Revised Ordinance Governing Minimum Essential Requirements for Allied Health Sciences for starting fresh Bachelors courses in Allied Health Sciences in RGUHS - 2018

B.Sc OPTOMETRY

RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES, KARNATAKA

4th 'T' Block, Bangalore 560 041

Annexure to University Notification No. RGU/AUTH/135-SYN/36(1)/2018-19 dated 17.09.2018

Revised Ordinance Governing Minimum Essential Requirements for Allied Health Sciences for starting fresh Bachelors courses in Allied Health Sciences in RGUHS -2018

B.Sc Optometry

Rajiv Gandhi University of Health Sciences, Karnataka offers the following Bachelors courses in Allied Health Sciences Faculty. The duration of the course and the requirement of infrastructure such as hospital facility, minimum intake for the said courses are as under : -

Sl No	Course	Duration	Minimum seats	Maximum seats	Own Hospital/Lab	MOU for Hospital/Lab
01	B.Sc. Anesthesia Technology	3 years 6 months	10	30	Mandatory	Not permitted
02	B.Sc. Operation Theatre Technology	3 years 6 months	10	30	Mandatory	Not permitted
03	B.Sc. Neuroscience Technology	3 years 6 months	10	20	Mandatory	Not permitted
04	B.Sc. Cardiac Care Technology	3 years 6 months	10	20	Mandatory with Cath lab & Cardiac OT	Not permitted
05	B.Sc. Perfusion Technology	3 years 6 months	10	20	Mandatory with Cath lab & Cardiac OT	Not permitted
06	B.Sc. Renal Dialysis Technology	3 years 6 months	10	20	Mandatory	Not permitted
07	B.Sc. Respiratory Care Technology	3 years 6 months	10	20	Mandatory	Not permitted
08	B.Sc. Radiotherapy	3 years 6 months	10	20	Mandatory	Not permitted
09	B.Sc. Medical Imaging Technology	3 years 6 months	10	40	Desirable	Permitted with adequate equipment's and workload
10	B.Sc. Medical Lab Technology	3 years 6 months	10	40	Desirable	Permitted with adequate equipment's and workload

11	B.Sc. Optometry	4 years	20	30	Mandatory	Not permitted
12	Bachelors in Hospital Administration	3 years (6 Semesters)	10	40	Desirable	Permitted
13	Bachelors in Public Health	4 years (8 Semesters)	10	40	Desirable	Permitted
14	Bachelors in Prosthetics & Orthotics	4 years 6 months	10	30	Mandatory	Not permitted

2(a) The general guidelines for all Bachelors courses in Allied Health Science :

1. Increase in take for any course shall be considered only after the 1st batch of students admitted complete the tenure of the course.

2. Certain courses need in house hands on training hence such courses affiliation shall be given to only those Colleges which have their own Hospital with respective department fully functional with necessary medical personnel with adequate clinical workload as specified in respective course ordinance. Colleges which have a tie up or MOU with other Hospitals shall not be considered for starting such courses.

3. Whenever a college wishes to start a Master's program, the college should have already been affiliated to offer Bachelors program from the same subject specialty with at least one batch of students having successfully completed the bachelor's course.

(b) Intake for courses:

1. B.Sc. Imaging Technology & B.Sc. Medical Lab Technology courses shall have a minimum intake of 10 seats and maximum intake of 40 seats and colleges applying for the same shall have their own clinical set up offering respective facilities or an MOU with an 100 bedded Hospital or an NABL accredited Laboratory with adequate workload. Colleges which have own clinical/lab facility can be given 20 seats at the start whereas colleges which have an MOU can be given 10 seats when the college is started.

2. B.Sc. Optometry shall have a minimum intake of 20 seats but colleges applying for the same shall have their own Hospital which has an active ophthalmology department with adequate clinical workload as mentioned in the minimum criteria for B.Sc. optometry Course

3. Courses like B.Sc. Anaesthesia Technology, B.Sc. Operation Theatre Technology, B.Sc. Cardiac Care Technology, B.Sc. Perfusion Technology, B.Sc. Renal Dialysis Technology, B.Sc. Neuroscience Technology, B.Sc. Respiratory Care Technology, B.Sc. Radiotherapy and B.Sc. Prosthetics & Orthoticsshall have their own clinical set up with respective departments functional with adequate work load as mentioned in minimum criteria for starting such courses and the seat intake shall be 10 seats when the course is being started for the first time in a college.

