



ARYABHATTA KNOWLEDGE UNIVERSITY

Chanakya National Law University Campus, Near Bus Stand, Mithapur, Patna - 800 001
E-mail:- akuniv10@gmail.com

Notification

In exercise of the powers conferred by section 29 (2) of the Aryabhatta Knowledge University Act, 2008, the Department of Education, Government of Bihar has approved the Ordinance for the award of Degree Para Medical Bachelor Degree Course vide letter no. 15/एम 1-138/2015-1180 दिनांक 14.06.2017 may be called namely, " B.Sc. in Medical Laboratory Technology", "B.Sc. in Operation Theatre & Anesthesia Technology", "B.Sc. in Optometry & Ophthalmic Technology", and " B.Sc. in Radio Diagnosis & Imaging Technology" is being notified herewith.

The said Ordinance shall be deemed to have come into force with effect from the year 2012-13.

By order of the Vice Chancellor
Sd. /-

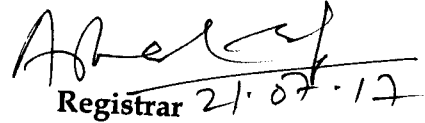
Registrar
Aryabhatta Knowledge University, Patna

Memo No. : 012/ Acad/09-03/AKU/2015(Vol-IV)-3142

Date:- 21-07-2017

Copy to the following for information and necessary action:

1. The Principal Secretary, H.E. the Governor-cum-Chancellor, Rajbhawan, Bihar.
2. The Principal Secretary, Education Department, Government of Bihar.
3. The Principal Secretary, Health Department, Government of Bihar.
4. The Additional Secretary, Education Department, Government of Bihar.
5. The Dean, Health & Medicine, Aryabhatta Knowledge University, Patna.
6. The Director, Public Health Institute, Ashok Rajpath, Patna.
7. The Controller of Examination, Aryabhatta Knowledge University, Patna.
8. PA to Vice-Chancellor/PVC Office/ Registrar Office/All officers of AKU, Patna.


Registrar 21.07.17

Aryabhatta Knowledge University, Patna

Ordinances
for
Para Medical Bachelor Degree Course



Aryabhatta Knowledge University, Patna

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Ordinances of Para Medical Bachelor Degree Course

The Ordinances & Syllabus are subject to modifications by the standing Board of studies for Paramedical courses time to time.

Ordinances:-

1. Duration of course-

The period of certified study & Practical training will be - 3 years + One Year internship (after completion of the 3 years course)

2. Medium of instruction-

Medium of teaching instruction & examination shall be in English.

3. Eligibility for admission -

(A) for First Year

(i) A candidate seeking admission to the Bachelor degree course in Paramedical technology should have passed in 10+2 or equivalent exam (Bihar Intermediate council, CBSE, ICSE or other Boards) with Physics, chemistry, Biology and English as Principal Subjects of study.

(ii) Passed in Vocational higher secondary education courses recognized by Govt. body (state or central) with physics, chemistry, Biology & English as equivalent to 10+2 examination.

(iii) The candidate who is going to appear in the final examination of 10+2 or intermediate or equivalent will also be eligible for such courses.

(B) for Lateral Entry (Second Year)

(i) For Lateral entry to second year in Bachelor degree course in Paramedical technology, candidates should have passed two years Diploma in respective faculty from a Govt. recognized Paramedical Institute or Board.

Note:- Admission is done of candidates selected by qualifying exam conducted by Board authorized by Govt. of Bihar.

4. Attendance -

(a) Every candidate should have attendance at least 75% of total number of classes conducted in an academic year from date of commencement of the term to the last working day for that year in theory & practical separately. Only such candidates are eligible for the University examination

(b) A student who does not fulfill the minimum required attendance in an academic year must complete the required attendance through extra classes assigned by the institute.

A. K. Singh
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- (c) Condonation of shortage in aggregate attendance up to 10% (between 65% and 75%) in every year may be granted by the Institute's academic committee under special circumstances (candidates having good academic and behavioral record).

Relaxation will be given in special circumstances on medical ground for 10% extra.

Note:- Total condonation shall not exceed more than 15% for a particular candidate.

5. Internal Assessment-(IA)

- (a) Internal assessment will be done in each subject and the marks will be awarded to the candidate as detailed in the Scheme of examination. There should be a minimum interval of four months between two periodical tests (theory & practical) in one academic year.

The marks of Internal Assessment shall be communicated to the University fifteen days before the commencement of University exam.

