DIRECTION

No.: 26 / 2010 Date:06.2010

Subject: Scheme for Choice Based Credit System (CBCS) and Awarding Grades to the Post Graduate Students in the Faculty of Science, Direction, 2010.

Whereas, University Grants Commission, New Delhi vide D.O.No.F- $2/2008/(XI\ Plan)$, Dtd.31 Jan.2008 regarding new initiatives under the $11^{th}\ Plan$ – Academic Reforms in the University has suggested for improving quality of higher education and to initiate the Academic Reform at the earliest.

AND

Whereas, the Academic Council while considering the above letter in its meeting held on 30.4.2008, vide item No.55 has resolved to refer the same to Dean's Committee, and the Dean's Committee in its meeting held on 19.07.2008 has decided to refer the matter to all Board of Studies.

AND

Whereas, the recommendations of various Board of Studies in the faculty of Science regarding Upgradation and Revision of various syllabi and introduction of choice based credit pattern Examination System at post graduate level was considered by the faculty of Science in its meeting held on 7.12.2009 and constituted a Committee of all Chairmen of Board of Studies and one member nominated by Chairmen of respective B.O.S. under the Chairmanship of Dean of faculty to decide the policy decision regarding choice based credit system examination pattern at P.G. level.

AND

Whereas, the faculty of Science in its emergent meeting held on 11th May, 2010 vide item No.27, has considered, accepted and recommended to Academic Council, the policy decision regarding introduction of Scheme for Choice Based Credit System (CBCS) and Awarding Grades to the Post Graduate Students in the Faculty of Science under ordinance No.4 of 2008. The recommendations of the faculty was approved by the Academic Council in its emergent meeting held on 28.5.2010, vide item No.36.

AND

Whereas, Ordinance No.4 of 2008 in respect of Examinations leading to the Degree of বিল্লান स्নানক (Bachelor of Science) is in existence in the University as per semester pattern examination system.

AND

Whereas, it is necessary to frame the Regulation regarding the Scheme for Choice Based Credit System (CBCS) and Awarding Grades to the Post Graduate Students in the Faculty of Science which is to be implemented from the Academic Session 2010-11 of M.Sc.Semester-I & onwards to all subjects in the faculty of Science and framing of Regulation for the above examination is likely to take some time.

AND

Whereas, the admission of students in the above pattern at M.Sc. Part-I (Semester-I) of all subjects in the faculty of Science are to be made in the Academic Session 2010-11.

Now, therefore, I, Dr. Kamal Singh, Vice Chancellor of Sant Gadge Baba Amravati University, in exercise of powers conferred upon me under sub-section (8) of section 14 of the Maharashtra Universities Act., 1994, do hereby direct as under:

- 1. This Direction may be called "Scheme for Choice Based Credit System (CBCS) and Awarding Grades to the Post Graduate Students in the Faculty of Science, Direction, 2010.
- 2. This Direction shall come into force with effect from the examination as shown below for all subjects for the Examinations leading to the Degree of Master of Science in the faculty of Science-
 - (i) Winter 2010 examination for M.Sc. Part-I, Semester-I,
 - (ii) Summer-2011 examination for M.Sc. Part-I, Semester-II,
 - (iii) Winter-2011 examination for M.Sc. Part-II, Semester-III,
 - (iv) Summer-2012 examination for M.Sc. Part-II, Semester-IV.
- 3. The detailed Scheme for Choice Based Credit System (CBCS) and Awarding Grades to the Post Graduate students in the Faculty of Science is as given below-

I. The CBCS System

All Programmes (named after the Core subject) mentioned in para 9 of Ordinance No.4 of 2008 shall be run on Choice Based Credit System (CBCS) and the grades in 7 point scale will be awarded to the students. It is an instructional package developed to suit the needs of students to keep pace with the developments in higher

education and the quality assurance expected of it in the light of liberalization and globalization in higher education.

II. Credits and Degrees

- i) A candidate who has successfully completed all the core courses Compulsory, Elective/ Specialised courses and project prescribed and optional approved by the University for the programme and accumulated not less than 72 (52 core and elective) Credits and who has put in the minimum residence time shall be eligible to receive the degree.
- ii) One Credit shall mean one teaching period per week for one semester (of 16 weeks) for theory courses and one laboratory session of two periods / week for one semester. One teaching period shall be of 60 minutes duration including 10 minutes for discussion / movement.

