

(Abstract)

Certificate Programme in Swimming under the School of Physical Education and Sports Sciences, Mangattuparamba Campus- modified Regulation, Scheme, Syllabus and Pattern of question Papers implemented with effect from 2022 admission-Orders issued

ACADEMIC C SECTION

Acad/C4/4836/2011 (I)

Dated: 16.08.2022

Read:-1, U.O No. Acad/C4/12070/2018 dated 11.07.2018

- 2 Letter no from Head School of Physical Education and Sports Sciences dated 04.05.2022 & 25.05.2022
- 3. Minutes of the meeting of Academic Council held on 14.06.2022

ORDER

- 1. The Regulation, Scheme, Syllabus and Model question Papers of Certificate Programme in Swimming under the School of Physical Education and Sports Sciences, Mangattuparamba Campus were implemented with effect from 2018 admission, as per paper read(1) above.
- 2. The meeting of the Department Council of Dept. of Physical Education, held on 22.04.2022, prepared the modified draft Regulation, Scheme and Syllabus and pattern of Question Paper for Certificate Programme in Swimming and the Head, School of Physical Education & Sports Sciences, submitted the same, as per paper read(2), for implementation with effect from 2022 admission.
- 3.As ordered by the Vice Chancellor, the Draft Regulation, Scheme, Syllabus and Pattern of Question Paper for Certificate Programme in Swimming was placed before the Academic Council as per paper read (3), and XXIV meeting of Academic Council resolved to accept the aforementioned draft Regulation, Scheme, Syllabus and Pattern of Question Paper, for implementation with effect from 2022 admission.
- 4.The modified Regulation, Scheme, Syllabus and Pattern of Question Paper for Certificate Programme in Swimming, implemented with effect from 2022 admission are appended and uploaded in the University website (www.kannuruniv.ac.in).
- 5. The U. O read (1) above stands modified to this extent.

Orders are issued accordingly

3d/~ Dr. Joby K Jose REGISTRAR (i/c)

To: The Head school of Physical Education & Sports sciences, Mangattuparamba Campus

Copy To: 1. The Examination Branch (through PA to CE).

- 2. PS to VC / PA to PVC / PA to R
- 3. DR / AR 1/AR II (Acad)/Acad G Section
- 4. Web Manager(for uploading in the Website)
- 5. SF / DF /FC

FOrwarded By Order SECTION OFFICER

Q

KANNUR UNIVERSITY



SCHOOL OF PHYSICAL EDUCATION AND SPORTS SCIENCES

CERTIFICATE PROGRAMME IN SWIMMING Syllabus (Effective from 2022 Admission)

I. REGULATION, SCHEME OF EXAMINATION AND SYLLABUS FOR CERTIFICATECOURSEINSWIMMING TRAINING

- 1. Nameof the Course: Certificate Course in Swimming Training
- 2. AimsandObjectivesoftheCourse
 - Toteachthestudentsthe basicskillsforbecominga goodswimmer.
 - Tostudytheprinciples oftraining related to swimming
 - Tounderstandthebasicstructureandfunctionofhumanbody.
 - Tostudythekinesiologyaspects ofExercise.
 - Touseswimmingforhealth andfitness.
- 3. NatureoftheCourse: Thecourseshallbefulltimeregular and co-educational.
- **4. Duration of the Course:** The duration of the course shall be threemonths with 60 working days.

5. EligibilityforAdmission

- Candidates for admission to the Certificate Course in Swimming Training shallhave passedHSC/+2/VHSC/10+3 Diploma or any other higher examinationsrecognizedbytheKannurUniversity.
- Should be below 40 years as on the date of notification of the course.
 AgerelaxationasperUniversityRulesinthe caseof deservingcandidatesbe givenformaximum 5years.
- Shouldknowswimmingandshouldpass generalswimmingfitnesstest.
- Shouldbephysicallyandmentallyfitto undergoswimmingtraining
- Reservation of seats shall be as per rules framed by the Government/Universityfromtimeto time.

