Periyar Maniammai Institute of Science and Technology (Deemed to be University)
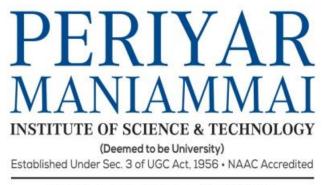
(PMIST)

Department of Education

B. Sc.B.Ed. Regulations 2020 -2021

CONTENTS

REGULATIONS 2020

Degree Programme with Semester System

1. **PROGRAMME OFFERED AND DURATION OF THE PROGRAMME**

   (i) Integrated Programme of Teacher Education titled "**Bachelor of Science and Education**" (B.Sc.B.Ed.) degree course. The course will be of Four year duration with Bachelor of Science (three major) degree and a Bachelor degree of Education organized on the Semester pattern with 2 semesters in a year. Each semester will consist of 125 working days instruction excluding examination. A working day shall be of a minimum of 6 hours adding upto a minimum of 36 hours per week.

   Student teacher shall however be permitted to complete the programme within a maximum period of six years from the date of admission to the programme.

   (ii) Equivalence:

   The Programme contents related to Physics / Chemistry / Mathematics / Computer Science offered in B.Sc.B.Ed. are equivalent to that of B.Sc.(PCM / PMCs) of Periyar Maniammai University or any other University recognized by UGC and the course contents related to education components in B.Sc.B.Ed. are equivalent to that of B.Ed. of Periyar Maniammai University or any other University recognized by UGC.

   Students who pass this course are considered eligible to pursue Master's Degree in the respective subject's content area and also in Education in the Departments of Periyar Maniammai University or any other University recognized by UGC.

2. **ELIGIBILITY**

   (i) A candidate shall be eligible for admission to the course leading to the Degree of Bachelor of Science and Education, B.Sc.B.Ed., provided:

   The Candidate must have passed 10+2 pattern (passed X and XII standard Examinations) under State Government Secondary Board or Matriculation Board or Anglo Indian Board of Tamil Nadu or CBSE Board Examination or any other equivalent examination recognized by Indian Universities by UGC as eligibility for Under Graduate degree programme.

(ii) The candidate must have passed the above mentioned examinations with any one of the following combination of subjects:

   a. Mathematics, Physics, Chemistry, Biology

   b. Mathematics, Physics, Chemistry, Computer Science

(iii)The candidates must have obtained 50% in the aggregate. However relaxation in marks for SC/ST/BC/OBC shall be as per the rules of the Central Government / State Government whichever is applicable.

3. SELECTION PROCEDURE

The selection of the candidates will be based on the following

   Qualifying Examination   : 50%

   Entrance Test   : 50%

The reservation shall be as per the regulation of the University/Guideline of the Government of India in force from time to time.

4. PRE-REQUISITE

If a prerequisite is specified for a particular course, then the student should get a minimum knowledge in the prescribed prerequisite course to register for that particular course.

5. SCHEME OF INSTRUCTION

The Curriculum for B.Sc.B.Ed. is derived from National Curricular Framework for Teacher Educator 2009 comprising three broad curricular areas:

Area A: Foundation of Education:

   (i) Learner Studies

   (ii) Contemporary Studies

   (iii) Educational Studies

Area B: Curriculum and Pedagogy

   (i) Curricular Studies

   (ii) Pedagogic Studies

Area C: School Internship

5.1 The courses identified according to the NCFTE – 2009 are organized under the following four categories.

     a) **C**ommon **C**ourses

     b) **C**ore **C**ourses

     c) **E**lectives

     d) Practicum and School Internship

5.2 Common Courses:

Comprises of courses that are mandatory for all students,

a) Regional language: Tamil. If necessary other languages can be added.

b) English

c).   i). Holistic Education

      ii). Environmental Education

      iii). Theatre art and Heritage, Craft Tradition

      iv). Social Engineering

      v). Soft Skills & Peace Education

      vi). Indian Constitution and Human Rights

      vii). ICT / e-Learning

5.3 Core Courses: Core Courses will be three major system offered in two streams

     i.   **PCM: Physics, Chemistry, and Mathematics**

     ii.   **CsMP: Computer Science, Mathematics, Physics**

For PCM Students

     (i)   Courses in Physics, Chemistry and Mathematics.

     (ii) Seven Courses in Education.

     (iii) Two Courses one in Pedagogy of Mathematics and another in Pedagogy of Physical Science.

For Cs MP Students

     (i)   Courses in Computer Science, Mathematics and Physics.