III. Courses

- (i) Core Course: A core course is a course that a student admitted to a particular programme must successfully complete to receive the degree. There may be two kinds of core courses: The **hard-core** courses which cannot be substituted by any other course and which must be successfully completed and **soft-core** courses which may be substituted by equivalent courses from the same department. In all P.G. programmes a project with 03 credits shall be included. The project may include a viva-voce examination with a credit of 1, Normally no theory course shall have more than 4 credits.
- (ii) Elective Course: Means a optional course from the basic subject or specilization.

 The core credits for any P.G. programme (inclusive of hard-core, soft-core and project) shall not exceed 60 credits and shall not be less than 48 credits. Each Board of Studies shall specify the core-credit load for their respective programme apart from approving syllabi, for all the courses offered by the department.

(iii) General Interest Course (GIC)

The General Interest Course shall be the choice of student. The student who choose the GIC shall have to register for it on payment of fees as prescribed by the University.

The Departmental Committee shall follow a selection procedure on a first come first served basis, fixing the maximum number of students, after counselling to the students etc. to avoid overcrowding to particular course(s) at the expense of some other courses.

- (iv) Each Course is designed such that it includes lectures / tutorials / laboratory or field work / Seminar / Practical training / Assignments / Term paper / Report writing or review of literature and any other innovative practice etc., to meet effective teaching and learning needs.
- (v) Attendance: Students must have 75% of attendance in each Core and Elective course for appearing the examination. However student having attendance less than 75% may apply to the H.O.D. for condonation of attendance upto 15% under the provision of para 6-A (i) of Ordinance No.6.

IV. Registration for General Interest Course :-

- i) Each student, on admission shall be assigned to a faculty advisor who shall advise the student about the academic programme and counsel him on the choice of courses listed in Appendix-Q depending on his general interest, academic background and objective.
- ii) With the advice and consent of the faculty advisor the student shall register for courses he plans to take for the semester before classes start. No student shall be permitted to register for courses exceeding 30 credits per semester including those of repeat courses nor shall any student be permitted to register for any course without satisfactorily completing the prerequisites for the course except with the permission of the concerned teacher in the prescribed format.
- iii) If the student feels he has registered for more courses than he can handle, he shall have the option of dropping one or more of the courses he has registered for, with the consent of his advisor before the end of 3rd week of the semester. However, a student, to retain his status, should have registered at least for core course and elective course of that semester.
- iv) Students, other than those freshly admitted, shall register for the courses of their choice in the preceding semester by filling in the prescribed forms.
- v) The University shall prescribe the maximum number of students in each General Interest Course taking into account the teachers and Physical facilities available in the Department.
- vi) The University may make available to all students a listing of all the courses offered in every semester specifying the credits, the prerequisites, a brief description or list of topics the course intends to cover, the instructor who is giving the courses, the time and place of the classes for the course. This information shall be made available on the University website.
- vii) Normally no course shall be offered unless a minimum of 10 students are registered.
- viii) The student shall have to pay the prescribed fee per course for the registration.

V. Programme Committee :-

There shall be the programme committee at the University level constituted as under-

- i) Dean of the faculty (Chairman)
- ii) Heads of all the Departments (Member)
- iii) Three teachers from the affiliated colleges having post graduate courses other than University Department nominated by the Vice-Chancellor. (Member)
- iv) Deputy Registrar (Acad) (Secretary)

Duties and responsibilities of the Programme Committee shall be as under-

- i) To identify the General Interest Courses (GIC) as per the need of the student and availability of teachers in the Departments.
- ii) To approve the time table of GIC and make it available to the students before the commencement of respective semester. This time table also be made available on the University website.
- iii) To consider and approve the report of grivence redresal committee.
- iv) To remove the difficulties if any faced during implementation of the CBCS and report it to Hon'ble Vice-Chancellor for further action.
- v) Any other matter as it think fit for the effective implementation of CBCS.

VI. Departmental Committee

1. Every P.G. programme of the University/College shall be monitored by a committee constituted for this purpose by the Department.

TheCommittee shall consist of H.O.D. as a Chairman and all the teachers of the Deptt. of its members including one student members per class. There shall be at least one student member on the committee.

VII. Grievances Redressal Committee

The University or College shall form a Grievance Redressal Committee for each course in each department with the Course Teacher and the HOD. This Committee shall solve all grievances relating to the Internal Assessment marks of the students.