7. SelectionCriteria

The course shall have 20 (Twenty) seats in a batch. The selection of candidates for admission to the course shall be based on the merit determined by the following criteria:

Sl No	Criteria	Marks
1	Entranceexamination*	40 Marks
2	Sports Proficiency (Swimming)	20 Marks
2	Physical Fitnesstest	25 Marks
3	Marksofthequalifyingexamination	25 Marks
-	Total Marks	100 Marks

^{*} Entrance examination shall be multiple choice questions based on theknowledge of Structure and functions of the body, General English of HSC/+2 syllabus and General Knowledge. Candidates should scoreat least 40% marks in the selection test stop lace in the rank list.

8. MediumofInstructionandExamination

Themedium of Instruction and Examination of the courses hall be English.

9. SchemeofExamination

			Marks	
Course Code	CourseContent	CE	EE	Total
CERTCSTC01	PrinciplesandMethodsof SwimmingTraining	40	60	100
CERTCSTC02	Human AnatomyPhysiologyand Kinesiology	40	60	100
CERTCSTC03	SwimmingPractical	40	60	100
	Total	120	180	300

The evaluation of a course consists of two parts: Continuous Evaluation (CE) and External Evaluation (EE). The totalmarksallotted for the theory papers and Practical shall be 100, with 40 % marks for Internal Evaluation and 60% marks for the External Evaluation

13. Conduct of Theory Evaluation:

All examinations will be conducted by the Head of the Department. To conduct

the theory examination, the Head of the department shall submit a confidential panel of examiners not less than ten experts form the outside and inside the Kannur University duly approved the department council for the approval of vice chancellor.

All the faculty in charge of the course shall prepare and submit three (3) unique set of question papers for their course in theory paper will in advanced to the Head of the Department for the conduct of theory examination to the respective batch. The head of the department shall conduct scrutiny meeting of the above question paper submitted by the concerned faulty by inviting at least two external experts from the list approved by the vice-chancellor.

11. Evaluation and Assessment Rubrics Theory and Practical's

Continuous Evaluation for theory and practical shall be on the basis of the internal examinations, assignments, seminars and attendance. The valuation shall be be conducted by the concerned teacher. The students shall also maintain a record book which should be submitted at the time of the final examinations.

The Examinations in theory and practical shall be conducted by the department after the completion of the required theory and practical classes of the course. The duration of Department Examination for each theory paper shall be for 2 hours. External Examination of Practical's shall be conducted by the department with one external examiner. The reshall be no supplementary examinations. For reappearance /improvement, the students can appear along with the next batch. There shall be no improvement chancefor internal evaluation

InternalEvaluationofTheoryPapers	~~
Classroom tests (40%) Best out of two tests	Marks: 16
Tutorial with viva, discussions, debate, seminar presentations (40%)	Marks: 16
Assignments (20%)	Marks: 8
Total	Marks: 40
InternalEvaluationofPractical	
Skill Proficiency	Marks: 16
Record File/Project Report	Marks: 12
Officiating	Marks:12
Viva	-
Total	Marks: 40

13.1 Pattern of Question Papers and Evaluation Criteria

Patter of questions: questions shall be set to asses knowledge acquired standard application of knowledge, application knowledge in new situation, critical evaluation of

knowledge and the ability synthesize knowledge. The duration of examination is two (2) hours only. Question paper for end semester theory examination shall consists of two parts.

Part A

(Short essay type)

Answer all Questions

Each question carries four marks

- 1.
- 2.
- 3.
- 4.
- 5.

(5 X 4 = 20 Marks)

Part B

(Essay type)

Answer any two questions.

Each question carries 10 Marks

- 6.
- 7.
- 8.

 $(2 \times 10 = 20 \text{ Marks})$

14. Conversion of Marks into percentage

An alphabetical Grading System shall be adopted for the assessment of a student's performance in a Course. The grade is based on a 6 point scale. The following table gives the range of marks % and alphabetical grade.

Range of Marks%	Grade Points	Alphabetical Grade
90-100	9	A+
80-89	8	A
70-79	7	B+
60-69	6	В
50-59	5	С
Below 50	0	F

15. Grade Point Average (GPA)

Performance of a student at the end of each Semester is indicated by the Grade Point Average (GPA) and is calculated by taking the weighted average of grade points of the Courses successfully completed. Following formula is used for the calculation. The average will be rounded off to two decimal places.

$$CGPA = \frac{\text{Sum of (grade points in a course multiplied by its credit)}}{\text{Sum of Credits of Courses}}$$

CGPA Calculation

At the end of the Programme, the overall performance of a student is indicated by the Cumulative Grade Point Average (CGPA) and is calculated using the same formula given above. Empirical formula for calculating the percentage of marks will be (CGPA x 10)+5. Based on the CGPA overall letter grade of the student and classification shall be in the following way.