    (ii) Seven Courses in Education

    (iii) Two Courses one in Pedagogy of Computer Science and another in Pedagogy of Mathematics.

5.4 ELECTIVES

Comprises of three courses in Education and Two courses in each Science Subjects. The students have to choose one in Education and another in Science Subjects.

5.5 PRACTICUM AND SCHOOL INTERNSHIP

School experience and Internship in teaching is an integral component of a teacher preparation programme to help student teachers learning and enhance their professional role. During this programme, the duration of internship will be 100 days.

6. Curriculum and Credit System

The present curriculum of the programme is based on the Outcome Based Education (OBE) and the Choice Based Credit System (CBCS). The Outcome Based Education (OBE) is the system in which the teaching, learning and evaluation process are focused towards the development of skills and ability acquired by the students during the course of their study. The Choice Based Credit System (CBCS) allows the students to earn their credits according to their interests. Professional Elective and Open Elective courses are different categories of courses offered to impart Choice Based Credit System. One credit stands for 1 lecture hour or two tutorial/lab hour. Credits can be obtained only after successful completion of the assessments.

7. MEDIUM OF INSTRUCTION

The Medium of Instruction and Examination shall be in English.

8. ATTENDANCE REQUIREMENT

End Semester Examinations

1	Overall 80% and above	Eligibility to write all examinations.
2	Overall 70% and above but below Overall 80%	Shortage of attendance is to be condoned on medical grounds with proper documents. Condonation fee of Rs. 300/- per course is to be paid by the students. **Medical reasons** – Granting of permission on production of all the necessary medical documents (like hospitalization, medical problem, treatment, Medical bills etc) and medical certificate from a registered medical practitioner not below the rank of a Civil assistant surgeon.
3	Below Overall 70%	Not eligible to write all the regular courses of that semester and will fall under redo category. The students have to redo the semester during the subsequent year.

There may be a student whose overall attendance is equal to or above 80%/70% (70% in case of medical grounds) and for that student, there may be some course's attendance below 80/70%% (70% in case of medical grounds). In that case, the student can be allowed to write the examinations in the regular stream for the courses in which the student attained the required attendance 80%/ 70%% (70% in case of medical grounds).

Moreover, for the courses in which the attendance is less than 80%/70%% (70% in case of medical grounds), the student is permitted to write the courses as supplementary in the subsequent semesters after the payment of condonation fee and compensating the lack of attendance.

9. ATTENDANCE REQUIREMENTS FOR CONTINUOUS ASSESSMENTS

9.1. A student should attain at least 80% attendance to qualify for taking all written Formative Assessments of theory part and mid semester exam of lab part.

9.2. If a student secures less than 80%, she/he will be allowed to take CA-I and CA-II as supplementary exam after gaining 80% attendance and paying fees of Rs. 75 per theory paper for CA-I, CA II and Rs.100 per practical exam for the mid semester laboratory part. In addition, this provision is given to students who have lost their attendance due to (a) medical reasons (with proper documents) or (b) represented the University activities and (c) other than (a) and (b) with prior permission from Dean (Academics).

9.3. If a student could not secure 80% attendance within the supplementary schedule for CA I and CA-II, she/he can continue the course but will not be given supplementary exams.

9.4. If a student could not pass the Formative Assessments, she/he should take the exam in the forthcoming semesters with the approval of Department Head, School Dean and Dean (Academics).

Minimum 35% in SA (includes Theory cum Lab) and 40% in total (overall) for all UG Arts, Science and Humanities and Education programmes

2. Students are permitted to appear for the supplementary examinations both during odd and even semester.

9.5. Special Exams: Participation on behalf of University in Curriculum / co – curricular /extra curricular or related work or any other activity as recommended by the HOD/Authorities. This is applicable for all exams.

9.6. The following letter grade will appear in the mark sheet for every course for the attendance gained in that course.

Performance	Letter Grade	% of Attendance
Outstanding	**O**	>=96%
Medium	**M**	>=86% and <95%
Satisfactory	**S**	>=81% and <85%

10. STUDENT COUNSELORS

Each faculty member of the department will be attached with certain number of students as student counselor appointed by the respective head of the department to help the students in planning their courses of study and for general advice on the academic programme throughout their period of study. The student counselor also discuss with or inform the parents about the progress / performance of the students concerned and also monitor the academic/general performance of the students including attendance.

11. EXAMINATION AND ASSESSMENT

11. 1. THEORY EXAMINATION

The Semester System will be followed and there will be Eight Semesters in the B.Sc. B.Ed., Programme.