4. Courses like Bachelors in Hospital Administration and Bachelors in Public Health shall have an intake of 30 seats provided the college has its own hospital / NGO which provide adequate hands on training for the students admitted to the course as mentioned in

minimum criteria for respective course.Colleges which have a tie up or MOU with a Hospital / NGO shall have be granted only 20 seats when an application for fresh affiliation is made.

5. The colleges which have already been sanctioned affiliation and do not have the necessary infrastructure like hospital, clinical facility shall be given a minimum time frame to create the same and an affidavit to this effect should be taken from the college management where in it is also made clear that if the college does not adhere to the conditions and fails in providing the necessary infrastructurelike Hospital and clinical facility, it shall forfeit the right to be affiliated with RGUHS.

It is seen that some colleges have been offering Masters program but not Bachelors program even though such program is available in the list of courses offered in RGUHS, if this trend continues there may be a day when colleges will seek admission only for the courses which are in demand hence such colleges which are affiliated to RGUHS are offering Masters courses in AHS subjects but have not started Bachelors course shall be asked to start the same from the academic year 2019-20 failing which necessary action for disaffiliation should be initiated.

(c) Minimum eligibility requirements for Candidates

A candidate seeking admission to the Bachelor of Science Degree Courses in the Allied Health Sciences course from Sl.No. 1 to 14 shall have studied English as one of the principal subject during the tenure of the course and for those seeking admission to the Bachelor of Science Degree Courses in the Allied Health Sciences courses mentioned above except for B.Sc. Imaging Technology and B.Sc. Radiotherapy Technology shall have passed:

1. Two year Pre-University examination or equivalent as recognized by Rajiv Gandhi University of Health Sciences with, Physics, Chemistry and Biology as subjects of study.

OR

2. Pre-Degree course from a recognized University considered as equivalent by RGUHS, (Two years after ten years of schooling) with Physics, Chemistry and Biology as subjects of study.

OR

3. Any equivalent examination recognized by the Rajiv Gandhi University of Health Sciences, Bangalore for the above purpose with Physics, Chemistry and Biology as subjects of study.

OR

4. The vocational higher secondary education course conducted by Vocational Higher Secondary Education of any other State Government with five subjects including Physics,

Chemistry, Biology and English in addition to vocational subjects conducted is considered equivalent to plus TWO examinations of Government of Karnataka Pre University Course.

OR

5. Candidates with two years diploma from a recognized Government Board in a subject for which the candidate desires to enroll, in the respective Allied Health Sciences course mentioned in Sl. No. 1 to 14 shall have passed Diploma [10+2] with Physics, Chemistry and Biology, as subjects or candidates with 3 years diploma from a recognized Government Board in a subject for which the candidate desires to enroll, in the respective Allied Health Sciences course mentioned in Sl. No. 1 to 14 should have studied Physics, Biology and Chemistry as subjects during the tenure of the course.

6. Lateral entry to second year for allied health science courses for candidates who have passed diploma program from the Government Boards and recognized by RGUHS, fulfilling the conditions specified above under sl. No. 5 and these students are eligible to take admission on lateral entry system only in the same subject studied at diploma level from the academic year 2008-09 vide RGUHS Notification no. AUTH/AHS/317/2008-09 dated 01.08.2008.

7. In case of admission to B.Sc. Imaging Technology Or B.Sc.Radiotherapy Technology the candidate should have passed Pre-University or equivalent examination with Physics, Chemistry, Biology and Mathematics, as subjects of study.