CGPA	Overall Letter Grade	Classification	
8.5 and above	8.5 and above A+		
7.5 and above but less than 8.5	A	Distinction	
6.5 and above but less than 7.5	B+	First Class	
5.5 and above but less than 6.5	В	First Class	
5 and above but less than 5.5	С	Second Class	

Appearance for Continuous Evaluation (CE) and End Semester Evaluation (ESE) are compulsory and no Grade shall be awarded to a candidate if he/she is absent for CE/ESE or both. A student who fails to complete the programme/semester can repeat the full programme/ semester once, if the department council permits to do so

15. Grade Card

The control of examination, Kannur University is the authority to issue the semester wise grade card and consolidated grade statement and certificate on completion

of the program based on the authenticated documents submitted by the Head of the Department after the approval of the department council on end of each semester.

Supplementary examination for failed Candidates

- Candidate who have failed(F) grade in the semester examination can appear of
 the failed paper for the particular semester along with the regular students.
 However, the continues evaluation marks shall remine the same. Two sets of
 supplementary chances will be given for each semester with two years
- Appearance for continues evaluation end semester evaluation are compulsory and
 no grade shall be awarded to a candidate if he or she is absent for CE/ESE or
 both. A student who fails to complete a program/ semester can repite full
 program/ semester ones, if the department council permit so.
- 3. There shall be no provision for improvement of CE/ESE

16. PromotionandPass:

Students who secure not less than 50% marks in aggregate and separatelyininternal assessments in each of the theory papers and in practical shall be declared to have passed the Certificate course in Swimming Training Examination.

17. Department Council

- Chairman: the Head of the Department of school physical education and sport sciences.
- 2. Members: (I) All the faulty members of school physical education and sport sciences. (II) all the faulty members who engages classes for the course

Details financial assistance required for the conduct of session by the academic experts

Sl No	Description	Amount	Remarks
1	Remuneration to/ TA/DA foe experts	Rs.50000.00	(Per Session Rs.4000/-)
2	Expense for conducting all semester examinations	Rs.50000.00	
lla l	Total	Rs.100000.00	

NB: Economic class flight fare is eligible for the experts coming from other state/country with the prior approval from Vice-Chancellor of the Kannur University.

18. Grievance Redressal Mechanism

Committees will be constituted at the Department and University levels to investigate the written complaints regarding continuous Evaluation (CE). Department Level Committee (DLC) will consist of the Department Council and student nominee oof the department students union from the concerned faculty.

University level committee (ULC) will consist of the pro-vice-chancellor (Chairman and convener), the convener of the curriculum committee (vice-chairman), the head of the department concerned and a nominee of students union. Department level committee will be decided over by the head of the department and university level committee by the pro-vice-chancellor. Department level committee will have initial jurisdiction or complaints against CE and University level committee will hear appeals against department level decision. Complaints will have to be submitted to the department concerned within two weeks of publication of result of CE and disposed of within two weeks of receipts of complaints. Appeals to university level committee should be made within one month of the decision taken by the department level committee and disposed within two month of receipt of the complaint.

Complaints unsolved by university level grievance committee will be placed before the vice chancellor.

15. PROGRAMME STRUCTURE

Certificate Course in Swimming (Three Months) Programme Structure
Distribution of Credit, Hours and Marks:

Total Credit: 12

Theory Credits: 07 Practicum Credits: 05

Course Code	CourseContent	Credit			Teaching Hours			Marks		
		L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
CERTCSTC01	Principles and Methods of Swimming Training	3	1	4	48	32	80	40	60	100
CERTCSTC02	Human Anatomy, Physiology and Kinesiology	3	1	4	48	32	80	40	60	100

CERTIFICATE IN SWIMMING SYLLABUS

(Effective from Academic Year 2022-23)

