

**REGULATIONS & COURSES OF STUDIES OF 4 & ½ YEARS  
BACHELOR OF PHYSIOTHERAPY (BPT): 2023**



**THE ODISHA UNIVERSITY OF HEALTH SCIENCES,  
BHUBANESWAR- 751009**

## REGULATIONS & COURSES OF STUDIES FOR THE 4 AND ½ YEARS BACHELOR OF PHYSIOTHERAPY (BPT) DEGREE - 2023

### 1. Title and commencement of the Program:

- (a) These regulations may be called "Bachelor of Physiotherapy (In short BPT) Regulations 2023".
- (b) They shall come into force from the current academic year 2023-24.
- (c) The Regulations and courses of studies prescribed are subject to modification by the Academic Council and Executive Board of the Odisha University of Health Sciences, Bhubaneswar from time to time.

### 2. Introduction: Physiotherapy is concerned with human function and movement and maximising physical potential. It is concerned with identifying and maximising quality of life and movement potential within the spheres of promotion, prevention, treatment / intervention, habilitation and rehabilitation. Physiotherapy helps to restore movement and function when someone is affected by injury, illness or disability. It can also help to reduce risk of injury or illness in the future. Physical forces like heat, light, sound, energy from electromagnetic spectrum, electricity, mechanical pressure, mechanical forces and buoyancy of water are used in physiotherapy to treat patients. Throughout a person's life, the goal of physiotherapy is to restore maximum movement and functional ability.

Physical therapy is usually done to balance as well as restorative of maximum movement & functional capability throughout the lifespan. Therapy helps in treating disorders without using any kind of drug. Physiotherapists possess an in-depth understanding of the human anatomy as well as the intricacies of bones, muscles, & nerves. Throughout the entire study program, a learner will learn about physical movement, post-fracture manoeuvres, injury, or chronic pain, hip pains, etc and will develop a deep understanding of the human body's bones, muscles, and nerves and their intricate connections.

Bachelor of Physiotherapy is a 4-year undergraduate course, including compulsory 6 months of clinical internship, and involving the science of physical movement aimed at preventing disease and disability.

### 3. Goal: To impart quality education in the field of physiotherapy, providing evidence-based physiotherapy care, sustainable community engagement and encouraging seeds of research.

### 4. Objective: The objective is to;

- a) Prepare compassionate, competent, and ethical entry-level physiotherapists, with the skills and techniques necessary for the physical diagnosis, prevention and management of various conditions based on current evidence of physiotherapy practice.
- b) Develops skills and physiotherapy techniques such as therapeutic massage and manual therapy, exercise, electrotherapy, specialized techniques in the field of various specialties relevant to physiotherapy practice.
- c) Plan and implement appropriate physiotherapeutic intervention for all clinical conditions related to physiotherapy in acute and chronic phases, critical care, indoor and outdoor institutional care and independent practice.
- d) Instill ability to crucially appraise published literature, interpret data and to broaden his/her knowledge by keeping abreast with modern developments in the respective physiotherapy and thereby enhancing research ability.
- e) Develop proper attitude or compassion and concern for the individual and welfare of the

- f) physically handicapped in the institution and community levels.
- f) Develop skills as a self-directed learner, recognize continuous education, select and use appropriate learning resources.
- g) Strengthen ability to inculcate appropriate professional relationship in multidisciplinary set up, patient management and co-partnership basis.

**5. Eligibility for admission to the Course:**

- (i) +2 Science with Physics, Chemistry and Biology or Botany and Zoology with 50% aggregate.
  - (ii) **Physical fitness Certificate:** Every candidate before admission to the course shall be required to submit College Leaving Certificate, Migration Certificate (if applicable) in original, Physical Fitness Certificate and a declaration before the Principal / Director of the Institution that
    - (a) I am not continuing in any Degree Course under any State, Deemed, Central University and Autonomous Body.
    - (b) I have not been involved in any kind of criminal and unlawful activities in the past.
- Provided further, after fulfilment of all condition (s), the University on receipt of student detail with prescribed fees, shall issue University Registration Number as per OUHS First Statute-2023, which shall be used as Roll Number for all Examination (s).

**6. Duration:** The duration of the programme is of four and half academic years (inclusive of 6 months of compulsory rotatory internship), which can be completed in a maximum of 8 years from the date of admission to the programme. Each academic year consists of two semesters i.e. Odd and Even Semester.

**7. Medium of instruction:** English shall be the medium of instruction for all the subjects of study and for examination of the course.