Note

a. The Candidate shall have passed individually in each of the principal subjects

b. Candidates who have completed diploma or vocational course through correspondence shall not be eligible for any of the courses mentioned above

3. Optimum Duration of the course :

Duration shall be for a period of Four (4) years including s (1) one year of internship

4. INFRASTRUCTURE:

1. Four Labs each with an area of 900 Sq. ft
2. Three Class rooms each with a capacity for 10 students. **(each not less than 600 sq. ft. each)**

3. Lab facilities for Basic Medical Sciences as per the criteria mentioned in Basic Medical Sciences requirements.
4. Lab equipment's for Basic Medical Sciences as per the criteria mentioned in Basic Medical Sciences requirements.
5. a. Board (Black or White) - Mandatory
   b. Multimedia / Computer and its accessories / LCD Projector

5. MINIMUM REQUIREMENTS FOR TEACHING BASIC MEDICAL SCIENCES SUBJECTS:

1. ANATOMY:

Specimens, Models, Charts, Dissected body parts, slides as per syllabus.

2. PHYSIOLOGY:

One Microscope per student, One Stethoscope per student, demonstration equipment for complete blood count, Blood
grouping and matching kits, B.P apparatus one per student,
Staining apparatus with few common stains, Spirometer for demonstration purpose.

BIOCHEMISTRY:

Digital balance, titration apparatus, laboratory glassware, calorimeter, spectrophotometer, pH meter, basic kits for
determining urine sugars / ketone bodies, proteins etc.

MICROBIOLOGY:

Microscope, Hot air oven, Autoclave, Incubator ,
Electronic analytical balance ,Water bath ,Vortex mixer ,
Laminar air flow chamber ,Glass wares (beaker, conical flask, pipettes, test tubes, petridish) ,Refrigerator ,Felix & drayer's tube ,Bunsen burner ,Culture media ,Centrifuge ,Inoculation loop ,
Latex agglutination tiles ,Vdrl rotator ,Mcintosh filder anaerobic
jar , Micro titre plate, Inspisator.

3. PATHOLOGY:

Haemocytometer – rbc & wbc count ,Haemoglobinometer ,Wintrobes tube, Westergren tube & stand ,Lancet ,Capilary tube ,Whatsman no.1 filter paper, Centrifuge, Microscope, Glass slide, Test tubes, Blood group reagent, Dpx, Coplin jar, H & e stain ,Leishman stain, brilliant cresyl blue stain, pasteur pipette, special stains, diluting fluid - rbc, wbc, plt, pap stain, Coomb's reagent, Phosphate buffer, Distilled water

1. Teaching Staff:

1. Principal / Professor & HOD,
    a. MS - Ophthalmology 5 yrs. Teaching Experience in a Medical College
    b. M.Sc. Optometry (2 years course) with 10 years teaching experience in a College

2. Associate Professor:

a. M.Sc. Medical (Anatomy, Physiology, Biochemistry, Microbiology,pathology,Pharmocology) with 6 years teaching experience
M.Sc. MLT (2 years course) Micorbiology/Biochemistry/Hematology with 7 years teaching experience

b. MD(Microbiology/Biochemistry/Pathology/Physiology/Pharmocology)
c. MS(Anatomy)

As per MCI/NMC norms

d. M.Sc. Phd - minimum 3 year
e. M.Sc. Optometry (2 years course) - minimum 07 years teaching experience
f. M.Sc. Physics - minimum 07 years teaching experience

3. Assistant Professor:

a. M.Sc. Medical (03 years course) (Anatomy, Physiology, Biochemistry, Microbiology,Pathology,Pharmocology) with 3 years teaching experience
M.Sc. MLT (2 years course) Micorbiology/Biochemistry/Hematology with 4 years teaching experience

b. M.Sc. Optometry Phd.
c. M.Sc. Optometry :02 years course teaching experience
d. M. D.(Biochemistry, Microbiology, Pathology/Pharmocology) - As per MCI/NMC norms
e. MS(Anatomy)-As per MCI/NMC norms
f. M.Sc. Physics :03 years course teaching experience

4. Lecturer:

- M.Sc. Medical (03 years course) (Anatomy, Physiology, Biochemistry, Microbiology,Pathology,Pharmocology)
  M.Sc. MLT (2 years course) Micorbiology/Biochemistry/Hematology
- M.Sc. Optometry (02 years course)

c. Msc. Physics with 3 years teaching experience

5. Tutor:

B.Sc. Optometry

Minimum no. of Faculty in each Department:

- **Anatomy :** ONE
- **Physiology**: ONE
- **Biochemistry:** ONE
- **Microbiology:** ONE

- **Pathology:** ONE
- **Pharmocology:**ONE
- **Physics:** ONE
- M.Sc. Optometry:Three
- **B.Sc.** Optometry **Tutors:** At least ONE in each dept.
- **Lab Instructors :** At least ONE in each departmental practical laboratory
- Qualified Technician with 3 years experience.: ONE

ONLY for Anatomy & Physiology subjects visiting faculty services can be availed subject to the qualification criteria for respective subjects

1- Systemic & Ocular Diseases: MBBS with MD in General Medicine

Part time teachers services can be availed for subsidiary subjects

Note: **Mentioned in the syllabus be made available mandatorily**

6. **Minimum number of faculty:** As mentioned above

7. **Library:** Standard reference books and journals should be made available in each of the subject speciality.

   Note: **Books mentioned in the syllabus be made available mandatorily**

8. **A Hospital /Laboratory:**

Optometrists are physicians who diagnose and treat vision problems. To practice as an optometrist, students must learn how to examine patients, diagnose vision disorders, treat vision problems and educate patients on common eye-related concerns.

- In optometric patient evaluation and management, the focus is to refine the student's clinical and application skills to make him/her an Optometrist. The student will learn about the diagnostic approaches and management of various ocular disorders, binocular vision anomalies, assessment and dispensing of contact lenses and Low vision aids.

Hospital Should be well equipped with all the machines (infrastructur mentioned below) required to learn by the students in their academic year

Functioning Equipment:

List of equipment/ lab facility required in optometry :

1. **Hospital/Vision Care(optometry) Facility**

Sl. No.	Description	Nos	Specification
1	Out patients	100	100 patients daily

2	Labs	6	1. Physics Lab 2. Work shop 3. Visual Lab for Refraction 4. Contact lens clinic 5. Low vision clinic 6. Orthoptics clinic

2. **List of Instruments Required in Mechanical Workshop**

Sl.No.	Description of Items	Qty
1	Spherical Machine	1
2	Cylindrical Machine	1
3	Cylindrical Button	5nos
4	Cylindrical Sticks	2nos
5	Guage of Brass	1 set
6	Spherical Blocks – oridinary	8 doz
7	Pressure Pins	1 set
8	Centre Nipples	4 doz
9	Cyl : Governor	2
10	Lensometer	1
11	Heater, Hanner, Pile, Grinding, Stone etc.	1 set
12	Grinding Powder MA 2	2kg
13	Grinding Powder MA 3	2 gk
14	Rough Blank buttons	100
15	Serium oxide Grade A	10 kg
16	Tar Pitch	25 kg
17	Cylindrical lap toric base	1 set
18	Cylindrical Governor	1
19	Centre Nipples	1 doz
20	Spherical Lamp	1 set
21	Velvette Polishing Cloth	5m

3. **List of instruments Required in Physical and geometrical optics Laboratory**

Sl. No.	Description of Items	Qty.
1	Nodel Slide Assembly 'Leader' complete with Optical Bench	2
2	Spectrometer 6" scale VR 1 minute in box	4
3	Lens Convex Sonm Dia – FL 10 cm	4
4	- do – 20 cm	4
5	- do – 30 cm	4
6	- do – 15 cm	4
7	Glass Slab 100 x 50 x 18 mm	4
8	Air Wedge	4
9	Plane Diffraction Gratings – 15,00 lines per inch area – 50 x 32	4
10	Small Angle Prisms Angle 300, size 30 x 30 mm face Optical Polished	4
11	Refracting gratings	2
12	Concave Mirror – 5 cmDia – 20 cm, F.L	4
13	- do – 15 cm F.L.	4
14	- do – 10 cm F.L.	4
15	Convex Mirror – 15 cm F.L.	4
16	- do – 25 cm F.L.	4
17	Watch Glass. 7.5. cm dia	8
18	Glass Prism for pin Tracing Experiment	4
19	Spectrometer Prism, DF	4
20	Illuminated wire guaze	4
21	Lens stand single	4
22	White screen – wooden	4