CERTCSTC03	Swimming Practical - 1	1	3	4	16	96	112	40	60	100
	TotalMarks	7	5	12	112	160	272	120	180	300

16. CURRICULUM OUTLINE AND DETAILED SYLLABUS FOR COURSE IN SWIMMING (THREE MONTHS) PROGRAMME

CERTCSTC01-PRINCIPLESANDMETHODSOFSWIMMINGTRAINING

	Credit			Teaching Hours		As	sessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	48	32	80	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, Int.=Internal, Ext.=External

ESSENCE OF THE COURSE

COURSE CONTENTS

Unit-1: Introduction

- Swimming-Meaning and definition
- Historyof swimming
- · Basic swimming skills -submerging, jumping, floating, locomotion & breathing
- Benefits of swimming and class management
- National and International Bodies controlling Swimming and their affiliated units (FINA, SFI etc.)

Unit II Basic Rules and Measurements

- Swimming pool measurement & rules and regulations of pools arena
- Safetyand Sanitation of swimming pools (Chemicals required for maintenance)
- Maintenance of swimming Pool,
- Pool water tests

Unit-III: Techniques and Teaching of Different Strokes

- Body position, arm action, leg action, breathing and coordination of Free Style
- Body position, arm action, leg action, breathing and coordination of Back Stroke
- Body position, arm action, leg action, breathing and coordination of Butterfly
- Body position, arm action, leg action, breathing and coordination of breast Stroke
- Grab Start- Track Start- Back Stroke Start
- Free Turns Open Turns

UnitIV: Techniques/Skills Development (Technical Aspects of Coaching)

- Qualities of good coach.
- Training for mastery in technique/skill.
- Identification & Correction of faults.
- · Warm-up and cool down for swimmers

Unit V: Training

- Development of motor abilities
- · Basic Concept of preparation of training schedules.
- Coaching lessons of various skill/technique
- Evaluation of swimmers' performance

Unit-VI: Survival and Life Saving Technique of Swimming

- Meaning and definition of First Aid
- The PRICE principles of first aid -
- The ABC and steps involved in Cardiopulmonary Resuscitation (CPR)
- Life Saving Indirect method- By reaching pole, By live saving rings, By rope,
- By life jacket Direct method Jumps, Approach, Hold, Artificial Resuscitation
- Common injuries, treatment and rehab in swimming
- Treatment for drowning, fracture, sprain and strain at swimming pool.

Unit VII: Diet, Nutrition and Recreation

- Basics of Nutrition: Macro Nutrient, Micro Nutrient
- Sources and functions of Nutrients
- Balance diet- Calories & diet
- Exercise & diet
- Relationship between diet and swimming performance.
- Active recreation in swimming Pools.

Unit -VIII: Officiating

- Swimming rules and regulations (FINA)
- Mechanics of officiating.
- Qualities of good official.
- Swimming competitions

TEACHING LEARNING STRATEGIES

 The content will be taught by using lecture, demonstration, explanation, presentation methods, videos, learning by doing, Whole part whole method, Drills.

MODE OF TRANSACTION

• Lecture/Work in the Pool/ Viva/ learning by doing/ Individual Practice etc.

ASSESSMENT RUBRICS

Total Marks	Marks: 100		
• Assignments	Marks: 8		
• Tutorial with viva, discussions, debate, seminar presentations	Marks: 16		
Classroom tests (Best out of two tests)	Marks: 16		
Classroom Test, Assignments, Presentations / Practical	Marks: 40		
Theory External Exam	Marks: 60		

SUGGESTED READINGS

- Swimming. Human Kinetics Publishers, Inc Box 5076, Champaign, IL 61820.
- Maglischo, E.W.(1999): Swimming Fastest Mansfield Publishing Company, PoloAlto, California
- Counsilman J.E.(1977): The Complete book of Swimming. M.C.Cleff and StewartLtd.
- Counsilman, J.E. (1978): Competitive Swimming Manual for Coaches and Swimmers. P elham Books Ltd., 27 Wrights Lane, London W-8-572.
- Counsilman, J.E. and Counsilman, J.E.(1994): the new Science of SwimmingPracticeHall, Englewood Cliffs, N.S. 07632.
- ColwinC.H.(1992): Swimming into21stCentury.LeisurePress, Champaign, Illinois. 91825.,
- 7. Gallagher, H. (1970): Harry Gallagher on Swimming. Pelham Book Ltd. 52 Bedford Square London, W.C.I.
- 8. Gahridson M.A. (1987): Swimming Pools. A guide to their planning, design and operation. Human Kinetics Publishers Inc. Box 5076, Champaign, IL 61820.