VIII. Total credits per semester:-

 ${\bf Table - I} \\ {\bf For \ all \ subjects \ other \ than \ Mathematics, \ Biotechnology \ \& \ Computer \ Science} \\$

| Course | | Credits | | | | | | | | | |
|-------------|-------|----------|----------|----------|-----|--|--|--|--|--|--|
| | Sem-I | Sem-II | Sem-III | Sem-IV | | | | | | | |
| Core | 12 | 12 | 12 | 12 | 48 | | | | | | |
| Elective | 04 | 04 | 04 | 04 | 16 | | | | | | |
| GIC | 00 | 04 | 04 | 04 | 12 | | | | | | |
| Lab. Course | 06 | 06 | 06 | 03 | 21 | | | | | | |
| I.A. | 04 | 04 | 04 | 04 | 16 | | | | | | |
| Project | 00 | 00 | 00 | 03 | 03 | | | | | | |
| Total | 26 | 26 or 30 | 26 or 30 | 26 or 30 | 116 | | | | | | |

Table-II For Mathematics

| Course work | | | Credits | | |
|---------------------|------------|-------------|--------------|-------------|-------|
| | Semester I | Semester II | Semester III | Semester IV | Total |
| Core courses | 12 | 12 | 12 | 12 | 48 |
| Elective Courses | 08 | 08 | 08 | 08 | 32 |
| GIC | | 04 | 04 | 04 | 12 |
| Internal Assessment | 05 | 05 | 05 | 05 | 20 |
| Project | | | | 04 | 04 |
| Total | 25 | 25 or 29 | 25 or 29 | 25 or 33 | 116 |

Table-III For Biotechnology

| Course work | | | Credits | | |
|---------------------|------------|-------------|--------------|-------------|-------|
| | Semester I | Semester II | Semester III | Semester IV | Total |
| Core courses | 16 | 12 | 12 | 08 | 48 |
| Elective Courses | | 9 | | 9 | 18 |
| Lab courses | 24 | 18 | 18 | 12 | 72 |
| Seminar | | 01 | 01 | | 02 |
| Project | | | | 06 | 06 |
| Assignment | | | 02 | | 02 |
| Internal Assessment | | | 02 | | 02 |
| Total | 40 | 40 | 35 | 35 | 150 |

Table-IV For Computer Science

| Course | | Cre | dits | | Total |
|-------------|-------|--------|---------|--------|-------|
| | Sem-I | Sem-II | Sem-III | Sem-IV | |
| Core | 25 | 20 | 15 | 10 | 70 |
| Elective | - | 05 | 05 | 05 | 15 |
| GIC | - | - | 05 | - | 05 |
| Lab. Course | 06 | 06 | 06 | 03 | 22 |
| I.A. | į | - | - | 02 | 02 |
| Project | - | - | - | 04/02 | 06 |
| Total | 31 | 31 | 31 | 26 | 119 |

IX. Grade Awards:-

(i) A seven point rating scale is used for the evaluation of the performance of the student to provide letter grade for each course and overall grade for the Master's Programme. Grade points are based on the total number of marks obtained by him/her in all the heads of examination of the course. These grade points and their equivalent range of marks are shown separately in Table-I. The performance of the student in theory, practical, internal assessment, subjects shall be evaluated in accordance with following Table-I.

TABLE -I

| Grade | Range of Marks obtained out of 100 or Equivalent fraction | Grade Points | Remarks (Not to be displayed On transcripts) |
|------------|---|--------------|--|
| 0 | 90-100 | 10 | Outstanding |
| A + | 80-89 | 9 | Excellent |
| A | 70-79 | 8 | Very Good |
| B+ | 60-69 | 7 | Good |
| В | 55-59 | 6 | Fair |
| C+ | 50-54 | 5 | Average |
| C | 40-49 | 4 | Below Average |
| F | Below 40 | 0 | Fail |

TABLE-II: Final Grade Points for SGPA and CGPA

| Grade Points | Final Grade | Remarks |
|--------------|-------------|----------------------|
| | | (Not to be displayed |
| | | On transcripts) |
| 9.00-10.00 | О | Outstanding |
| 8.00 – 8.99 | A + | Excellent |
| 7.00-7.99 | A | Very Good |
| 6.00-6.99 | B + | Good |
| 5.50 – 5.99 | В | Fair |
| 5.00 - 5.49 | C+ | Average |
| 4.00 – 4.99 | С | Below Average |

Equivalence of the conventional division/class with the CGPA is in accordance with the following table no. 4.

Table III. Equivalence of Class/Division to CGPA

| Sr. | CGPA | Class/Division |
|-----|---------------------------------|------------------------------|
| No. | | |
| 1 | 8.00 or more | First Class – Exemplary |
| 2 | 7.50 or more but less than 8.00 | First Class with Distinction |
| 3 | 6.00 or more but less than 7.49 | First Class |
| 4 | 5.50 or more but less than 5.99 | Higher Second Class |
| 5 | 4.00 or more but less than 5.49 | Second Class |
| 6 | Less than 4.00 | Fail |

The overall performance of a student is evaluated by assigning appropriate weightage to all the *four* semesters in order to maintain the quality of education. A student is permitted to appear for the semester examination subject to he or she has a minimum attendance of 75% in theory and practical classes, completes all his/her internal/ sessional assignments and clears all his/her dues. Non appearance in any examination is treated as the student having secured zero mark in that subject examination.

