-	10	10 hours x 16 weeks	7
ASL2535	Summer Internship Evaluation-II (Outreach Program)	-	-	-	-	3
	<b>Open Electives</b>					<b>4</b>
LAN2551	Foreign Language-V French-V	2	-	-		2
LAN2552	German-V					
LAN2553	Spanish-V					
LAN2554	Russian-V					
LAN2555	Chinese-V					
LAN2556	Portuguese-V					
LAN2557	Korean-V					
LAN2558	Japanese-V					
LAN2559	Hindi-V					
CSS2551	Employability Skills *	1	-	-		1
BEH2551	Individual, Society and Nations*	1	-	-		1
	<b>TOTAL</b>					<b>41</b>

## SIXTH SEMESTER

Course Code	Course Title	Lectures (L)Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Hours Per Week (RCI-Guidelines)	Total Credits
ASL2606	Motor Speech Disorders in Adults	3	1	-	4 hours x 16 weeks	5
ASL2607	Language Disorders in Adults	3	1	-	4 hours x 16 weeks	5
ASL2608	Aural Rehabilitation in Adults	3	1	-	4 hours x 16 weeks	5
ASL2609	Audiology in Practice	3	1	-	4 hours x 16 weeks	5
ASL2610	Clinicals in Speech Language Pathology-IV	-	-	10	10 hours x 16 weeks	7
ASL2611	Clinicals in Audiology-IV	-	-	10	10 hours x 16 weeks	7
	<b>Open Electives</b>					<b>2</b>
CSS2651	Workplace Communication *	1	-	-	-	1
BEH2651	Interpersonal Communication and Relationship Management*	1	-	-	-	1
	<b>TOTAL</b>					<b>36</b>

## SEVENTH SEMESTER

Course Code	Course Title	Lectures (L)Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Hours Per Week (RCI-Guidelines)	Total Credits
ASL2701	Clinicals in Speech Language Pathology and Audiology-I	-	-	-	35 hours x 18 weeks	24
	<b>TOTAL</b>					<b>24</b>

## EIGHTH SEMESTER

Course Code	Course Title	Lectures (L)Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Hours Per Week (RCI-Guidelines)	Total Credits
ASL2801	Clinicals in Speech Language Pathology and Audiology-II	-	-	-	35 hours x 18 weeks	24
	<b>TOTAL</b>					<b>24</b>

# 13402 Master of Science- Clinical Research (Total Credits-100)

## Programme Structure-2020

### FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
CLR4101	Fundamentals of Clinical Operations	5	-	-	5
CLR4102	Clinical Data Management	4	-	-	4
CLR4103	Statistics for Clinical Research	3	1	-	4
CLR4104	Basics of Pharmacy, Drug discovery & Development	5	-	-	5
<b>Open Electives</b>					<b>5</b>
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self-Development and Interpersonal Skills	1	-	-	1
LAN4151	Foreign Business Language-I	3	-	-	3
LAN4152	French-I				
LAN4153	German-I				
LAN4154	Spanish-I				
LAN4155	Russian-I				
LAN4156	Chinese-I				
LAN4157	Portuguese-I				
LAN4158	Korean-I				
LAN4159	Japanese-I				
	Hindi-I **				
<b>TOTAL</b>					<b>23</b>

\*\* Hindi as Foreign Language for Foreign National Students

### SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
CLR4201	Pre Clinical Studies and Safety	5	-	-	5
CLR4202	IPR & Data Exclusivity, Bioethics in Clinical Research	5	-	-	5
CLR4204	Regulatory Affairs	5	-	-	5
CLR4206	Audit & Inspection	5	-	-	5
<b>Open Electives</b>					<b>5</b>
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication and Relationship Management	1	-	-	1

LAN4251	Foreign Business Language-II	3	-	-	3
LAN4252	French-II				
LAN4253	German-II				
LAN4254	Spanish-II				
LAN4255	Russian-II				
LAN4256	Chinese-II				
LAN4257	Portuguese-II				
LAN4258	Korean-II				
LAN4259	Japanese-II				
LAN4259	Hindi-II				
<b>TOTAL</b>					<b>25</b>