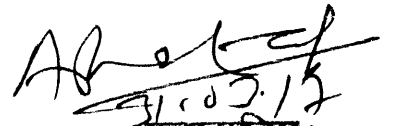
- (b) Best of two periodical tests will be communicated to University.
- (c) If a candidate is absent for any one of test due to genuine and satisfactory reasons, such a candidate may be given a re-test within three weeks.
- (d) Internal Assessment question pattern will be same as of University exam.

6. Subjects and hours of teaching for theory and practical.

- (a) Subjects and number of hours of teaching, theory and practical in 1st year 2nd year and 3rd year are as shown in TABLE-1, TABLE-2 & TABLE-3 for a particular bachelor course.
- (b) Main & Subsidiary subjects are common for all the courses in paramedical bachelor degree technology in 1st academic year.
- (c) For 2nd & 3rd year the main subjects will be different for each course.

7. Schedule of Examination-

- (a) Authority for conducting the examination and award of degree is controller of examination, Aryabhatta Knowledge University (AKU).
- (b) Regular examination- shall be conducted at the end of 1st year 2nd year and 3rd year (Both main and subsidiary subjects)
 1st year - common for all main subjects without practical university examination.
 2nd + 3rd year - University exam(Both theory & Practical)
- (c) Supplementary examination shall be conducted after six weeks of final examination results. Scheme of examination will be same as that of regular exam.
- (d) Distribution of marks in Internal Assessment and university examination in both theory and practical in both main and subsidiary subjects are shown in TABLE -4, TABLE -5, TABLE -6 for each year.


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8. Passing criteria:-

(i) 1ST YEAR

(a) Main subjects-

A candidate is declared to have passed in a subject if he / she secures 50% of marks in university exam and Internal Assessment added together in main subjects.

(b) Grace Marks- As per AKU rules.

(c) Subsidiary subjects-

A minimum prescribed passing marks in subsidiary subjects should be 30% of marks in university & Internal Assessment added together.

(ii) 2nd & 3rd year

(a) Main subject-A candidate is declared to have passed the examination in a subject if he/she secures 50% of marks in theory & practical separately in university exam . Marks obtained in internal assessment will be added to the theory paper.

(b) Subsidiary subject- Same as 1st year

(c) If a candidate fails in either theory or practical exam in 2nd or 3rd year will have to appear for both in next examination.

9. Carry over benefit-

(a) 1st year - A candidate who fails in the subjects shall be permitted to carry over these subjects to 2nd year but must pass before proceeding into 3rd year exam.

(b) 2nd year - candidate is permitted to carry over subjects but must pass before appearing for 3rd year exam.

Conclusion -A candidate should have cleared all the main and subsidiary paper of 1st year and 2nd year before appearing for 3rd year University exam.

(c) If any candidate is not able to clear all his subjects (1st year, 2nd year & 3rd year) from the university exam within eight years from date of admission ,his candidature will be cancelled permanently from the institution.

(d) For lateral entry courses- Time limit for clearance of subjects (2nd yr, 3rd yr.) will be seven years.

10. Distribution of class -

Distinction - 75% in main subjects as grand total

1st division 60% in main subjects as grand total

2nd division 50% in main subjects as grand total

11. Award of degree

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A candidate will be eligible for Degree of Bachelor of science in the course where they have undergone the prescribed course of study for period of not less than three years and have passed the prescribed examination in all subjects with completion of compulsory one year internship.

12. Clinical posting

- (a) 2nd year - Practical & clinical classes will be held in respective department in PHI & PMCH.
 (b) 3rd Year- Depends on type of courses in PHI or PMCH.

13. Criteria for Internship - One Year duration (after completion of the course)

- (a) Six Months internship in PMCH in respective faculties .
 (b) Six months rotating internship in--(i) Govt. of Bihar hospitals
 (ii) Central Govt. / Autonomous hospitals (iii) Specialised NGO hospitals

14. Name of Para Medical Degree Courses -

- (i) B.Sc. in MEDICAL LABORATORY TECHNOLOGY
 (ii) B.Sc. in OPERATION THEATRE & ANESTHESIA TECHNOLOGY
 (iii) B.Sc. in OPTOMETRY & OPHTHALMIC TECHNOLOGY
 (iv) B.Sc. in RADIO DIAGNOSIS & IMAGINE TECHNOLOGY

15. Distribution of type of Questions and marks for various subject

Table -A

Main subject having maximum marks =70

Sl.no.	<u>Theory</u> Type of Question	No. of Question	Marks
1	Long type	2 (2 of 3)	2x11 = 22
2	Short type	4 (4 of 6)	4x7 = 28
3	MCQ or one/two line type	10 (10 of 12)	10x2 = 20

Total - 70

Table -B

Main subject + Subsidiary subject having maximum marks =35

Sl.no.	<u>Theory</u> Type of Question	No. of Question	Marks
1	Long type	1 (1 of 2)	1x11 = 11
2	Short type	2 (2 of 3)	2x7 = 14
3	MCQ or one/two line type	5 (5 of 6)	5x2 = 10

Total - 35

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Table -C
Communicative skills (English subject) having maximum marks =35

Sl.no.	Theory Type of Question	No. of Question	Marks
1	Essay type	1 (1 of 2)	1x10 = 10
2	Comprehension ability	1	1x5 = 5
3	Precise writing	1	1x5 = 5
4	Grammar Common error Fill in the blanks Synonyms or antonyms	15	1 x 15 = 15
Total --			35

Table -D
Public Health / Computer subject having maximum marks =35

Sl.no.	Theory Type of Question	No. of Question	Marks
1	Short type	5 (5 of 6)	2x5 = 10
2	MCQ or One/Two Line	10 (10 of 12)	1x10 = 10
3	Practical		15
Total -			35

TABLE-1

SUBJECT

B.Sc. in MEDICAL LABORATORY TECHNOLOGY

1ST YEAR TEACHING HOURS (TOTAL- 500HRS)

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	TUTORIAL (hrs)	TOTAL (hrs)
(1) ANATOMY	70	20	10	100
(2) PHYSIOLOGY	70	20	10	100
(3) PATHOLOGY	70	20	10	100
(4)				
(a) MICRO-BIOLOGY+	35	10	5	
(b) BIO-CHEMISTRY	35	10	5	100

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TOTAL	280	80	40	400
<u>SUBSIDIARY SUBJECT</u>				
(1) COMMUNICATION SKILLS (ENGLISH)	50			50
(2) COMPUTER SKILL	20	20	10	50
TOTAL	70	20	10	100

TABLE-2SUBJECT

B.Sc. in MEDICAL LABORATORY TECHNOLOGY
2ND YEAR- TEACHING HOURS (TOTAL- 500HRS)

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	TUTORIAL (hrs)	TOTAL (hrs)
(1). PATHOLOGY	70	20	10	100
(2). (a) MICRO- BIOLOGY (b) ADVANCE PATHOLOGY	35 35	15 15	25 25	150
(3). BIO-CHEMISTRY	70	30	50	150
TOTAL	210	80	110	400
<u>SUBSIDIARY SUBJECT</u>				
(1) COMPUTER	20	20	10	50
(2) PUBLIC HEALTH	20	20	10	50
TOTAL	40	40	20	100

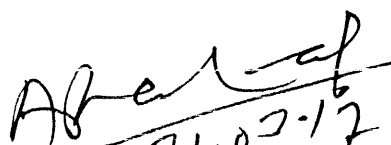

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TABLE-3**SUBJECT****B.Sc. in MEDICAL LABORATORY TECHNOLOGY
3RD YEAR- TEACHING HOURS (TOTAL- 900HRS)**

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	CLINICAL POSTING (hrs)	TOTAL (hrs)
(1) PATHOLOGY	50	50	200	300
(2) (a) BIO-CHEMISTRY	25	25	100	300
(b) MICRO-BIOLOGY	25	25	100	
(3). LAB MANAGEMENT	50	50	200	300
TOTAL	150	150	600	900
SUBSIDIARY SUBJECT				
(1) PROJECT WORK IN MEDICAL LABORATORY TECHNOLOGY			IN ONE MONTH	IN ONE MONTH

TABLE-4**SUBJECT****B.Sc. in MEDICAL LABORATORY TECHNOLOGY****DISTRIBUTION OF MARKS FOR 1ST YEAR UNIVERSITY EXAM (TOTAL500-MARKS)**

MAIN SUBJECT	THEORY HRS. MARKS	IA THEORY MARKS	GRAND TOTAL MARKS
(1) ANATOMY	3 hrs 70	30	100
(2) PHYSIOLOGY	3 hrs. 70	30	100
(3) PATHOLOGY	3 hrs. 70	30	100
(4) (a) MICRO-BIOLOGY	3 hrs. 35	15	100
(b) BIO-CHEMISTRY	35	15	
TOTAL	280	120	400

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SUBSIDIARY SUBJECT	WRITTEN PAPER HRS. MARKS	IA THEORY TOTAL MARKS	PRACTICAL	TOTAL MARKS
(1) COMMUNICATIVE SKILLS (ENGLISH)	1.5 hrs. 35	15	-----	50
(2) COMPUTER SKILLS	1.5 hrs. 20	15	15	50
TOTAL	55	30	15	100

TABLE-5

SUBJECT

B.Sc. in MEDICAL LABORATORY TECHNOLOGY

DISTRIBUTION OF MARKS IN 2ND YEAR UNIVERSITY EXAM (TOTAL-500MARKS)

MAIN SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL PRAC+VIVA= TOTAL	GRAND TOTAL MARKS
(1) PATHOLOGY	3 hrs. 70	20 + 10 = 30	---	100
(2) (a) MICRO-BIOLOGY	1.5 hrs 35	10 + 05 = 15	20 + 5 = 25	150
(b) ADVANCE PATHOLOGY	1.5 hrs 35	10 + 05 = 15	20 + 5 = 25	
(3) BIO-CHEMISTRY	3 hrs. 70	20 + 10 = 30	40 + 10 = 50	150
TOTAL	210	90	100	400

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<u>SUBSIDIARY SUBJECT</u>	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL TOTAL	GRAND TOTAL MARKS
(1) COMPUTER	1.5 hrs 20	10 + 05 = 15	15	50
(2) PUBLIC HEALTH	1.5 hrs 20	10 + 05 = 15	15	50
TOTAL	40	30	30	100

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TABLE-6
SUBJECT
B.Sc. in MEDICAL LABORATORY TECHNOLOGY

DISTRIBUTION OF MARKS IN 3RD YEAR UNIVERSITY EXAM (TOTAL-500 MARKS)

MAIN SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL PRAC+VIVA= TOTAL	GRAND TOTAL MARKS
(1) PATHOLOGY	3 hrs 70	20 + 10 = 30	40 + 10 = 50	150
(2) (a) BIO-CHEMISTRY	1.5 hrs. 35	10 + 5 = 15	20 + 05 = 25	150
(b) MICRO-BIOLOGY	1.5 hrs. 35	10 + 5 = 15	20 + 05 = 25	
(3) LAB MANAGEMENT	3 hrs 70	20 + 10 = 30	40 + 10 = 50	150
TOTAL	210	90	150	450

SUBSIDIARY SUBJECT

PROJECT WORK IN MEDICAL LABORATORY TECHNOLOGY		---	50	50
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MAIN SUBJECT+ SUBSIDIARY SUBJECT----- TOTAL 500

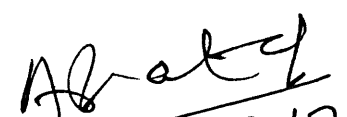

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SUBJECT

B.Sc. in OPERATION THEATRE & ANESTHESIA TECHNOLOGY

SUBJECT - 1ST YEAR- TEACHING HOURS (TOTAL- 500HRS)

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	TUTORIAL (hrs)	TOTAL (hrs)
(1) ANATOMY	70	20	10	100
(2) PHYSIOLOGY	70	20	10	100
(3) PATHOLOGY	70	20	10	100
(4) (a) MICRO-BIOLOGY	35	10	5	100
(b) BIO-CHEMISTRY	35	10	5	
TOTAL	280	80	40	400
<u>SUBSIDIARY SUBJECT</u>				
(1) COMMUNICATION SKILLS (ENGLISH)	50			50
(2) COMPUTER SKILL	20	20	10	50
TOTAL	70	20	10	100

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TABLE-2
SUBJECT
B.Sc. in OPERATION THEATRE & ANESTHESIA TECHNOLOGY
SUBJECT - 2ND YEAR- TEACHING HOURS (TOTAL- 500HRS)

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	TUTORIAL (hrs)	TOTAL (hrs)
(1)				
(a) APPLIED PATHOLOGY	35	35	5	
(b) APPLIED MICROBIOLOGY	35	35	5	150
(2) INTRODUCTION TO O.T. TECHNOLOGY	70	70	10	150
(3)				
(a) GENERAL PHARMACOLOGY	35	10	5	
(b) MEDICINE RELEVANT TO O.T. TECHNOLOGY	35	10	5	100
TOTAL	210	160	30	400
SUBSIDIARY SUBJECT				
(1) COMPUTER	20	20	10	50
(2) PUBLIC HEALTH	20	20	10	50
TOTAL	40	40	20	100

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TABLE-3**SUBJECT****B.Sc. in OPERATION THEATRE & ANESTHESIA TECHNOLOGY****SUBJECT - 3RD YEAR- TEACHING HOURS (TOTAL- 900HRS)**

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	CLINICAL POSTING (hrs)	TOTAL (hrs)
(1) OPERATION THEATRE- TECHNOLOGY CLINICAL	50	50	200	300
(2) OPERATION THEATRE TECHNOLOGY APPLIED	50	50	200	300
(3) OPERATION THEATRE TECHNOLOGY ADVANCED	50	50	200	300
TOTAL	150	150	600	900
SUBSIDIARY SUBJECT				
PROJECT WORK IN OPERATION THEATRE TECHNOLOGY		---	IN ONE MONTH	IN ONE MONTH

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TABLE-4**SUBJECT****B.Sc. in OPERATION THEATRE & ANESTHESIA TECHNOLOGY****DISTRIBUTION OF MARKS FOR 1ST YEAR UNIVERSITY EXAM &****INTERNAL ASSESSMENT EXAM (TOTAL- 500MARKS)**

<u>MAIN SUBJECT</u>	<u>THEORY HRS. MARKS</u>	<u>IA THEORY MARKS</u>	<u>GRAND TOTAL MARKS</u>
1. ANATOMY	3 hrs. 70	30	100
2. PHYSIOLOGY	3 hrs. 70	30	100
3. PATHOLOGY	3 hrs. 70	30	100
4. (a) MICRO BIOLOGY	1.5 hrs. 35	15	50
(b) BIO-CHEMISTRY	1.5 hrs. 35	15	50
TOTAL	280	120	400

<u>SUBSIDIARY SUBJECT</u>	<u>WRITTEN PAPER HRS. MARKS</u>	<u>IA THEORY TOTAL MARKS</u>	<u>PRACTICAL</u>	<u>TOTAL MARKS</u>
(1) COMMUNICATIVE SKILLS (ENGLISH)	1.5 hrs. 35	15	-----	50
(2) COMPUTER SKILLS	1.5 hrs. 20	15	15	50
TOTAL	55	30	15	100

MAIN SUBJECT+ SUBSIDIARY SUBJECT-----

TOTAL 500



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TABLE-5

SUBJECT

B.Sc. in OPERATION THEATRE & ANESTHESIA TECHNOLOGY

DISTRIBUTION OF MARKS IN 2ND YEAR UNIVERSITY EXAM&

INTERNAL ASSESSMENT EXAM (TOTAL-500 MARKS)

MAIN SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL PRAC+VIVA= TOTAL	GRAND TOTAL MARKS
1.(a)APPLIED PATHOLOGY	35	10 + 05 = 15	20 + 5 = 25	150
(b)APPLIED MICROBIOLOGY	3 hrs. + 35	10 + 05 = 15	20 + 5 = 25	
2. INTRODUCTION TO OT. TECHNOLOGY	3 hrs. 70	20 + 10 = 30	40 + 10 = 50	150
3. (a) GENERAL PHARMACOLOGY	35	10 + 05 = 15	-	100
(b) MEDICINES RELATED TO OT TECHNOLOGY	3 hrs. + 35	10 + 05 = 15	-----	
TOTAL	210	90	100	400

SUBSIDIARY SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL TOTAL	GRAND TOTAL MARKS
1.COMPUTER	1.5 hrs 20	10 + 05 = 15	15	50
2.PUBLIC HEALTH	1.5 hrs 20	10 + 05 = 15	15	50
TOTAL	40	30	30	100

MAIN SUBJECT+ SUBSIDIARY SUBJECT-----

TOTAL 500

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TABLE-6

SUBJECT

B.Sc. in OPERATION THEATRE & ANESTHESIA TECHNOLOGY

DISTRIBUTION OF MARKS IN 3RD YEAR UNIVERSITY EXAM &

INTERNAL ASSESSMENT EXAM (TOTAL-500 MARKS)

MAIN SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL PRAC+VIVA= TOTAL	GRAND TOTAL MARKS
(1)OPERATION TECHNOLOGY CLINICAL	3 hrs 70	20 + 10 = 30	40 + 10 = 50	150
(2)OPERATION TECHNOLOGY APPLIED	3 hrs. 70	20 + 10 = 30	40 + 10 = 50	150
(3) OPERATION TECHNOLOGY ADVANCE	3 hrs 70	20 + 10 = 30	40 + 10 = 50	150
TOTAL	210	90	150	450