**8. Commencement of the Course:** The course will commence from August / September 1<sup>st</sup> of every year.

**9. Academic Year:** The academic year shall be twelve months and commencing on the first day of enrolment into the course.

**10. Attendance:** The component wise attendance percentage shall be as under;

Subjects	Eligibility criteria
Subjects taught in one phase (Theory)	75 %
Subjects taught in more than one phase (Theory)	75 %
Clinical / Practical Training	80 %
Internship	100 %

**11. Course Cycle, Codes and Structure:** The four and half -year full-time programme consists of eight semesters excluding 6 (six) months compulsory rotatory internship. There shall be 50 (Fifty) Numbers of Theory, Practical / Clinical including Project in all eight semesters followed by six months internship after passing all semester examinations. The total marks for the Course is **4000**. The total number of digits used in the course is 08 (Eight).

- i. The 1<sup>st</sup> two digits (Numerical) indicates the Year of Courses of Studies.
- ii. The 3<sup>rd</sup> digit (Letter) indicates the "Faculty" Allied Health Sciences.
- iii. The 4<sup>th</sup> & 5<sup>th</sup> digits (Letters) indicate the Course Code "BPT".
- iv. The 6<sup>th</sup> digit (Numerical) indicates the sequence of the Semester.
- v. The 7<sup>th</sup> & 8<sup>th</sup> digits (Numerical, Numerical and Letter) indicate sequence of the Theory

Subject (s) of the Semester or Practical.

**Table No 01 Course Structure:**

Sub Code	Sub Title	Contact Hours		Internal Assessment		U-Assessment		Total
		Theory	Practical -Training	Theory	Practical	Theory	Practical	
<b>First Semester</b>								
23ABP101	Psychology	50	--	10	--	40	--	50
23ABP102	Electro Therapy-I	100	--	20	--	80	--	100
23ABP103	Exercise Therapy-I	100	--	20	--	80	--	100
23ABP1P1	Practical- Electro Therapy-I	--	100	--	20	--	80	100
23ABP1P2	Practical- Exercise Therapy-I	--	100	--	20	--	80	100
<b>Non-University Examination</b>								
23ABP104	English & Communication Skill	50	--	50	--	--	--	50
<b>Total</b>		<b>300</b>	<b>200</b>	<b>100</b>	<b>40</b>	<b>200</b>	<b>160</b>	<b>500</b>
<b>Second Semester</b>								
23ABP201	Human Anatomy	100	--	20	--	80	--	100
23ABP202	Human Physiology	50	--	10	--	40	--	50
23ABP203	Sociology	50	--	10	--	40	--	50
23ABP204	Biochemistry	50	--	10	--	40	--	50
23ABP205	Electro Therapy-II	100	--	20	--	80	--	100
23ABP206	Exercise Therapy-II	100	--	20	--	80	--	100
23ABP2P1	Practical - Human Anatomy	--	100	--	20	--	80	100
23ABP2P2	Practical- Human Physiology	--	50	--	10	--	40	50
23ABP2P3	Practical- Electro Therapy-II	--	100	--	20	--	80	100
23ABP2P4	Practical- Exercise Therapy-II	--	100	--	20	--	80	100
<b>Non-University Examination</b>								
23ABP206	Introduction Health Care Delivery System	50	--	50	--	--	--	50
<b>Total</b>		<b>500</b>	<b>350</b>	<b>170</b>	<b>70</b>	<b>360</b>	<b>280</b>	<b>850</b>
<b>Third Semester</b>								
23ABP301	Pathology and Microbiology	50	--	10	--	40	--	50
23ABP302	Pharmacology	50	--	10	--	40	--	50
23ABP303	Community Medicine	50	--	10	--	40	--	50
23ABP304	Biomechanics & Kinesiology	100	--	20	--	80	--	100
<b>Non-University Examination</b>								
23ABP305	First Aid & Emergency Care	30	20	25	25	--	--	50
		<b>280</b>	<b>20</b>	<b>75</b>	<b>25</b>	<b>200</b>	--	<b>300</b>
<b>Fourth Semester</b>								
23ABP401	Medicine-I (Gen Medicine including Gerontology)	100	--	20	--	80	--	100
23ABP402	Surgery- I (Gen Surgery, Obt & Gyn, Cardiothoracic, Plastic Surgery)	100	--	20	--	80	--	100
23ABP403	Cardiology	50	--	10	--	40	--	50
23ABP404	Paediatric	50	--	10	--	40	--	50
23ABP405	Physiotherapy in cardiopulmonary conditions	100	--	20	--	80	--	100

23ABP41P	Practical- Medicine-I	--	100	--	20	--	80	100
23ABP42P	Practical- Surgery- I	--	100	--	20	--	80	100
23ABP43P	Practical- PT in cardiopulmonary conditions	--	150	--	20	--	80	100
<b>Non-University Examination</b>								
23ABP406	Environmental Science	50	--	25	25	--	--	50
		<b>450</b>	<b>350</b>	<b>105</b>	<b>85</b>	<b>320</b>	<b>240</b>	<b>750</b>
<b>Fifth Semester</b>								
23ABP501	Physiotherapy in Surgical condition	100	--	20	--	80	--	100
23ABP51P	Practical - Physiotherapy in Surgical condition	--	100	--	20	--	80	100
<b>Non-University Examination</b>								
23ABP502	Computer Science	20	30	25	25	--	--	50
		<b>120</b>	<b>130</b>	<b>45</b>	<b>45</b>	<b>80</b>	<b>80</b>	<b>250</b>
<b>Sixth Semester</b>								
23ABP601	Neuroscience (Neurology & Neurosurgery)	100	--	20	--	80	--	100
23ABP602	Orthopaedics	100	--	20	--	80	--	100
23ABP603	Psychiatry	100	--	20	--	80	--	100
23ABP6P1	Practical- Neuroscience	--	100	--	20	--	80	100
23ABP6P2	Practical- Orthopaedics	--	100	--	20	--	80	100
<b>Non-University Examination</b>								
23ABP604	Research Methodology & Biostatistics	50	--	50	--	--	--	50
		<b>350</b>	<b>200</b>	<b>110</b>	<b>40</b>	<b>240</b>	<b>160</b>	<b>550</b>
<b>Seventh Semester</b>								
23ABP701	Rehabilitation Science	100	--	20	--	80	--	100
23ABP702	Physical & Functional Diagnostic Skills	100	--	20	--	80	--	100
23ABP7P1	Practical- Physical & Functional Diagnostic Skills	--	150	--	20	--	80	100
<b>Non-University Examination</b>								
23ABP703	Yoga & Naturopathy	20	30	25	25	--	--	50
		<b>220</b>	<b>180</b>	<b>65</b>	<b>45</b>	<b>160</b>	<b>80</b>	<b>350</b>
<b>Eighth Semester</b>								
23ABP801	Physiotherapy in Musculoskeletal conditions	100	--	20	--	80	--	100
23ABP802	Physiotherapy in Neurological Conditions	100	--	20	--	80	--	100
23ABP8P1	Practical- Physiotherapy in Musculoskeletal conditions	--	150	--	20	--	80	100
23ABP8P2	Practical- Physiotherapy in Neurological Conditions	--	150	--	20	--	80	100
<b>Non-University Examination</b>								
23ABP803	Professional Management & Ethics	50	--	50	--	--	--	50
		<b>250</b>	<b>300</b>	<b>90</b>	<b>40</b>	<b>160</b>	<b>160</b>	<b>450</b>

INTERNSHIP								
23ABP901	Internship & Project	--	--	--	--	--	--	ACCEPTED/ NOT ACCEPTED
		--	--	--	--	--	--	A/NA
Grand Total								4000

**12. Plan of Studies (Teaching, Training & Practice):** The plan of studies consists of classroom lectures, practical and laboratory demonstrations, bed side clinics, discussions, self-directed academic activities and clinical postings.

**12.1. First Semester:** A student will be required to undertake theory and practicals for 500 clock hours. The subjects are Psychology, Electro-Therapy-I, Exercise Therapy-I. In addition, s/he has to study English & Communication Skills.

**12.2. Second Semester:** A student will be required to undertake theory and practicals for 850 clock hours. The subjects are Human Anatomy, Human Physiology, Sociology, Biochemistry, Electro Therapy- II, Exercise Therapy-II. In addition, s/he has to study Introduction to Health Care Delivery System.

**12.3. Third Semester:** A student will be required to undertake theory and practicals for 300 clock hours. The subjects are Pathology and Microbiology, Pharmacology, Community Medicine, and Biomechanics & Medicine. In addition, s/he has to study First Aid & Emergency Care.