- Hogg, J.(1977). Success in Swimming. John Murray Publishers, 50AthemondeStreet, London W1 4BD.
- Hollander, A.P.; Huijing P.A. and Groot G.D.(1983): Biomechanics and Medicinein Jarvis, M.A. Your book of Survival Swimming and Life Saving. Faber andFaber,24 Russell Square,London.
- 11. Larrabnee, I.G. (1987): Coaching Swimming effectively. Human Kinetics Publishers, In cBox 5076, Champaign, IL 61820..
- 12. McElroy G.K.(1985): Swimming and Life Saving. The Royal Life Saving SocietyAustralia,1982 (Reprint).
- Practical guide to First Aid Dr. Pippa Keech MBchB MRCGP ,published byLorensBooks, 2003
- 14. 'FirstAidtheVitalLink' TheCanadianRedCross Society, MosbyLifeline1994
- Clark N (1997) Nancy Clark's Sports Nutrition Guidebook. Second Edition. Human Kinetics, Champaign Illinois.
- 16. SharadChandMishra.Dr.(2005)Concepts&issuesinsportsNutrition

THEORY PAPER II CERTCSTC02-HUMANANATOMYPHYSIOLOGYANDKINESIOLOGY

	Credit		Teac	Teaching Hours		Ass	sessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	48	32	80	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, Int.=Internal, Ext.=External

COURSE CONTENTS

Unit I: Introduction

- Meaning of Anatomy and Physiology
- Structure & Functions of cell
- Tissues-Types of Tissues -Structure and functions of tissue
- Gross Anatomy of skeleton, Axial Skeleton, Appendicular Skeleton, Naming of bones Articulations, Classification of Joints

Unit-II: Different Systems of the Human Body

- Muscular System Histology, Functional Characteristics of Muscles, Gross Anatomy of Skeletal Muscles, Types of Muscle Contraction.
- Excretory system- Structure of kidney and Skin.
- Cardio-Vascular System- Structure, Cardiac Cycle, Blood Pressure, Circulation
- Respiratory System Anatomy, Ventilation and Lung Volumes, Pulmonary Volumes and Capacity

Unit-III: Integration and Control System

- Central Nervous System Brain, Spinal Cord, Autonomic Nervous System Structure and Functions
- Functional Organization of the Endocrine System and Digestive System
- Nervous System- Structure and functions of Neuron Central nervous system -Peripheral nervous system- Autonomic nervous System

UnitV: Kinesiology

- Kinesiology, Meaning and definition-Importance of Kinesiology -
- Fundamentalconcepts: Anatomical position, Body Cavities-, Axis, Planes and Directional terms –
- Fundamental movements- Major muscles of the upper body and lower body and theirfunctions –
- Muscle Movement Classification –Agonist, Antagonist, Target,Synergist,Stabilizer,
- Types of muscle contraction Isotoniccontraction- Concentric and Eccentric,
 Isometric (Static)- Posture and Movementanalysis.

TEACHING LEARNING STRATEGIES:

 The class will be taught by using lectures and demonstration, seminars, classroom discussion, videos, charts and presentations method.

MODE OF TRANSACTION

 Lecture//Laboratory Work/ Field Work/ Outreach Activities/ Project Work/ Vocational Training/Viva/ Seminars/ Term Papers/Assignments/ Presentations/ Self-Study etc.

Theory External Exam	Marks: 60		
Classroom Test, Assignments, Presentations / Practical	Marks: 40		
Classroom tests (Best out of two tests)	Marks: 16		
Tutorial with viva, discussions, debate, seminar presentations	Marks: 16		
Assignments	Marks: 8		
Total Marks	Marks: 100		

SUGGESTED READINGS

- Saladin
 — Anatomy&Physiology: TheUnit Form andFunction, Publishedby McGraw
 —HillNewYord,3Ed,2004
- 2. Gerard J. Tortora "Principles of Anatomy & physiology, Published by John Wiley&Sons,Inc, NewYork, 9thEd, 2000
- 3. WilliamPeter. L. Gray's Anatomy. Edinburgh; Churchilllivingstone, 1980.

- 4. Pearce Ecelyn C. Anatomy and Physiology for Nurses, Oxford University press, Kolkatta, 1978.
- Thimpson, Elern. W. and R.T. Floyd; Manual of structural Kinesiology, St,LouisMorby1994.
- 6. Hamilton, Nancy, Kinesiology, Boston, McGraw Hill, 2002
- 7. Crouch James E. Essential Human Anatomy A Text Lea & Febriger , Philladalphia, 1980.
- 8. Hay, James G & Reid J.G. Anatomical and Mechanical Basis of Human Motion, Prenticehall, NewJeresy, 1985.
- Jenson C.R. & Schultzer G.W. Applied Kinesiology and Biomechnics, McGrowhill book Co. NewYork, 1984,
- Lock Hurt and others Anatomy of the human body, Feber & Feber OxfordUniversity,1975
- 11. Pearce Evelyn-AnatomyandPhysiologyforNurses, OxfordUniversity,1975.
- Rasch & Bruke Kinesiology and applied Anatomy, Lea Febriger, Philladalphia, 1978.
- Rasch, Philip J. Kinesiologyand Applied Anatomy, Lea Febriger, Philladalphia, 1989.

PRACTICAL I CERTCSTC03-SWIMMINGPRACTICAL

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
1	3	4	16	96	112	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE CONTENTS

UnitI-Generalexercisesforswimming

- · Generalandspecificwarmuponlandand inwater
- Limberingdown

UnitII-Development of General conditioning abilities.

- Freehand/calisthenicsexercises.
- Developmentofbasicenduranceinswimming.
- Development of basic strength, speed, flexibility and coordinative abilities required in swimming.

UnitIII-personalperformanceand demonstrationabilityinswimmingstrokes

- Freestyle
- Backstroke
- Breaststroke
- Butterfly
- AllstartsandTurns

UnitIV-Practiceon LifeSaving.TeachingPractice:

- IndirectMethod-Pole,rings,rope,lifejacket
- DirectMethod-Jumps, Approach, Hold, Artificial Resuscitation
- StepsinCardioPulmonaryResuscitation(CPR)

UnitV-TestandMeasurement

- Swimmingperformance abilitytest-SpeedtestandEndurancetest.
- Cardiorespiratoryfitness-12Min. RunorWalkTest/HarvardStepTest
- Flexibility-Sitandreach test
- Bodycomposition-BMI/SkinFoldCaliper

TEACHING LEARNING STRATEGIES

 The content will be taught by using lecture, demonstration, explanation, presentation methods, videos, learning by doing, Whole part whole method, Drills.

MODE OF TRANSACTION

• Lecture/Work in the Pool/ Viva/ learning by doing/ Individual Practice etc.

ASSESSMENT RUBRICS

Component	Continuous Evaluation 40	External Evaluation 60	Total marks 100	
Skill Proficiency	(40%) Marks: 16	(40%) Marks: 24	Marks: 40	
Record File/Project Report	(30%) Marks: 12	(20%) Marks: 12	Marks: 24	
Officiating	(30%) Marks:12	(20%)Marks: 12	Marks: 24	
Viva	-	(20%) Marks:12	Marks: 12	

SUGGESTED READINGS

- Maglischo, E.W.(1999): Swimming Fastest Mansfield Publishing Company, PoloAlto, California.
- 2. McElroy G.K.(1985): Swimming and Life Saving. The Royal Life Saving SocietyAustralia,1982
- 3. Sweetenham B. and Atkinon J.(2003): Championship Swim Training. HumanKineticsP.O.Box5076, ChampaignIL618250-5076,800-746-4457.
- 4. Hogg,J.(1977).SuccessinSwimming.JohnMurrayPublishers,50AthemondeStree t,London W1 4BD.
- 5. Lewin, G. (1979): Swimming Sport Verlag, Berlin.

Total Marks: 100