23	Retort stand 20 cm x 15 cm base with 100 cm x 8 mm dia	12
24	Iron clamps with boss head (large size)	12
25	Air film Rectangular frame for critical angle experiment	4
26	Biprism low angle 40 x 30 mm	4
27	Newtons Ring Apparatus	4
28	Plano convex lens 5 cm dia, wo F.I	4
29	Plano concave lens 5 cm	4
30	Pointer head for liquid line experiment	4
31	Optic lever single with 1 ¼ " x 1 ¼ " mirror	2
32	- do – double	2
33	Students Polarimeter 'focus' model – SPJ.8(B) fitted with hi quartz	2
34	Sodium Vapour Lamp – imported make with Indian leak Transformer 30 x –35 walts (Bulb + Transformer)	4
35	Mercury Vapour Lamp with choke to work on 220 volts Ac main	4
36	Drawing Boards superior	8
37	Sherometer	4
38	Meter scale one meter 1st marked	30
39	Half meter scale	30
40	washer for polarimeter tube	6
41	screw drive	1
42	cutting player	1
43	nose player	1
44	source for mirror and lens experiment	4
45	lens stands	6
43	lens stands for convex and concave lens	2
44	reflectors for NR AW	4

45	plane mirror strip 1" x3"	6
46	Pointer	2
47	60 w bulbs	4
48	Wooden screen	4
49	Reading lens	4
50	LED torch	4
51	Planks constant apparatus	5
53	Photo diode	5
54	6 m measuring tape	2
55	Object for RP	2
56	Sodium vapor lamp 100w	6
57	Mercury vapor lamp 100w	2
58	Funnel stand	2
59	Clamps for stand	2
60	Oil can	2
61	Grease	2
62	Black cloth cover for spectrometer and traveling microscope	6
63	Cello tape	2
64	Stickers	2
65	First aid box	2
66	Paper knife	2
62	Punching machine	2
63	Sugar	1 kg
64	Kitchen scale (to weigh 10 gm) dial type	2
65	Wooden hammers.	2

4. Demonstration Room for 2nd year and 3rd year students

Sl. No.	Description	Qty
1	Trial Set	4
2	Prism bar	2
3	Jackson cross cylinder	4
4	Streak Retinoscope, Welch Allyn USA Make	2
5	Near Vision Chart	4
06	Trial Frame	4
07	Keratometer B & L Type	1
08	Pediatric trial frame	2
09	Gonioscope Lens	1
10	Indirect Ophthalmoscope, Keeler Basic with out 20D Lens LED Light	1
11	Direct Ophthalmoscope Keeler UK Make	2
12	70D, 90D Lens	2
13	Amsler Chart	2
14	Contrasensitvity Chart (functional acuity chart)	1
15	Acuity LED Vision Chart	2
16	Manual Lens Meter	1
17	Colour vision chart (Ichihara chart)	2
11	Near Vision Chart	4
12	Rose Bengal Staining	2
13	Fluoresine Strips (100 pcs contains one box)	2
14	Tear film stripe (100 pcs contains one box)	2
15	Trial Frame	4
16	Pediatric trial frame	2
17	Fresenal prism set	1

18	Gonioscope Lens	1
19	Indirect Ophthalmoscope Welch Allyn with 20D Lens	1
20	Auto Lens Meter Model D-903	1
21	Slit lamp chair unit	2

5. Contact lens clinics for 3rd year and interns

Sl. No.	Description	Qty
1	Trial Set	4
2	Prism bar	2
3	Jackson cross cylinder	4
4	Streak Retinoscope, Welch Allyn USA Make	2
5	Near Vision Chart	4
6	Trial Frame	4
7	Keratometer B & L Type	1
8	Pediatric trial frame	2
9	Indirect Ophthalmoscope Keeler Basic with 20D Lens LED Light	1
10	Streak Retinoscope, Keeler UK Make	2
11	Direct Ophthalmoscope Welch Allyn Make	2
12	70D, 90D Lens	2
13	Acuity LED Vision Chart	1
14	Manual Lens Meter	1
15	Rose Bengal Staining	2
16	Fluoresine Strips (100 pcs contains one box)	2
17	Tear film stripe (100 pcs contains one box)	2
18	Corneal topoghraphy basic model	1