### **SUMMER INTERNSHIP THIRD SEMESTER**

<b>Course Code</b>	<b>Course Title</b>	<b>Lecture (L) Hours Per Week</b>	<b>Tutorial (T) Hours Per Week</b>	<b>Practical (P) Hours Per Week</b>	<b>Total Credits</b>
CLR4301	Project Management & Business Development	5	-	-	5
CLR4302	Special Regulatory Process	4	-	-	4
CLR4303	Reporting and Medical Writing	5	-	-	5
CLR4304	Pharmacogenomics	4	-	-	4
CLR4305	Pharmacovigilance & Safety Monitoring	4	-	-	4
CLR4335	Summer Internship Evaluation	-	-	-	6
<b>Open Electives</b>					<b>4</b>
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
LAN4351	Foreign Business Language-III	2	-	-	2
LAN4352	French-III				
LAN4353	German-III				
LAN4354	Spanish-III				
LAN4355	Russian-III				
LAN4356	Chinese-III				
LAN4357	Portuguese-III				
LAN4358	Korean-III				
LAN4359	Japanese-III				
LAN4359	Hindi-III				
<b>TOTAL</b>					<b>32</b>

### **FOURTH SEMESTER**

<b>Course Code</b>	<b>Course Title</b>	<b>Lecture (L) Hours Per Week</b>	<b>Tutorial (T) Hours Per Week</b>	<b>Practical (P) Hours Per Week</b>	<b>Total Credits</b>
CLR4437	Dissertation	-	-	-	20
<b>TOTAL</b>					<b>20</b>

# 13394 M.Sc.-Dietetics & Applied Nutrition (Total Credits-100)

## Programme Structure-2020

### FIRST SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
DAN4101	Advanced Nutrition-I	4	-	-	4
DAN4102	Nutritional Biochemistry-I	4	-	-	4
DAN4103	Human Physiology	3	-	-	3
DAN4104	Food Science-I	4	-	-	4
DAN4105	Therapeutic Nutrition-I	3	-	-	3
DAN4106	Nutritional Biochemistry Lab-I	-	-	2	1
DAN4107	Food Science Lab-I	-	-	2	1
DAN4108	Therapeutic Nutrition Lab-I	-	-	2	1
<b>Open Electives</b>					<b>5</b>
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development & Interpersonal Skills	1	-	-	1
LAN4151	Foreign Business Language-I	3	-	-	3
LAN4152	French-I				
LAN4153	German-I				
LAN4154	Spanish-I				
LAN4155	Russian-I				
LAN4156	Chinese-I				
LAN4157	Portuguese-I				
LAN4158	Korean-I				
LAN4159	Japanese-I				
LAN4159	Hindi-I **				
<b>TOTAL</b>					<b>26</b>

\*\* Hindi as Foreign Language for Foreign National Students

### SECOND SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
DAN4201	Advanced Nutrition-II	3	-	-	3
DAN4202	Nutritional Biochemistry-II	4	-	-	4
DAN4203	Research Methodology	4	-	-	4
DAN4204	Therapeutic Nutrition-II	3	-	-	3
DAN4205	Dietetic Technique and Patient Counseling	3	-	-	3
DAN4206	Nutritional Biochemistry Lab-II	-	-	2	1
DAN4207	Advanced Nutrition Lab-II	-	-	2	1



DAN4208	Therapeutic Nutrition Lab-II	-	-	4	2
<b>Open Electives</b>					<b>5</b>
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication and Relationship Management	1	-	-	1
LAN4251	Foreign Business Language-II	3	-	-	3
LAN4251	French-II				
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
<b>TOTAL</b>					<b>26</b>

### THIRD SEMESTER

Course Code	Course Title	Lectures (L) Hours Per week	Tutorial (T) Hours Per week	Practical (P) Hours Per Week	Total Credits
DAN4301	Community Nutrition-I	1	1	-	2
DAN4302	Institutional Food Administration	4	-	-	4
DAN4303	Food Science-II	3	-	-	3
DAN4304	Food Microbiology	5	-	-	5
DAN4305	Community Nutrition Lab-I	-	-	2	1
DAN4306	Food Science Lab-II	-	-	4	2
DAN4307	Food Microbiology Lab	-	-	4	2
DAN4335	Summer Internship Evaluation	-	-	-	6
<b>Open Electives</b>					<b>4</b>
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
LAN4351	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
<b>TOTAL</b>					<b>29</b>

## FOURTH SEMESTER

<b>Course Code</b>	<b>Course Title</b>	<b>Lectures (L)Hours Per week</b>	<b>Tutorial (T) Hours Per week</b>	<b>Practical (P) Hours Per Week</b>	<b>Total Credits</b>
DAN4401	Community Nutrition-II	1	1	-	2
DAN4402	Food Processing & Technology	3	-	-	3
DAN4403	Nutrition for Health and Fitness	3	-	-	3
DAN4404	Community Nutrition Lab-II	-	-	4	2
DAN4405	Food Processing &Technology Lab	-	-	2	1
DAN4437	Dissertation	-	-	-	6
	<b>Open Electives</b>				<b>2</b>
CSS4451	Cross Cultural Communication	1	-	-	1
BEH4451	Professional Excellence	1	-	-	1
	<b>TOTAL</b>				<b>19</b>

# 131133 Master of Optometry (Total Credits-100)

## Programme Structure-2020

### FIRST SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Clinical (C) hours per week	Total Credits
OPT4101	Epidemiology Public Health & Community Optometry	2	1	-	-	3
OPT4102	Binocular Vision & Pediatric Optometry-I	3	-	2	-	4
OPT4105	Clinic-I (General)	-	1	-	9	3
OPT4106	Research Methodology & Biostatistics-I	2	-	2	-	3
OPT4109	Low Vision, Rehabilitation & Geriatric Optometry	3	1	-	-	4
OPT4110	Applied Optics	3	-	2	-	4
	<b>Open Electives</b>					<b>5</b>
CSS4151	Basics of Communication	1	-	-	-	1
BEH4151	Self Development and Interpersonal Skills	1	-	-	-	1
LAN4151	Foreign Business Language-I French-I	3	-	-	-	3
LAN4152	German-I					
LAN4153	Spanish-I					
LAN4154	Russian-I					
LAN4155	Chinese-I					
LAN4156	Portuguese-I					
LAN4157	Korean-I					
LAN4158	Japanese-I					
LAN4159	Hindi-I **					
	<b>TOTAL</b>	-	-	-	-	<b>26</b>

\*\* Hindi as Foreign Language for Foreign National Students

### SECOND SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Clinical (C) hours per week	Total Credits
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OPT4203	Binocular Vision-II & Vision Therapy	3	-	2	-	4
OPT4204	Advanced Contact Lens-I	3	-	2	-	4
OPT4205	Clinics-II (Specialty)	-	-	-	9	3
OPT4211	Ocular Diseases & Diagnostics-I	2	1	2	-	4
OPT4212	Research Methodology & Biostatistics-II	2	-	2	-	3
OPT4232	Project (Research)	-	-	-	-	2
	<b>Open Electives</b>					<b>5</b>
CSS4251	Corporate Communication	1	-	-	-	1
BEH4251	Behavioural Communication & Relationship Management	1	-	-	-	1
LAN4251	Foreign Business Language-II	3	-	-	-	3
LAN4252	French-II					
LAN4253	German-II					
LAN4254	Spanish-II					
LAN4255	Russian-II					
LAN4256	Chinese-II					
LAN4257	Portuguese-II					
LAN4258	Korean-II					
LAN4259	Japanese-II					
LAN4259	Hindi-II					
	<b>TOTAL</b>	-	-	-	-	<b>25</b>