**12.4. Fourth Semester:** A student will be required to undertake theory and practicals for 750 clock hours. The subjects are Medicine-I (General Medicine including Gerontology), Surgery-I (General Surgery, Obstetrics & Gynaecology, Cardiothoracic, Plastic Surgery), Cardiology, Paediatrics, and Physiotherapy in Cardiopulmonary conditions. In addition, s/he has to study Environmental Science.

**12.5. Fifth Semester:** A student will be required to undertake theory and practicals for 250 clock hours. The subjects are Physiotherapy in Surgical Conditions only. In addition, s/he has to study Computer Science.

**12.6. Sixth Semester:** A student will be required to undertake theory and practicals for 550 clock hours. The subjects are Neuroscience (Neurology & Neurosurgery), Orthopaedics, and Psychiatry. In addition, s/he has to study Research Methodology & Biostatistics.

**12.7. Seventh Semester:** A student will be required to undertake theory and practicals for 350 clock hours. The subjects are Rehabilitation Science, and Physical & Functional Diagnostic Skills. In addition, s/he has to study Yoga & Naturopathy.

**12.8. Eighth Semester:** A student will be required to undertake theory and practicals for 450 clock hours. The subjects are Physiotherapy in Musculoskeletal conditions, and Physiotherapy in Neurological Conditions. In addition, s/he has to study Professional Management & Ethics.

Provided further, some subjects of higher semester (s) will start from lower semester but assessment shall be made in the higher semester only.

**12.9. Internship & Project:** There shall be six months (24 weeks) of internship after successfully completing all the 8-semester examination and the candidate had been declared to have passed the examination in all the subjects. Internship shall be done in any hospital

recognized by University or in his / her own college / institution. No candidate shall be awarded degree certificate without successfully completing six months of internship.

The Internship should be rotatory and cover clinical branches concerned with occupational therapy such as Orthopedics, Cardiothoracic including ICU, Neurology, Pediatrics, General Medicine, General Surgery, Burn and plastic surgery, Psychiatry, Oncology, Obstetrics and Gynecology both at the inpatient and outpatient services. On completion of all postings, the duly completed logbooks along with a Project Report will be submitted to the Head of Department to be considered as having successfully completed the internship program. The student has to do the project in the internship as part of the curriculum of BPT course and submit it for the fulfilment of the degree which shall be evaluated by two examiners. Passing the project work is mandatory for completing the internship program.

**13. Scheme of Internal Assessments, Practical / Clinical, Internship & Project, and passing criteria:**

**13.1. Theory & Practical / Clinical:**

- (i) There shall be a minimum of 2 periodic assessments, for theory and practical including viva separately, and is mandatory for the student.
- (ii) Average of the marks of the best two periodic assessment shall be taken as internal assessment mark of the candidate.
- (iii) The class average of internal assessments mark of theory and practical should not exceed 80 % of Maximum marks.
- (iv) The class average of internal assessment for an examination shall be calculated based on the total number of candidates in a particular batch appearing for that internal assessment examination.
- (v) The candidate must secure the minimum 50 % marks for internal assessment in theory and practical separately in each subject in order to be eligible to appear in the university examination of the Semester.
- (vi) Each student should maintain a logbook and record the procedures they do and the work patterns they are undergoing. It shall be based on periodical assessment, evaluation of student assignment, preparation for seminar, clinical case presentation, assessment of candidate's performance in the sessional examinations, routine clinical works, logbook and record keeping etc.

**13.2. Internship & Project:** After successful completion of Internship, s/he shall be required to submit a Project Report to the Head of the Department. The Project Report will be presented and evaluated by the Head of the Department, and Member teachers of the Department concerned who will either accept / propose for Modification. The Head of the Department, and Head of the Institution shall jointly certify the successful completion of the compulsory rotatory internship programme upon acceptance of the Project report to the University for consideration of the award of Degree.

**14. Eligibility criteria for appearing University Examinations:**

A candidate shall be eligible to carry forward all the courses if a s/he fulfills the following criteria and hereafter prescribed under Regulation 18.1.

In addition,

- (i) Attended 75 % theory and 80% Clinical / Practical training classes,
- (ii) Passed in Internal Assessment (s) with minimum 50% marks, and
- (iii) Not been debarred for any objectionable mis-conduct or malpractice by the Institution, and University.

- 15. Examinations [University (Theory & Practical / Clinical)]:**
- 15.1.** There shall be semester examination at the end of each semester. A candidate securing a minimum of 50% marks in internal assessments of individual subjects and 50% marks in internal clinical evaluations (clinical assessment, client contact hours and internal viva) to be conducted by the College / Institution will only be eligible and allowed to appear for university examinations of the respective year.
- Provided, the College / Institution shall submit the internal marks to the University before registering the eligible students for appearing semester examinations of the semester. In the event, a College / Institution fail or does not submit the mark (s) before the cut-off date, it shall be treated that no examination (s) have been conducted, and thereby the students shall not be allowed to register for respective University semester Examinations.
- 15.2.** Theory examinations: Each theory paper of the examinations conducted by the University shall be valued by external examiner appointed by the University, and marks rounded to the next integer shall be awarded to the candidate.
- 15.3. Clinical / Practical (Semester) Examinations:** The University practical / clinical Examination (s) carrying 80 (Eighty) marks shall be conducted by one internal examiner and one external examiner (s) appointed by the University.
- 16. Registration:** A candidate shall be eligible to register for Semester (Regular / Back) Examination only when s/he has fulfilled college and corresponding university criterions.
- (i) The College / Institution shall register the subjects of eligible students with the University on payment of a fee as to be notified by the University towards conduct of Regular / Back Theory examinations. The College / Institution shall retain 15 % of the University Examinations fees to meet the expenditure of Examination Centre. However, such retention of fees shall not be applicable in case of Back Paper or Supplementary Examinations.
  - (ii) The College / Institution shall follow uniform Question pattern / template / Answer Booklets and Records for conducting Internal Assessment and Clinical / Practical Tests.
- 17. Passing Heads:** The passing head (Theory and Practical / Practicum) is as under;
- (i) A Student is required to obtain a minimum of 50% in each of the theory papers, internal assessment, practical and clinical exams for a pass.
  - (ii) A Students will not be able to appear for university theory exam if they do not pass in their practical, internal assessment or clinical component.
  - (iii) A Students will have to pass the clinical examination of the given semester to proceed to the next year.
  - (iv) A candidate failing in one or more subject (s) shall appear for the subject(s) as a whole in the next appearance (i.e. Theory, Practical, and Viva).
  - (v) A student shall be declared to have passed the examination if he/she obtains the following minimum qualifying marks: -
    - (a) 50% of Marks in Internal Assessment (I.A) – Theory & Practical / Clinical.
    - (b) 50% of Marks in the University Practical / Clinical Examination.
    - (c) 50% of Marks in the University Theory Examination,
    - (d) Fail in University Clinical / Practical subject Examination (s) shall be treated as fail in Theory of the Subject.
- 18. Promotion to Higher Year, Re-admission after discontinuation or Break of Study into the Course:**
- (i) A candidate having 80% attendance in theory and practical in all the subjects,
  - (ii) Passed in internal assessment, registered and appeared the semester subjects (Theory

- & Clinical / Practical) will be allowed to keep terms up to Sixth Semester.
- (iii) The candidate shall be eligible to be promoted and register and appear seventh and eighth semester examinations only after clearing all the papers of the first, second, third, and fourth semester Examinations if any.
  - (iv) The candidates shall be eligible for internship only after clearing the seventh and eighth semesters examinations.

**18.1.** A candidate will be allowed for re-admission;

- a) If s/he did / could not register for the two consecutive semester examinations.
- b) If a candidate, failed any theory / practical / clinical University examinations availing three chances, s/he shall be required to take re-admission
- c) If the candidate is eligible, and has permissible tenure to complete the remaining tenure / years of eight year to complete the course.  
Provided further, s/he shall be required to apply in the prescribed form with fees as prescribed for the purpose, and shall be admitted in the course in force (Dual Syllabus).

- 19. Supplementary Examination:** There will be a supplementary examination for final year theory subjects within three months from the date of publication of eighth semester examination to extend a chance to clear the failed theory subjects of 7<sup>th</sup> & 8<sup>th</sup> Semester if any only. However, a candidate shall not be eligible; if s/he has not registered for the 7<sup>th</sup> & 8<sup>th</sup> Semester Examinations, and accordingly has not appeared the respective semesters Examinations.

A student having more backlog after availing the chance, shall not be allowed to re-appear in the subsequent years Supplementary Examination meant for the regular final year students only. Such student (s) will be allowed re-appear back theory subjects only with the student in Regular Examinations.

- 20. Classification of successful candidates and award of Degree:** The University shall adopt Marking and division practice.

**20.1.** Candidate will be awarded division after successful completion and internship at the end of four and half years. The percentage of marks will be calculated from aggregate of total marks obtained in all the four years University examinations.