SUBSIDIARY SUBJECT

(1)PROJECT WORK IN <u>OPERATION</u> <u>THEATRE</u> <u>TECHNOLOGY</u>	---	---	50	50
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MAIN SUBJECT+ SUBSIDIARY SUBJECT-----

TOTAL 500

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TABLE-1**SUBJECT****B.Sc. in OPTOMETRY & OPHTHALMIC TECHNOLOGY****SUBJECT - 1ST YEAR- TEACHING HOURS (TOTAL- 500HRS)**

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	TUTORIAL (hrs)	TOTAL (hrs)
(1) ANATOMY	70	20	10	100
(2) PHYSIOLOGY	70	20	10	100
(3) PATHOLOGY	70	20	10	100
(4)	35	10	5	100
a. BIOCHEMISTRY				
b. MICROBIOLOGY	35	10	5	
TOTAL	280	80	40	400
<u>SUBSIDIARY SUBJECT</u>				
(1) COMMUNICATION SKILLS (ENGLISH)	50			50
(2) COMPUTER SKILL	20	20	10	50
TOTAL	70	20	10	100

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TABLE-2**SUBJECT****B.Sc. in OPTOMETRY & OPHTHALMIC TECHNOLOGY****SUBJECT - 2ND YEAR- TEACHING HOURS (TOTAL- 500HRS)**

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	TUTORIAL (hrs)	TOTAL (hrs)
(1) OCCULAR PHARMACY & PHARMACOLOGY	70	20	10	100
(2) A. (a) OPTIC (b) REFRACTION B. OPHTHALMIC INSTRUMENTS & APPLIANCES	35 35	25 25	15 15	150
3. INVESTIGATIVE OPHTHALMOLOGY & ORTHOPTIC	70	50	30	150
TOTAL	210	120	70	400
SUBSIDIARY SUBJECT				
(1) COMPUTER	20	20	10	50
(2) PUBLIC HEALTH	20	20	10	50
TOTAL	50	30	20	100

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TABLE-3

SUBJECTB.Sc. in OPTOMETRY & OPHTHALMIC TECHNOLOGYSUBJECT - 3RD YEAR- TEACHING HOURS (TOTAL- 900HRS)

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	CLINICAL POSTING (hrs)	TOTAL (hrs)
(1) (a) CLINICAL & ADVANCED ORTHOPTICS	25	25	100	300
(b) CLINICAL & ADVANCED OPTICS	25	25	100	
(2) (a) CONTACT LENS CLINICAL & ADVANCED REFRACTION	25	25	100	300
(b) COMMUNITY OPHTHALMOLOGY INVESTIGATIONS IN CLINICAL OPHTHALMOLOGY	25	25	100	
(3) (a) EYE BANK	25	25	100	300
(c) OPHTHALMIC O.T. MANAGEMENT	25	25	100	
TOTAL	150	150	600	900
<u>SUBSIDIARY SUBJECT</u>				
PROJECT WORK IN OPHTHALMOLOGY TECHNOLOGY	IN ONE MONTH			IN ONE MONTH



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TABLE-4
SUBJECT
B.Sc. in OPTOMETRY & OPHTHALMIC TECHNOLOGY

DISTRIBUTION OF MARKS FOR 1ST YEAR UNIVERSITY EXAM (TOTAL- 500 MARKS)

<u>MAIN SUBJECT</u>	<u>THEORY</u> HRS. MARKS		<u>IA</u> (THEORY MARKS)	<u>GRAND</u> <u>TOTAL</u> <u>MARKS</u>	
(1) ANATOMY	3 hrs.	70	30	100	
(2) PHYSIOLOGY	3 hrs.	70	30	100	
(3) PATHOLOGY	3 hrs.	70	30	100	
(4) (a) BIOCHEMISTRY	1.5 hrs	35	10	100	
(b) MICROBIOLOGY	1.5 hrs	35	10		
TOTAL		280	120	400	
<u>SUBSIDIARY</u> <u>SUBJECT</u>	<u>WRITTEN</u> <u>PAPER</u> HRS. MARKS		<u>IA</u> <u>THEORY</u> <u>TOTAL</u> <u>MARKS</u>	<u>PRACTICAL</u>	<u>TOTAL</u> <u>MARKS</u>
(2) COMMUNICATIVE SKILLS (ENGLISH)	1.5 hrs.	35	15	-----	50
(2) COMPUTER SKILLS	1.5 hrs.	20	15	15	50
TOTAL		55	30	15	100