### THIRD SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Clinical (C) hours per week	Total Credits
OPT4303	Advanced Contact Lens-II	3	-	2	-	4
OPT4305	Clinics-III (Specialty)	-	-	-	9 hrs/week	3
OPT4306	Environmental Optometry	2	1	-	-	3
OPT4307	Teaching Methodology	1	1	2	-	3
OPT4308	Ocular Diseases & Diagnostics-II	2	1	2	-	4
OPT4332	Project	-	-	-	-	3
	<b>Open Electives</b>					<b>4</b>
CSS4351	Interpersonal Communication	1	-	-	-	1
BEH4351	Leading Through Teams	1	-	-	-	1
LAN4351	Foreign Business Language-III	2	-	-	-	2
LAN4352	French-III					
LAN4353	German-III					
LAN4353	Spanish-III					

LAN4354	Russian-III					
LAN4355	Chinese-III					
LAN4356	Portuguese-III					
LAN4357	Korean-III					
LAN4358	Japanese-III					
LAN4359	Hindi-III					
	<b>TOTAL</b>					<b>24</b>

## FOURTH SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Clinical (C) hours per week	Total Credits
OPT4401	Clinical Optometry (General)	-	2	-	150hrs/semester	5
OPT4437	Clinical Internship-Dissertation	-	-	-	300 hrs/semester	10
	<b>Electives (Any One) Specialization</b>					<b>10</b>
OPT4407	Advance Clinical Retina and Glaucoma	-	2	-	300hrs/semester	10
OPT4408	Advance Pediatric, Binocular Vision & Vision Therapy	-	2	-	300hrs/semester	10
OPT4409	Advance Applied Optics	-	2	-	300hrs/semester	10
OPT4410	Advance Cornea & Contact Lens	-	2	-	300hrs/semester	10
	<b>TOTAL</b>					<b>25</b>

# 131134 Master of Optometry-Practitioner (Total Credits-100)

## Programme Structure-2020

### FIRST SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Self Guided Clinical (C) Hours per Semester	Total Credits
OPP4101	Epidemiology Public Health & Community Optometry	2	1	-	30hrs	3
OPP4102	Binocular Vision & Pediatric Optometry-I	2	2	-	60hrs	4
OPP4105	Clinic-I	-	-	-	120hrs	3
OPP4106	Research Methodology & Biostatistics	2	2	-	90 hrs	4
OPP4109	Low Vision Care and Geriatric Optometry	2	2	-	60hrs	4
OPP4110	Applied Optics (Dispensing)	2	2	-	60hrs / semester	4
OPP4132	Project (with Presentation & Evaluation)	-	-	-	-	4
	<b>TOTAL</b>					<b>26</b>

### SECOND SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P)Hours Per Week	Self Guided Clinical (C)hours per Semester	Total Credits
OPP4203	Binocular Vision-II & Vision Therapy	2	2	-	60 hrs	4
OPP4204	Advanced Contact Lens-I	2	2	-	90 hrs	4
OPP4205	Clinics-II (Specialty)	-	1	-	60 hrs	3
OPP4211	Ocular Disease and Diagnostics-I	2	2	-	90 hrs	4
OPP4212	Low Vision Care and Rehabilitation	2	2	-	60 hrs	4
OPP4232	Project	-	-	-		4
	<b>TOTAL</b>					<b>23</b>

### THIRD SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Clinical (C) hours per Semester	Total Credits
OPP4303	Advanced Contact Lens-II	2	2	-	60hrs/semester	4
OPP4305	Clinics-III (Specialty)	-	2	-	90 hrs/	4
OPP4306	Environmental Optometry	1	1	-	60hrs/semester	3
OPP4307	Teaching Methodology	1	2	-	60hrs/semester	3
OPP4308	Ocular Diseases and Diagnostics-II	2	2	-	90 hrs	4
OPP4332	Project	-	-	-	-	6
	<b>TOTAL</b>					<b>24</b>

### FOURTH SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Clinical (C) hours per Semester	Total Credits
OPP4401	Clinical Optometry (General)	2	-	-	180hrs/semester	6
OPP4437	Clinical Dissertation	-	-	-	-	11
	<b>Electives (Any One)</b>					<b>10</b>
OPP4407	Advance Clinical Retina	2	-	-	200 hrs/Semester	10
OPP4408	Advance Clinical Glaucoma	2	-	-	200 hrs/Semester	10
OPP4409	Advance Clinical Pediatric, Binocular Vision and Vision Therapy	2	-	-	200 hrs/Semester	10
OPP4410	Advance Applied Optics	2	-	-	200 hrs/Semester	10
OPP4411	Advance Cornea & Contact Lens	2	-	-	200 hrs/Semester	10
	<b>TOTAL</b>					<b>27</b>

# 13396 Master of Public Health (Total Credits-100)

## Programme Structure-2020

### FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
PUH4101	Demography	2	1	-	3
PUH4102	Basic Epidemiology	2	1	-	3
PUH4103	Social & Behavioral Aspects of Health	2	-	-	2
PUH4104	Healthcare Delivery System & Policies	2	1	-	3
PUH4106	Biostatistics	2	1	-	3
PUH4109	Human Resource Management	2	1	-	3
<b>Open Electives</b>					<b>5</b>
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development & Interpersonal Skills	1	-	-	1
LAN4151	Foreign Business Language-I French-I	3	-	-	3
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
<b>TOTAL</b>					<b>22</b>

\*\* Hindi as Foreign Language for Foreign National Students

### SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
PUH4201	Applied Epidemiology	2	1	-	3
PUH4203	Communicable & Non-Communicable Diseases	3	1	-	4
PUH4204	Environmental Health Sanitation	2	1	-	3



PUH4205	Research Methodology	2	1	-	3
PUH4206	National Health Programmes	2	1	-	3
PUH4208	Health Economics	2	1	-	3
PUH4231	Term Paper	-	-	-	1
<b>Open Electives</b>					<b>5</b>
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication & Relationship Management	1	-	-	1
LAN4251	Foreign Business Language-II	3	-	-	3
LAN4251	French-II				
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
<b>TOTAL</b>					<b>25</b>

### THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
PUH4301	Operations Research	3	-	-	3
PUH4302	Quality in Healthcare	2	1	-	3
PUH4303	Nutrition	2	1	-	3
PUH4304	Women & Child Health	2	1	-	3
PUH4305	Health Programme Management	2	1	-	3
PUH4306	Health Promotion & Behaviour Change Communication	2	1	-	3
PUH4335	Summer Internship Evaluation	-	-	-	6
<b>Open Electives</b>					<b>4</b>
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
LAN4351	Foreign Business Language-III	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				

LAN4358	Japanese-III				
LAN4359	Hindi-III				
<b>TOTAL</b>					<b>28</b>

## FOURTH SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
PUH4401	Health Information System	2	-	-	2
PUH4402	Health Insurance	2	-	-	2
PUH4403	Disaster Management	2	-	-	2
PUH4404	Occupational Health	2	-	-	2
PUH4437	Dissertation	-	-	-	15
<b>Open Electives</b>					<b>2</b>
CSS4451	Cross Cultural Communication	1	-	1	1
BEH4451	Professional Excellence	1	-	1	1
<b>TOTAL</b>					<b>25</b>

### Note:

- Students will visit various Healthcare Organizations, Health related industries & Health Institutions in the city during their course for Field Visits/Practicals.
- During Fourth Semester, after registration students will proceed for internship in healthcare organizations from February to April. In May they will be back at University & submit their dissertation, viva-voce & presentation.

# 13340 MHA-Master of Hospital Administration (Total Credits-100)

## Programme Structure-2020

### FIRST SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
MHA4101	Hospital Organization and Management Processes	3	1	-	4
MHA4102	Demography	2	1	-	3
MHA4104	Marketing Management	2	1	-	3
MHA4105	Biostatistics	3	-	-	3
MHA4106	Information Technology for Managers	2	-	1	3
MHA4107	Essentials of Healthcare System	2	1	-	3
MHA4108	Human Resource Management	2	1	-	3
<b>Open Electives</b>					<b>5</b>
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development & Interpersonal Skills	1	-	-	1
LAN4151	Foreign Business Language-I French-I	3	-	-	3
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
<b>TOTAL</b>					<b>27</b>

\*\* Hindi as Foreign Language for Foreign National Students

### SECOND SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
MHA4201	Financial Management	2	1	-	3
MHA4203	Hospital Planning	2	1	-	3
MHA4204	Health Economics	2	1	-	3
MHA4205	Research Methodology	3	-	-	3
MHA4206	Hospital Materials Management	3	-	-	3

MHA4207	Epidemiology	2	1	-	3
MHA4231	Term Paper	-	1	-	1
<b>Open Electives</b>					<b>5</b>
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication & Relationship Management	1	-	-	1
LAN4251	Foreign Business Language-II French-II	3	-	-	3
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
<b>TOTAL</b>					<b>24</b>

### THIRD SEMESTER

Course Code	Course Title	Lecture (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
MHA4301	Strategic Management	3	-	-	3
MHA4302	Operations Research	3	-	-	3
MHA4303	Quality Management	2	1	-	3
MHA4304	Medical & Health Laws	3	-	-	3
MHA4305	Management of Clinical Services	2	1	-	3
MHA4306	Management of Support & Utility Services	2	1	-	3
MHA4335	Summer Internship Evaluation	-	-	-	6
<b>Open Electives</b>					<b>4</b>
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
LAN4351	Foreign Business Language-III French-III	2	-	-	2
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
<b>TOTAL</b>					<b>28</b>

## FOURTH SEMESTER

<b>Course Code</b>	<b>Course Title</b>	<b>Lecture (L) Hours Per Week</b>	<b>Tutorial (T) Hours Per Week</b>	<b>Practical (P) Hours Per Week</b>	<b>Total Credits</b>
MHA4401	Hospital Management Information System	1	1	-	2
MHA4402	Health Insurance and Medical Tourism	2	-	-	2
MHA4403	Disaster Management	1	1	-	2
MHA4437	Dissertation	-	-	-	15
	<b>TOTAL</b>				<b>21</b>

# 13163 M.Sc.-Medical Lab Technology (Total Credits-100)

## Programme Structure-2020

### FIRST SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
MLT4108	Laboratory Management & Quality Control	3	-	-	3
MLT4110	Anatomy	3	-	-	3
MLT4111	Physiology	3	-	-	3
MLT4113	Clinical Immunology	4	-	-	4
MLT4114	Advanced Laboratory Technique	4	-	-	4
MLT4105	Lab Course	-	-	2	1
MLT4112	Clinical Training	-	-	4	2
<b>Open Electives</b>					<b>5</b>
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development & Interpersonal Skills	1	-	-	1
LAN4151	<b>Foreign Business Language-I</b> French-I	3	-	-	3
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
<b>TOTAL</b>					<b>25</b>

\*\* Hindi as Foreign Language for Foreign National Students

### SECOND SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
MLT4208	Molecular Diagnostics	3	-	-	3
MLT4211	Research Methodology & Biostatistics	3	-	-	3
<b>Specialisation – Clinical Biochemistry</b>					<b>14</b>
MLT4210	Metabolic Biochemistry	4	-	-	4

MLT4213	Clinical Nutrition	4	-	-	4
MLT4214	Principles of Biochemistry	3	-	-	3
MLT4215	Clinical Biochemistry Lab Course-I	-	-	2	1
MLT4216	Clinical Biochemistry Clinical Training-I	-	-	4	2
<b>Specialisation – Clinical Microbiology</b>					<b>14</b>
MLT4217	General Microbiology	4	-	-	4
MLT4218	Diagnostic Microbiology-I	3	-	-	3
MLT4219	Clinical Bacteriology	4	-	-	4
MLT4220	Clinical Microbiology Lab Course-I	-	-	2	1
MLT4221	Clinical Microbiology Clinical Training-I	-	-	4	2
<b>Open Electives</b>					<b>5</b>
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioural Communication & Relationship Management	1	-	-	1
<b>Foreign Business Language-II</b>		3	-	-	3
LAN4251	French-II				
LAN4252	German-II				
LAN4253	Spanish-II				
LAN4254	Russian-II				
LAN4255	Chinese-II				
LAN4256	Portuguese-II				
LAN4257	Korean-II				
LAN4258	Japanese-II				
LAN4259	Hindi-II				
<b>TOTAL</b>					<b>25</b>

### SUMMER PROJECT

**Note:** Students must submit their summer project report immediately on return from summer vacation in June/ July and the same would be evaluated for 6 credit units, which would be included in the Third Semester marks.

### THIRD SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
MLT4335	Summer Project Evaluation	-	-	-	6
<b>Specialisation – Clinical Biochemistry</b>					<b>22</b>
MLT4307	Clinical Endocrinology	4	-	-	4
MLT4308	Clinical Enzymology	4	-	-	4
MLT4309	Advances in Intermediary Metabolism	3	-	-	3
MLT4310	Diagnostic Biochemistry	4	-	-	4
MLT4313	Advanced Chemical Pathology	4	-	-	4
MLT4314	Clinical Biochemistry Lab Course-	-	-	2	1

	II				
MLT4315	Clinical Biochemistry Clinical Training-II	-	-	4	2
<b>Specialisation – Clinical Microbiology</b>					<b>22</b>
MLT4316	Diagnostic Microbiology-II	4	-	-	4
MLT4317	Clinical Virology	4	-	-	4
MLT4318	Clinical Mycology	4	-	-	4
MLT4319	Clinical Parasitology	4	-	-	4
MLT4320	Pharmaceutical Microbiology	3	-	-	3
MLT4321	Clinical Microbiology Lab Course-II	-	-	2	1
MLT4322	Clinical Microbiology Clinical Training-II	-	-	4	2
<b>Open Electives</b>					<b>4</b>
	<b>Foreign Business Language-III</b>	2	-	-	2
LAN4351	French-III				
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
CSS4351	Interpersonal Communication	1			1
BEH4351	Leading Through Teams	1			1
<b>TOTAL</b>					<b>32</b>

## FOURTH SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Clinical Hours Per (Sem.)	Total Credits
MLT4401	On Job Training	-	-	-	200 Hours	9
MLT4437	Dissertation-Clinical Research	-	-	-	-	9
<b>TOTAL</b>						<b>18</b>

### Note:

Student will be sent to laboratories at Universities, National Institute and Hospitals for their project based research work during 4<sup>th</sup> Semester. At the end of 4<sup>th</sup> semester student will be evaluated on the basis of dissertation followed by presentation of their research work.



**131312 M.Sc.- Molecular Medicine & Stem Cell Technologies  
(Total Credits-100)**

**Programme Structure-2020**

**FIRST SEMESTER**

<b>Course Code</b>	<b>Course Title</b>	<b>Lectures (L) Hours Per Week</b>	<b>Tutorial (T) Hours Per Week</b>	<b>Practical (P) Hours Per Week</b>	<b>Total Credits</b>
SCT4101	Cell Biology & Genetics	3	-	-	3
SCT4102	Microbiology & Virology	3	-	-	3
SCT4103	Molecular Biology & rDNA Technology	2	-	-	2
SCT4104	Human Anatomy and Physiology	2	-	-	2
SCT4105	Bioanalytical Technologies & Instrumentation	2	-	-	2
SCT4106	Biostatistics	3	-	-	3
SCT4107	Biological Programming-I (Bioinformatics)	1	-	-	1
SCT4108	Cell & Molecular Biology Lab	-	-	2	1
SCT4109	Molecular Biology & rDNA Technology Lab	-	-	2	1
SCT4110	Bioanalytical Technologies & Instrumentation Lab	-	-	2	1
SCT4111	Research Seminar/ Research Presentation/ Lit. Review & Presentation: Molecular Medicine	-	-	-	1
SCT4131	Term Paper	-	-	-	1
<b>Open Electives</b>					<b>5</b>
CSS4151	Basics of Communication	1	-	-	1
BEH4151	Self Development & Interpersonal Skills	1	-	-	1
LAN4151	Foreign Business Language-I French-I	3	-	-	3
LAN4152	German-I				
LAN4153	Spanish-I				
LAN4154	Russian-I				
LAN4155	Chinese-I				
LAN4156	Portuguese-I				
LAN4157	Korean-I				
LAN4158	Japanese-I				
LAN4159	Hindi-I **				
<b>TOTAL</b>					<b>26</b>