- (i) First Class with Distinction: 75 % and above in aggregate of marks of all subjects including theory, clinical / practical with Internship -Project in the first attempt.
- (ii) First Division - 60% and above in the aggregate marks of all subjects.
- (ii) Second Division – 50% or more but less than 60% in the aggregate of marks of all subjects.

**20.2.** A candidate will be awarded Bachelor Degree in Physiotherapy (B.P.T.) to a candidate who complete the prescribed period, four and half academic year's courses of Studies, and has passed in all subjects (Theory & Practical / Clinical), Project with 6 months compulsory Rotatory Internship.

- 21. Record and Evaluation Guidelines:** The Practical Answer Booklet, Project Assignment / Record Book shall be as per the guidelines to be issued in this regard shall be strictly followed by the Examiners while assessing a practical component.

- 22. Withdrawal from Course, Struck off from the rolls of the College / Institution Admitted and withdrawal of Degree:**

- 22.1.** The University upon application, shall cancel the registration number issued to the candidate, and issue migration certificate on payment of fee as to be prescribed by the University.
- 22.2.** Any student who does not clear the Bachelor of Physiotherapy Course in all the subjects within a period of 8 years (Excluding Rotatory Internship with Project) from the date of admission / academic year shall be discharged from the course.
- 22.3.** Any student found to have obtained admission in fraudulent manner, if the documents furnished for gaining admission by any student are found to be forged / false / doctored at any stage of study.
- 22.4.** If any student is found to be involved in serious breach of discipline.
- 22.5.** A degree awarded by the University may be withdrawn if it is found at the later stage that the candidate has submitted any forged document or ineligible at the time of admission to the course.
- 23. Medal (s), Award (s) & Prize (s):** The University shall notify as and when decided by the Academic Council and Executive Body from time to time.
- 24. Discretionary Power:** Notwithstanding anything contained in the above, in case of any doubt or difficulty as to the interpretation of these Regulation (s), the matter shall be referred to the Vice Chancellor and his / her decision in this behalf, subject to the provisions of the OUHS Act - 2021, and OUHS 1<sup>st</sup> Statute - 2023 shall be final.



Registration no:

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Total Number of Pages: (XX)		Course: BPT
		SUB_CODE:
(--- <sup>th</sup> ) Year Regular / Back Examination: 20		
SUBJECT NAME:		
BRANCH:		
Max Time: 3 Hours	Sitting: 1 <sup>st</sup> 10.00 AM to 1.00 PM	
Max Marks: 80		
Q. CODE: (To be allotted by the University)		
All Questions are compulsory. Illustrate answer with diagrams wherever relevant / required		
The figures in the right-hand margin indicate marks.		
Q 1	Long Answer Question (Answer any one out of two)	(1 X 15 marks)
	a)	
	b)	
Q 2	Long Answer Question (Answer any one out of two)	(1 X 15 marks)
	a)	
	b)	
Q 3	Long Answer Question (Answer any one out of two)	(1 X 15 marks)
	a)	
	b)	
Q 4	Short Answer Questions (Focused) (Answer any two out of three)	(2 x 5 marks)
	a)	
	b)	
	c)	
Q 5	Short Answer Questions (Applied) (Answer any two out of three)	(2 x 5 marks)
	a)	
	b)	
	c)	
Q 6	Short Answer Case based question (Answer any two out of three)	(2 x 5 marks)
	a)	
	b)	
	c)	
Q 7	Objective Type (Selection / Supplied)	(5 x 1 mark)
	a)	
	b)	
	c)	
	d)	
	e)	

Registration no:

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Total Number of Pages: (XX)		Course: BPT
		SUB_CODE:
(--- <sup>th</sup> ) Year Regular / Back Examination: 20		
SUBJECT NAME:		
BRANCH:		
Max Time: 1 ½ Hours		Sitting: 1 <sup>st</sup> 10.00 AM to 11.30 AM
Max Marks: 40		
Q. CODE: (To be allotted by the University)		
All Questions are compulsory. Illustrate answer with diagrams wherever relevant / required		
The figures in the right-hand margin indicate marks.		
Q 1		Long Answer Question (Answer any one out of two)
	a)	
	b)	
Q 2		Long Answer (Answer any one out of two)
	a)	
	b)	
Q3		Short Answer Questions (Focused)
	a)	
	b)	
	c)	
Q 4		Objective Type (Selection / Supplied)
	a)	
	b)	
	c)	
	d)	
	e)	