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TABLE-5

SUBJECT

B.Sc. in OPTOMETRY & OPHTHALMIC TECHNOLOGY

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1099DISTRIBUTION OF MARKS IN 2ND YEAR UNIVERSITY EXAM (TOTAL-500 MARKS)

MAIN SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL PRAC+VIVA= TOTAL	GRAN D TOTAL MARK S
(1) OCULAR PHARMACY & PHARMACOL OGY	3 hrs. 70	20 + 10 = 30		100
(2) A (a) Optic (b) REFRACTION	1.5 hrs 35	10 + 05 = 15	20 + 05 = 25	150
B. OPHTHLAMIC INSTRUMENTS & APPLIANCES	1.5 hrs 35	10 + 05 = 15	20 + 05 = 25	
(3) INVESTIGATIVE OPHTHALMOLOGY	1.5 hrs 35	10 + 05 = 15	20 + 05 = 25	150
& ORTHOPTIC	1.5 hrs 35	10 + 05 = 15	20 + 05 = 25	
TOTAL	210	90	100	400

SUBSIDIARY SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL TOTAL	GRAND TOTAL MARKS
1.COMPUTER	1.5 hrs 20	10 + 05 = 15	15	50
2.PUBLIC HEALTH	1.5 hrs 20	10 + 05 = 15	15	50
TOTAL	40	30	30	100

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TABLE-6SUBJECTB.Sc. in OPTOMETRY & OPHTHALMIC TECHNOLOGYDISTRIBUTION OF MARKS IN 3RD YEAR UNIVERSITY EXAM (TOTAL-500 MARKS)

MAIN SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL PRAC+VIVA= TOTAL	GRAND TOTAL MARKS
1.(a)CLINICAL & ADVANCED ORTHOPTICS (b) CLINICAL & ADVANCED OPTICS	3 hrs 70	20 + 10 = 30	40 + 10 = 50	150
2.(a)CONTACT LENS CLINICAL &ADVANCED REFRACTIONS (b)COMMUNITY OPHTHLAMOLOGY INVESTIGATION IN CLINICALOPHTHLA MOLOGY	1.5 hrs. 35 1.5 hrs. 35	10 + 05 = 15 10 + 05 = 15	20 + 05 = 25 20 + 05 = 25	150
3.(a) EYE BANK (b) OPHTHLAMIC O.T. MANAGEMENT	1.5 hrs. 35 1.5 hrs. 35	10 + 05 = 15 10 + 05 = 15	20 + 05 = 25 20 + 05 = 25	150
TOTAL	210	90	150	450

SUBSIDIARY SUBJECT

<u>PROJECT WORK IN OPERATION THEATRE TECHNOLOGY</u>	50 marks	---	---	50
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TABLE-1

SUBJECT: B.Sc. in RADIO DIAGNOSIS & IMAGING TECHNOLOGY

SUBJECT - 1ST YEAR TEACHING HOURS (TOTAL-500HRS)

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	TUTORIAL (hrs)	TOTAL (hrs)
(1) ANATOMY	70	20	10	100
(2) PHYSIOLOGY	70	20	10	100
(3) PATHOLOGY	70	20	10	100
(4) (a) MICRO- BIOLOGY+ (b) BIO-CHEMISTRY	70	20	10	100
TOTAL	280	80	40	400
SUBSIDIARY SUBJECT				
(1) COMMUNICATION SKILLS (ENGLISH)	50			50
(2) COMPUTER SKILL	20	20	10	50
TOTAL	70	20	10	100

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TABLE-2

B.Sc. in RADIO DIAGNOSIS & IMAGING TECHNOLOGY
SUBJECT - 2ND YEAR- TEACHING HOURS (TOTAL- 500HRS)

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	TUTORIAL (hrs)	TOTAL (hrs)
1. Physics of Radiology & Electronic, Radiation Physics	70	20	10	100
2. Radiation Instrumentation	70	20	10	100
3. Radiation Biology & Radiation Protection	70	20	10	100
TOTAL	210	60	30	300
SUBSIDIARY SUBJECT				
(1) COMPUTER	20	20	10	50
(2) PUBLIC HEALTH	20	20	10	50
TOTAL	40	40	20	100

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TABLE-3**B.Sc. in RADIO DIAGNOSIS & IMAGING TECHNOLOGY****SUBJECT - 3RD YEAR- TEACHING HOURS (TOTAL- 900HRS)**