\*\* Hindi as Foreign Language for Foreign National Students

## SECOND SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
SCT4201	Stem Cell Technology	2	-	-	2
SCT4202	Fundamental Immunology-I	2	-	-	2
SCT4203	Human Embryology and Developmental Biology	2	-	-	2
SCT4204	Biological Programming-II (Bioinformatics)	1	-	-	1
SCT4205	Molecular Medicine: Principles & Application	3	-	-	3
SCT4206	Nano-medicines and Technologies	3	-	-	3
SCT4207	Fermentation Technology & Its Applications in Molecular Medicine	3	-	-	3
SCT4208	Stem Cell Technology Lab	-	-	2	1
SCT4209	Nano-medicines and Technologies Lab	-	-	2	1
SCT4210	Fundamental Immunology-I Lab	-	-	2	1
SCT4211	Biological Programming (Bioinformatics)-II Lab	-	-	2	1
<b>Open Electives</b>					<b>5</b>
CSS4251	Corporate Communication	1	-	-	1
BEH4251	Behavioral Communication & Relationship Management	1	-	-	1
LAN4251	Foreign Business Language-II	3	-	-	3
LAN4252	French-II				
LAN4253	German-II				
LAN4254	Spanish-II				
LAN4255	Russian-II				
LAN4256	Chinese-II				
LAN4257	Portuguese-II				
LAN4258	Korean-II				
LAN4259	Japanese-II				
LAN4259	Hindi-II				
<b>TOTAL</b>					<b>25</b>

## SUMMER INTERNSHIP THIRD SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
SCT4301	Cancer Biology & Cancer	3	-	-	3

	Therapeutics (T cell & Antibody-based Therapeutics)				
SCT4302	Human Stem Cell Culture & Differentiation Methods	3	-	-	3
SCT4303	Vaccines and Preclinical Animal Models	2	-	-	2
SCT4304	Fundamental Immunology-II	2	-	-	2
SCT4305	Genomics & Proteomics	2	-	-	2
SCT4306	Ethics of Biomedical Research Intellectual Property (IP), IP rights (IPR)	2	-	-	2
SCT4307	Plant Biotechnology and Its Applications in Molecular Medicine	2	-	-	2
SCT4308	Fundamental Immunology-II Lab	-	-	2	1
SCT4309	Genomics & Proteomics Lab	-	-	2	1
SCT4310	Stem Cell Culture Lab	-	-	2	1
SCT4311	Scientific Communication Skill Development (Seminar/ Workshop)	-	-	-	1
SCT4335	Summer Internship Evaluation	-	-	-	3
	<b>Concentration Electives (Select any One)</b>				<b>2</b>
SCT4312	Systems Biology	2	-	-	2
SCT4331	Term Paper	-	-	-	2
	<b>Open Electives</b>				<b>4</b>
LAN4351	<b>Foreign Business Language-III</b> French-III	2	-	-	2
LAN4352	German-III				
LAN4353	Spanish-III				
LAN4354	Russian-III				
LAN4355	Chinese-III				
LAN4356	Portuguese-III				
LAN4357	Korean-III				
LAN4358	Japanese-III				
LAN4359	Hindi-III				
CSS4351	Interpersonal Communication	1	-	-	1
BEH4351	Leading Through Teams	1	-	-	1
	<b>TOTAL</b>				<b>29</b>

## FOURTH SEMESTER

Course Code	Course Title	Lectures (L) Hours Per Week	Tutorial (T) Hours Per Week	Practical (P) Hours Per Week	Total Credits
SCT4401	Analysis of Business of Science & Alternative Careers in Molecular Medicine & Regenerative Medicine (Online Resources)	-	-	-	1

SCT4402	Industry Trends & Campus Recruitment Events & Career Counseling (Online Resources)	-	-	-	1
SCT4437	Dissertation / Project Report Presentation / Viva Voce	-	-	-	18
	<b>TOTAL</b>	-	-	-	<b>20</b>