19	RGP trail set	1
20	Soft lens trail set	1
21	Slit lamp chair unit	2

6. Low vision clinics for 3rd year and interns

Sl. No.	Description	Qty
1	Trial Set	4
2	Prism bar	2
3	Jackson cross cylinder	4
4	Streak Retinoscope, Welch Allyn USA Make	2
5	Near Vision Chart log mar chart	4
6	Trial Frame	4
7	Keratometer B & L Type	1
8	Pediatric trial frame	2
09	Indirect Ophthalmoscope Keeler Basic 20D Lens LED Light	1
10	Streak Retinoscope, Keeler UK Make	2
11	Direct Ophthalmoscope Welch Allyn Make	2
12	70D, 90D Lens	2
13	Contrasensitvity Chart (functional acuity chart)	1
14	Acuity LED Vision Chart	1
15	Manual Lens Meter	1
16	Low vision kit (hand magnifier spectacle magnifier	1
17	prism induced magnifier telescope	1
18	Telescope 2x 3x(spectacle mounted – binocular and monocular)- Variable focus preferably micro spiral	1

	oblique miniature telescope	
19	Microscope full field	1
20	Prismatic half eyes +5.0 to +12.0 D binocular	1
21	Hand held magnifiers 2x to 5x	1
22	Pocket magnifier 3x to 10 x	1
23	Stand magnifier 3x to 6x or more (illuminated)	1
24	Near binocular telemicroscope 3x , 4x	1
25	Bioptics 3x to 6x (wide field)	1
26	Binoculars sports glasses 2x to 3x	1
27	Filters clip on .filp up, fit overs	1
28	CCTV (video magnifier) max digital, mini viewer etc	1
29	Special charts (diagnostic)	1
30	Bar readers	1
31	typoscope	1
32	Multiple pin hole discs	1
33	Slit spectacles	1
34	Contact lens (high plus and Minus lens)-20 to -60. +10.0 to +30.0	1
35	Door eye	1
34	Glare free goose neck lamps	1
35	Aids for home trails	1
36	Monoculars 4x to 8x hand held	1
37	Helberk trail clips	1
38	Ocutech diagnostic kit	1
39	Aspheric magnifiers	1
40	Trail set of low vision kit	1

41	Slit lamp chair unit	2

7. Orthoptic clinic/ squint clinic/ peadiatric clinic for 3rd year and interns

Sl. No.	Description	Qty
1	Trial Set	4
3	Jackson cross cylinder	4
4	Streak Retinoscope, Welch Allyn USA Make	2
5	Near Vision Chart	4
6	Trial Frame	4
7	Keratometer B & L Type	1
8	Pediatric trial frame	2
9	Gonioscope Lens	1
10	Indirect Ophthalmoscope	
11	Keeler Basic with 20D Lens LED Light	1
12	Streak Retinoscope, Keeler UK Make	2
13	Direct Ophthalmoscope Welch Allyn Make	2
14	70D, 90D Lens	2
15	Acuity LED Vision Chart	1
16	Manual Lens Meter	1
17	Synaptophor	1
18	Torch light	2
19	Pen torch	2
20	Prism bar/ loose prism set	2
21	Cover paddle /Spielmann occluder	2
22	Gulden fixation stick	2

23	Maddox rod	2
24	Maddox wing	2
25	Maddox tangent screen	2
26	WFDT (Dist/Near)	2
27	Allen cards	2
28	Wright figures	2
29	Tumbling E	2
30	Eye patches	2
31	Interesting distance and near target	2
32	Accommodative near targets (Finger puppets)	2
33	Portable slit lamp	2
34	Papoose board	2
35	Wire lid speculums (infant and child size)	2
36	Loose retinoscopy lenses	2
37	Titmus or Randot test	2
38	Bagolini lens	2
39	Handheld tonometers	2
40	Calipers	2
41	Hess charting screen	2
42	Anaglyphic glasses	2
43	Basic Vision therapy kit	2

9. Clinical work load

Type of procedure	No. of procedure has to perform by optometry students
• Optometric workup to detect the ocular disorders (Ocular & relevant systemic history): History taking, External examination	300 patients

• Visual acuity assessment and refraction, Slit lamp examination, applanation Tonometry, Drugs and method of application,Do's and don'ts – Pupillary dilatation,fundus evaluation)	300 patients
• Instrumentation: I. Keratometry reading II. Direct ophthalmoscopy III. Applanation Tonometry IV. Lensometry V. Slit lamp examination VI. Indirect ophthalmoscopy VII. visual field VIII. Gonioscopy, IX. imaging technology including ultrasound X. retinal imaging techniques XI. corneal topography including ORBSCAN XII. Electrophysiology,	 200 patents 200 patients 300 patients 300 patients 300 patients 100 patients 100 patients 200 patients 200 patients 200 patients 200 patients 100 patients
• Contact lens workup: Rigid gas permeable lenses and soft lenses in refractive errors and in specialized condition, Fluorescein pattern, including dispensing	100 patients
• Low vision workup: dispensing of aids and counseling	100 patients
• Orthoptic workup: Tests for phorias and tropias, non-surgical management	150 patients

A Logbook to be maintained with details of all the postings for each of the student.

10.Minimum faculty requirements for seats sanctioned

Subject	For 20 seats intake	For 30 Seats intake	For 40 seats intake
MS - Ophthalmology or with DM(Ophthalmology) or M.Sc. Optometry (2 years course) **(HOD)**	01	01	01
Associate Prof MS - Ophthalmology or with DM(Ophthalmology) or M.Sc. Optometry (2 years course)	02	03	04
Lecturer / Assistant Prof / Associate Prof - Anatomy	01	01	01
Lecturer/Assistant Prof / Associate Prof - Physiology	01	01	01
Lecturer/Assistant Prof / Associate Prof – Biochemistry	01	01	01

Lecturer/Assistant Prof / Associate Prof – Microbiology	01	01	01
Lecturer/Assistant Prof / Associate Prof – Pathology	01	01	01
Lecturer/Assistant Prof / Associate Prof-physics	01	01	01
Lecturer/Assistant Prof / Associate Prof-pharmacology	01	01	01
Lecturer/Assistant Prof / Associate Prof-ophthamology	01	01	01
Tutor (B.Sc. **Sc Optometry)**	01	02	02
Clinical Workload & Infrastructure			
Physics Lab – 1000-1500 sq.ft	01	01	02
Optometric workup to detect the ocular disorders (Ocular & relevant systemic history): History taking, External examination	300patients	300patients	400patients
Visual acuity assessment and refraction, Slit lamp examination, applanation Tonometry, Drugs and method of application,Do's and don'ts – Pupillary dilatation,fundus evaluation)	300patients	300patients	400patients
Instrumentation:			
I. Keratometry reading	200 patents	200 patents	300 patents
II. Direct ophthalmoscopy	200 patients	200 patients	300patients
III. Applanation Tonometry	300 patients	300 patients	400 patients
IV. Lensometry	300 patients	300 patients	400 patients
V. Slit lamp examination	300 patients	300 patients	400 patients
VI. Indirect ophthalmoscopy	100 patients	100 patients	200 patients
VII. visual field	100 patients	100 patients	200 patients
VIII. Gonioscopy,	200 patients	200 patients	300 patients
IX. imaging technology including ultrasound	200 patients	200 patients	300 patients
X. retinal imaging techniques	200 patients	200 patients	300 patients
XI. corneal topography including ORBSCAN	200 patients	200 patients	300 patients
XII. Electrophysiology,	100 patients	100 patients	200 patients
Contact lens workup: Rigid gas permeable lenses and soft lenses in refractive errors and in specialized condition, Fluorescein pattern, including dispensing	100 patients	100 patients	150 patients
Low vision workup: dispensing of aids and counseling	100 patients	100 patients	150 patients
Orthoptic workup: Tests for phorias and tropias, non-surgical management	150 patients	150 patients	200 patients