Assessment Template for Theory Papers

A. UG (FT/PT)

I. Theory LTP 3:0:0 and 3:1:0

S.No	Task	Notes	%
1	CA1 Class Test (50marks) 10 MCQ=10, 5 SA=10, 2 LA=30	Assessment during 32-40 days	15%
2	CA2 Class Test (50marks) 10 MCQ=10, 5 SA=10, 2 LA=30	Assessment during 72-80 days	15%
3	CA3 Seminar, Assignment (20 Marks)	Assessment during 01-110 days	20%
4	END Semester (100 Marks) 10 MCQ = 10, 5 SA = 10, 4 LA = 60, 1 EQ = 20	After 110 days	50%
		Total	100%

MCA- Multiple Choice Questions   SA- Short Answers

LA – Long Answers   EQ – Essay Question

Choice left to the course teacher

For S.No 3 Rubrics should be given to the students on the first day along with course plan.

S.No 1 to 4 should be mapped to

Method   : D = Direct, I = Indirect

Domain   : C = Cognitive: A = Affective: P = Psychomotor

Usage type   : F = Formative S = Summative

Bloom's Level   : Remember (Rem), Understand (Under), Apply (Ap), Analyze (An),

                           Evaluate (Ev), Create (Cr)

11.2 PRACTICAL EXAMINATION

Assessment Template for Lab Papers

S.No	Task	Notes
1	CIA -1 (Based on observation Note and rubrics designed by lab teacher)	Assessment once in every 15 days
2	CIA-2 (Lab Mid Exam)	After 45 – 50 Days
3	CIA-2 (Lab Mid Exam)	After 45 – 50 Days
		After 90 days (Summative)
4	EA-2 End semester exam (External Assessment)	After 90 Days

(i) GPA: Grade Point Average

The Grade Point Corresponding to the Grade obtained by the Candidate in each course in a semester is multiplied by the credit prescribed for the respective courses and the sum of all these products is divided by the total number of credits prescribed for each semester i.e.

$$\text{GPA} = \frac{\sum_{i} C_{ni} G_{ni}}{\sum_{i} C_{ni}}$$

(ii) CGPA: Cumulative Grade Point Average

$$\text{CGPA} = \frac{\sum_{n} \sum_{i} C_{ni} G_{ni}}{\sum_{i} C_{ni}}$$

Where 'n' stands for the semester number, 'I' the course number. 'C' the credits earned in the nth Semester i^{th} course (Subject) and G_{ni} is the corresponding grade point obtained by the candidate.

CGPA considering all the courses enrolled from first semester. 'U' and 'W' grades will be excluded for calculating GPA and CGPA.

Finalization of grades for the examinations and re-examinations also will be made by the Quality Assurance Committee.

12. Revaluation

14.1. Candidates who wish to apply for revaluation should first apply for photocopy of her/his answer script in the prescribed format through the Head of the Department and Dean of School to the Controller of Examination by paying Rs. 400/- (Rupees Four Hundred only) per script within 10 days after the result is declared.

14.2. After receiving the photocopy, the student can verify the copy for any discrepancy like total mistake and omission in the valuation.

14.3. If any discrepancy is noticed the same may be brought to the notice of the Controller of Examinations for remedial action.

14.4. The valuation in the photocopy of the answer script can also be verified by the subject expert and if the expert is convinced that the script deserves higher marks than awarded, she/he can recommend for applying revaluation.

14.5. The student can apply for revaluation in the prescribed form by paying Rs.300/-(Rupees Three hundred only) per script towards revaluation fee within 15 days after the result is declared by submitting revaluation form duly signed by Head of the department and Dean of school.

13. SUPPLEMENTARY EXAMINATIONS

15.1. The students who have not passed the course have to reappear for the supplementary exams in the subsequent semester. University offers fast track supplementary exams programme in 8th semester where a student can take supplementary exams for the courses of 8th semester in a month's time provided she/he have not any standing arrears.

15.2. Students who have not passed formative assessment under OBE scheme has to retake those assessments.

15.2.1. All components pertaining to formative assessment, for example CA1, CA2, CA3… etc. will be offered. A student can take all or few assessments. The assessment will take place from week 4 of the semester.

II PRACTICAL EXAMINATION

The mode of evaluation of each practical will be as indicated below

Components	Marks Weightage
Formative	70%
Summative	30%

INTERNSHIP TEACHING PRACTICE

Internship Training in teaching will be conducted for 100 days.