The evaluation is based on an average weightage system. Every subject has credit points based on the hours of study required. Every student is assessed in a subject with appropriate weightage to internal/sessional work and semester examination, thereby making the students study regularly. Every student is awarded Grade points out of maximum 10 points in each subject (based on 7 Points Scale). Based on the Grade points obtained in each subject, Semester Grade Point Average (SGPA) and then Cumulative Grade Point Average (CGPA) are computed.

X. Computation of SGPA & CGPA

Every student will be awarded points out of maximum 10 points in each subject. (based on 7 Points Scale). Based on the Grade points obtained in each subject the Semester Grade Point Average (SGPA) and then Cumulative Grade Point Average (CGPA) are computed. The computation of SGPA & CGPA, is as under: Semester Grade Point Average (SGPA) is the weighted average of points obtained by a student in a semester and

is computed as follows: $U1 \times M1 + U2 \times M2 + \cdots + Un \times Mn$

$$SGPA = \frac{U1 \times M1 + U2 \times M2 + \dots + Un \times Mn}{U1 + U2 + \dots + Un}$$

Where U1, U2, are subject credit of the respective course and M1, M2, are the Grade Points obtained in the respective subject (out of 10)

The Semester Grade Point Average (SGPA) for all the four semesters is also mentioned at the end of every semester.

The Cumulative Grade Point Average (CGPA) is used to describe the overall performance of a student in the course and is computed as under:

$$CGPA = \frac{\sum_{n=1}^{4} SGPA(n)C_{n}}{\sum_{n=1}^{n=4} C_{n}}$$

Where SGPA (n) is the nth Semester SGPA of the student and C_n is the nth Semester total credit. The SGPA and CGPA are rounded off to the second place of decimal.

XI. Internal Evaluation Method:-

- (i) At the beginning of each course, every teacher shall inform his/her students unambiguously the method he/she proposes to adopt for the continuous assessment. Normally the teacher concerned may conduct three written sessional examinations spread periodically during the semester and select best two for contributing to the final marks.
- (ii) At the end of each semester the Departmental Committee shall assign grades to the students.
- (iii) The Departmental Committee shall prepare the copies of the result sheet in duplicate.
- (iv) Every student shall have the right to scrutinize answer scripts of sessional/end-semester examinations and seek clarifications from the teacher regarding evaluation of the scripts immediately thereafter or within 3 days of receiving the evaluated scripts.
- (v) The Department shall display the grade points and grades for the notice of students.
- (vi) The department shall send all records of evaluation, including sessional evaluation, for safekeeping to the Controller of Examinations as soon as all the formalities are over.

XII. Grade Card

The University shall issue at the beginning of each semester a grade card for the student, containing the grades obtained by the student in the previous semester and his Semester Grade Point Average (SGPA).

The grade card shall list:

- (a) the title of the courses along with code taken by the student
- (b) the credits associated with the course,
- (c) the grade and grade points secured by the student,
- (d) the total credits earned by the student in that semester.
- (e) the SGPA of the student,
- (f) the total credits earned by the students till that semester and
- (g) the CGPA of the student (At the end of the IVth Semester).

XIII.At the end of the IVth semester, the University shall issue the statement of marks to the Students showing details of marks obtained by the student in each Head in each semester along with grade total marks.

XIV. Power to modify and remove difficulties:-

- 1. Not withstanding anything contained in the foregoing, Hon'ble V.C. in consultation with the Dean of the faculty shall have the power to issue directions or orders to remove any difficulty,
- 2. Nothing in the foregoing may be construed as limiting the power of the University to amend, modify or repeal any all of the above.

Amravati (Dr.Kamal Singh)
Date: 13/7/2009 Vice-Chancellor

Appendix-A

Examination Scheme under C.B.C.S. for the subject other than Mathematics, Biotechnology and Computer Science in the faculty of Science

M.Sc. Part-I Semester-I

SA-Subject abbrivation; C-Core; E-Elective

| | | | | The | eory | | | Practical | | |
|--------|---------|---------|---------|-------|---------|-------|-------------|------------|-------------|--|
| | | | Max. | Min | Int. | Min. | Th + Int. | