



Annexure-4 D

**MGM SCHOOL OF BIOMEDICAL SCIENCES**  
**(A constituent unit of MGM INSTITUTE OF HEALTH SCIENCES)**

(Deemed University u/s 3 of UGC Act 1956)

Grade “A” Accredited by NAAC

Sector 1, Kamothe Navi Mumbai-410209,

Tel.No.:022-27437631,27437632,27432890

Email. [sbsnm@mgmuhs.com](mailto:sbsnm@mgmuhs.com)/Website : [www.mgmsbsnm.edu.in](http://www.mgmsbsnm.edu.in)

**CHOICE BASED CREDIT SYSTEM (CBCS)**

**(Academic Year 2018 - 19)**

**Curriculum for**

**B.Sc. Allied Health Sciences**

**B. Optometry**

OUTLINE OF COURSE CURRICULUM												
B.Optomety												
Semester I												
Code No.	Core Subjects	Credits/Week				Hrs/Semester				Marks		
		Lecture (L)	Tutorial (T)	Practical (P)	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Total hrs.	Internal Assessment	Semester Exam	Total
<b>Theory</b>												
BOPTOM 101 L	Human Anatomy Part I	3	-	-	3	45	-	-	45	20	80	100
BOPTOM 102 L	Human Physiology Part I	3	-	-	3	45	-	-	45	20	80	100
BOPTOM 103 L	General Biochemistry Nutrition	3	1	-	4	45	15	-	60	20	80	100
BOPTOM 104 L	Introduction to National Health Care System (Multidisciplinary/ Interdisciplinary)	3	-	-	3	45	-	-	45	20	80	100
<b>Practical</b>												
BOPTOM 101 P	Human Anatomy Part I	-	-	4	-	-	-	60	60	-	-	-
BOPTOM 102 P	Human Physiology Part I	-	-	4	-	-	-	60	60	-	-	-
BOPTOM 103 P	General Biochemistry	-	-	4	-	-	-	60	60	-	-	-
BOPTOM 105 P	Community Orientation & Clinical Visit (Including related practicals to the Parent course)	-	-	8	-	-	-	120	120	-	-	-
<b>Ability Enhancement Elective Course</b>												
AEC 001 L	English & Communication skills	3	-	-	3	45	-	-	45	100	-	100
AEC 002 L	Environmental Sciences											
<b>Total</b>		<b>15</b>	<b>1</b>	<b>20</b>	<b>16</b>	<b>225</b>	<b>15</b>	<b>300</b>	<b>540</b>	<b>180</b>	<b>320</b>	<b>500</b>
OUTLINE OF COURSE CURRICULUM												
B.Optomety												
Semester II												
Code No.	Core Subjects	Credits/Week				Hrs/Semester				Marks		
		Lecture (L)	Tutorial (T)	Practical (P)	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Total hrs.	Internal Assessment	Semester Exam	Total
<b>Theory</b>												
BOPTOM 106 L	Human Anatomy Part II	2	-	-	2	30	-	-	30	10	40	50
BOPTOM 107 L	Human Physiology Part II	2	-	-	2	30	-	-	30	10	40	50
BOPTOM 108 L	General Microbiology	3	-	-	3	45	-	-	45	20	80	100
BOPTOM 109 L	Basic Pathology & Hematology	3	1	-	4	45	15	-	60	20	80	100
BOPTOM 110 L	Introduction to Quality and Patient safety (Multidisciplinary/Interdisciplinary)	3	-	-	3	45	-	-	45	20	80	100
<b>Practical</b>												
BOPTOM 106 P	Human Anatomy Part II	-	-	4	-	-	-	60	60	-	-	-
BOPTOM 107 P	Human Physiology Part II	-	-	2	-	-	-	30	30	-	-	-
BOPTOM 108 P	General Microbiology	-	-	4	-	-	-	60	60	-	-	-
BOPTOM 109 P	Basic Pathology & Hematology	-	-	4	-	-	-	60	60	-	-	-
BOPTOM111 P	Community Orientation & Clinical Visit (Including related practicals to the parent course)	-	-	8	-	-	-	120	120	-	-	-
<b>Skill Enhancement Elective Course</b>												
SEC 001 L	Medical Bioethics & IPR	3	-	-	3	45	-	-	45	100	-	100
SEC 002 L	Human Rights & Professional Values											
<b>Total</b>		<b>16</b>	<b>1</b>	<b>22</b>	<b>17</b>	<b>240</b>	<b>15</b>	<b>330</b>	<b>585</b>	<b>180</b>	<b>320</b>	<b>500</b>

OUTLINE OF COURSE CURRICULUM														
B.Optomety														
Semester III														
Code No.	Core Subjects	Credits/Week					Hrs/Semester					Marks		
		Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation	Total hrs.	Internal Assessment	Semester Exam	Total
<b>Theory</b>														
BOPTOM 112 L	Physical Optics	3	-	-	-	3	45	-	-	-	45	20	80	100
BOPTOM 113 L	Geometrical Optics	3	-	-	-	3	45	-	-	-	45	20	80	100
BOPTOM 114 L	Visual Optics I/II	4	-	-	-	4	60	-	-	-	60	20	80	100
BOPTOM 115 L	Ocular diseases I	4	-	-	-	4	60	-	-	-	60	20	80	100
BOPTOM 116 L	Clinical Examinations and Visual systems	2	-	-	-	2	30	-	-	-	30	20	80	100
<b>Practical</b>														
BOPTOM 112 P	Physical Optics	-	-	4	-	2	-	-	60	-	60	10	40	50
BOPTOM 113 P	Geometrical Optics	-	-	4	-	2	-	-	60	-	60	50	-	50
BOPTOM 114 P	Visual Optics I/II	-	-	4	-	2	-	-	60	-	60	50	-	50
BOPTOM 116 P	Clinical Examinations and Visual systems	-	-	4	-	2	-	-	60	-	60	10	40	50
<b>Generic Elective Course</b>														
GEC 001 L	Pursuit of Inner Self Excellence (POIS)	3	-	-	-	3	45	-	-	-	45	100	-	100
GEC 002 L	Organisational Behaviour													
<b>Total</b>		<b>19</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>27</b>	<b>285</b>	<b>0</b>	<b>240</b>	<b>0</b>	<b>525</b>	<b>320</b>	<b>480</b>	<b>800</b>

OUTLINE OF COURSE CURRICULUM															
B.Optomety															
Semester IV															
Code No.	Core Subjects	Credits/Week					Hrs/Semester					Marks			
		Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation	Total hrs.	Internal Assessment	Semester Exam	Total	
<b>Theory</b>															
BOPTOM 117 L	Optometric Optics I & II	4	-	-	-	4	60	-	-	-	60	20	80	100	
BOPTOM 118 L	Ocular diseases II & Glaucoma	3	-	-	-	3	45	-	-	-	45	20	80	100	
BOPTOM 119 L	Dispensing optics	3	0	-	-	3	45	-	-	-	45	20	80	100	
BOPTOM 120 L	Optometric Instrumentation	3	-	-	-	3	45	-	-	-	45	20	80	100	
BOPTOM 121 L	Basic & Ocular Pharmacology	2	-	-	-	2	30	-	-	-	30	20	80	100	
BOPTOM 122 CP	BOPTOM Directed Clinical Education- I	-	-	-	-	15	5	-	-	-	225	225	50	-	50
<b>Practical</b>															
BOPTOM 117 P	Optometric Optics I & II	-	-	6	-	3	-	-	90	-	90	10	40	50	
BOPTOM 119 P	Dispensing optics	-	-	6	-	3	-	-	90	-	90	10	40	50	
BOPTOM 120 P	Optometric Instrumentation	-	-	2	-	-	-	-	30	-	30	-	-	-	
<b>Ability Enhancement Elective Course</b>															
AEC 003 L	Computer and Applications	3	-	-	-	3	45	-	-	-	45	100	-	100	
AEC 004 L	Biostatistics and Research Methodology														
<b>Total</b>		<b>18</b>	<b>0</b>	<b>14</b>	<b>15</b>	<b>29</b>	<b>270</b>	<b>0</b>	<b>210</b>	<b>225</b>	<b>705</b>	<b>270</b>	<b>480</b>	<b>750</b>	

OUTLINE OF COURSE CURRICULUM														
B.Optomety														
Semester V														
Code No.	Core Subjects	Credits/Week					Hrs/Semester					Marks		
		Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation	Total hrs.	Internal Assessment	Semester Exam	Total
<b>Theory</b>														
BOPTOM 123 L	Contact Lenses I	3	-	-	-	3	45	-	-	-	45	20	80	100
BOPTOM 124 L	Binocular Vision I&II	4	-	-	-	4	60	-	-	-	60	20	80	100
BOPTOM 125 L	Low Vision Aids	2	-	-	-	2	30	-	-	-	30	20	80	100
BOPTOM 126 L	Systemic Disease	3	-	-	-	3	45	-	-	-	45	20	80	100
BOPTOM 127 CP	BOPTOM Directed Clinical Education-II	-	-	-	27	9	-	-	-	405	405	50	-	50
<b>Practical</b>														
BOPTOM 123 P	Contact Lenses I	-	-	2	-	1	-	-	30	-	30	10	40	50
BOPTOM 124 P	Binocular Vision I&II	-	-	2	-	1	-	-	30	-	30	10	40	50
<b>Core Elective Course</b>														
CEC 005 L	Basics of Clinical Skill Learning	3	-	-	-	3	45	-	-	-	45	100	-	100
CEC 006 L	Hospital Operation Management													
<b>Total</b>		<b>15</b>	<b>0</b>	<b>4</b>	<b>27</b>	<b>26</b>	<b>225</b>	<b>0</b>	<b>60</b>	<b>405</b>	<b>690</b>	<b>250</b>	<b>400</b>	<b>650</b>

OUTLINE OF COURSE CURRICULUM														
B.Optomety														
Semester VI														
Code No.	Core Subjects	Credits/Week					Hrs/Semester					Marks		
		Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation	Total Credits (C)	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation	Total hrs.	Internal Assessment	Semester Exam	Total
<b>Theory</b>														
BOPTOM 128 L	Contact Lenses II	2	-	-	-	2	30	-	-	-	30	20	80	100
BOPTOM 129 L	Sports Vision	2	-	-	-	2	30	-	-	-	30	20	80	100
BOPTOM 130 L	Pediatric and Geriatric Optometry	2	-	-	-	2	30	-	-	-	30	20	80	100
BOPTOM 131 L	Occupational Optometry	2	-	-	-	2	30	-	-	-	30	20	80	100
BOPTOM 132 CP	BOPTOM Directed Clinical Education-III	-	-	-	36	12	-	-	-	540	540	50	-	50
<b>Practical</b>														
BOPTOM 128 P	Contact Lenses II	-	-	2	-	1	-	-	30	-	30	10	40	50
BOPTOM 130 P	Pediatric and Geriatric Optometry	-	-	2	-	1	-	-	30	-	30	10	40	50
<b>Total</b>		<b>8</b>	<b>0</b>	<b>4</b>	<b>36</b>	<b>22</b>	<b>120</b>	<b>0</b>	<b>60</b>	<b>540</b>	<b>720</b>	<b>150</b>	<b>400</b>	<b>550</b>

OUTLINE OF COURSE CURRICULUM										
B.Optomety (Internship)										
Semester VII & Semester VIII										
Code No.	Core Subjects	Credits/Week				Hrs/Semester				
		Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation	Lecture (L)	Tutorial (T)	Practical (P)	Clinical Posing/Rotation	Total hrs.
	Sem VII (Internship)	-	-	-	720	-	-	-	720	720
	Sem VIII (Internship)				720				720	720
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>1440</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1440</b>	<b>1440</b>