Semester	Days
III	15
IV	15
V	15
VI	15
VII	40
Total	100

Pre Internship Training will be given to the students in III, IV, V and VI semesters, 15 days each in the adopted schools in Periyar PURA villages of the University. This will provide the students the opportunity to learn the school environment and also to observe the learners and teachers.

In VII semester, the students will undergo 8 weeks of internship training continuously. The students will be engaged in preparing the records in the following categories:

1. Lesson plan (2)
2. Observation (2)
3. Mini Teaching (2)
4. Case study
5. Action research
6. Test and measurement (2)
7. Preparation of AV Aids (2)
8. Psychology Practical
9. Text Book Review
10. Physical Education
11. Field Visit
12. Citizenship Camp Training
13. School Diary

14. AWARDING GRADES

1. **Grade Versus Marks distribution**

Grade Letter	Grade Point	Performance	Actual Marks
O	10	Outstanding	A≥91
A+	9	Excellent	81≤A<91
A	8	Very Good	71≤A<81
B+	7	Good	61≤A<71
B	6	Above Average	55≤A<61
C+	5	Average	50≤A<55
C	4	Pass	40≤A<50
U	0	Reappear/Absent	A<40
W	0	Withdrawal	

CGPA to % conversion is multiplication of CGPA by 10.

provision of extra credits for the research papers and patents published/registered by the students : For every research paper published in Science Citation Index Journals one credit may be awarded. Similarly, two credits may be awarded for an IPR through Indian Government Patent Office. In case of other papers or patents, the worthiness will be decided by the Dean (Academics), Dean (Research) and an expert from the field of work. The decision taken by the above team will be final.

Presentation and publishing of research articles

In order to motivate the students towards research, it is proposed that students should make presentation and publish research articles during their study period. It is made mandatory for the award of the degree and is applicable for students admitted from the academic year 2017-18 onwards.

UG -Science and Humanities - 1 paper (Journal or Conference)

15. MINIMUM REQUIREMENTS OF MARKS FOR PASSING A COURSE

Type of Assessment	Passing Marks
Formative	35%
Summative	35%
Total= Formative + Summative	40%

16. ELIGIBILITY FOR THE DEGREE AND CLASSIFICATION OF CLASSES

18.1. The student is eligible for award of degree in B.Sc. B.Ed. programme if she/he earns total number of credits prescribed by the programme curriculum within permitted duration of the programme.

18.2. The degree is classified as *First Class with Distinction* if the student completes the degree in three years in single attempt (maximum number of courses which can be withdrawn is three and withdrawal considered for only one semester of the programme)

with CGPA greater than or equal to 8.50. If the student obtains CGPA greater than or equal to 6.50 (should have completed within four years), then the degree is classified as *First Class.* If the student obtains CGPA less than 6.50, then the degree is classified as *Second Class.*

18.3. In addition to the above conditions, participation in any one of the NSS/NCC/NSO/YRC during the course of their study is mandatory for award of a degree.

18.4. In order to motivate the students towards research, it is mandatory for the award of the degree that each student should publish one research paper/article in conference/journal/Seminar during their study period. This is applicable for the students admitted from the academic year 2017-18 onwards.

17. IDENTIFICATION AND SUPPORT FOR SLOW, MEDIUM AND ADVANCED LEARNERS

19.1. Advanced learners, slow learners and medium learners are identified based on the CGPA.

Category	CGPA
Advanced learners	7.5 and above
Medium learners	Above 6 and below 7.5
Slow learners	Less than 6

19.2. The advanced learners of II and III year students are exposed to career based life sciences and soft skills. These skills are taught by the senior teachers of the department/ University and also by having external experts.

19.3. Medium learners of III year can also join with the advanced learners during the special programs conducted by the department inviting external experts. On the other days they will be given special coaching on the courses which they are undergoing currently.

19.4. Medium learners of II year are given special coaching/tutorials classes for the courses which they are currently undergoing.

19.5. Slow learners are given remedial classes (coaching /tuition) for the courses which they have to reappear from previous semesters and in weak subjects during the current semester.

18. RULES FOR WITHDRAWAL FROM THE PROGRAMME

A student can withdraw from a programme temporarily or permanently due to whatsoever reasons. In that case she/he can rejoin the programme if she/he has temporarily withdrawn from a programme. However the maximum number of years to complete the programme is Six. Only one time this withdrawal is permitted during her/his programme.

19. RULES FOR CHANGING PROGRAMME OF STUDY

A student can change the programme of study with the due permission from Dean of the respected School and Dean (Academics) before completing 15 working days from the commencement of the programme.