MAIN SUBJECTS	THEORY (hrs)	PRACTICAL (hrs)	CLINICAL POSTING (hrs)	TOTAL (hrs)
(1) RADIOGRAPHY TECHNIQUE & DARK ROOM TECHNIQUE	50	50	200	300
(2) ADVANCE RADIO DIAGNOSIS	50	50	200	300
(3) RADIOTHERAPY & NUCLEAR MEDICINE IMAGING	50	50	200	300
TOTAL	150	150	600	900
SUBSIDIARY SUBJECT				
PROJECT WORK IN RADIO - IMAGING TECHNOLOGY			IN ONE MONTH	IN ONE MONTH



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TABLE-4

B.Sc. in RADIO DIAGNOSIS & IMAGING TECHNOLOGY
DISTRIBUTION OF MARKS FOR 1ST YEAR UNIVERSITY EXAM & INTERNAL
ASSESSMENT EXAM (TOTAL- 500 MARKS)

<u>MAIN SUBJECT</u>	<u>THEORY</u> <u>HRS.</u> <u>MARKS</u>		<u>IA</u> <u>(THEORY</u> <u>MARKS)</u>	<u>GRAND</u> <u>TOTAL</u> <u>MARKS</u>	
1. ANATOMY	3 hrs.	70	30	100	
2. PHYSIOLOGY	3 hrs.	70	30	100	
3. PATHOLOGY	3 hrs	70	30	100	
4. (a)MICROBIOLOGY	1.30 hrs	35	15	50	
(b)BIOCHEMISTRY	1.30 hrs	35	15	50	
TOTAL	280		120	400	
<u>SUBSIDIARY</u> <u>SUBJECT</u>	<u>WRITTEN</u> <u>PAPER</u> <u>HRS. MARKS</u>		<u>IA</u> <u>THEORY</u> <u>TOTAL MARKS</u>	<u>PRACTICAL</u>	<u>TOTAL</u> <u>MARKS</u>
(3) COMMUNICATIVE SKILLS	1.5 hrs.	35	15	-----	50
(2) COMPUTER	1.5 hrs.	20	15	15	50
TOTAL	55		30	15	100

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TABLE-5

B.Sc. in RADIO DIAGNOSIS & IMAGING TECHNOLOGY
DISTRIBUTION OF MARKS IN 2ND YEAR UNIVERSITY EXAM & INTERNAL EXAM
(TOTAL - 500 MARKS)

MAIN SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL PRAC+VIVA =TOTAL	GRAND TOTAL MARKS
1.PHYSICS OF RADIOLOGY& ELECTRONICS, RADIATION PHYSICS	3hrs. 70	20 + 10 = 30		100
2. RADIATION INSTRUMENTATION	3hrs. 70	20 + 10 = 30	40 + 10 = 50	150
3. RADIATION BIOLOGY& RADIATION PROTECTION	3hrs. 70	20 + 10 = 30	40 + 10 = 50	150
TOTAL	210	90	100	400

SUBSIDIARY SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC. = TOTAL MARKS	PRACTICAL TOTAL	GRAND TOTAL MARKS
1.COMPUTER	1.5 hrs 20	10 + 05 = 15	15	50
2.PUBLIC HEALTH	1.5 hrs 20	10 + 05 = 15	15	50
TOTAL	40	30	30	100

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TABLE-6

B.Sc. in RADIO DIAGNOSIS & IMAGING TECHNOLOGY**DISTRIBUTION OF MARKS IN 3RD YEAR UNIVERSITY EXAM & INTERNAL ASSESSMENT EXAM (TOTAL - 500 MARKS)**

MAIN SUBJECT	THEORY HRS. MARKS	IA THEORY+ PRAC= TOTAL MARKS	PRACTICAL PRAC+VIVA =TOTAL	GRAND TOTAL MARKS
1.RADIOGRAPHY TECHNIQUE & DARK ROOM TECHNIQUE	3 hrs 70	20 + 10 = 30	40 + 10 = 50	150
2. ADVANCE RADIO DIAGNOSIS	3 hrs 70	20 + 10 = 30	40 + 10 = 50	150
3. NUCLEAR MEDICINE IMAGING & HANDLING OF NUCLEAR MEDICINE INSTRUMENTS	3 hrs 70	20 + 10 = 30	40 + 10 = 50	150
TOTAL	210	90	150	450

SUBSIDIARY SUBJECT

<u>PROJECT WORK IN RADIO- IMAGING TECHNOLOGY</u>	-----	---	50	50
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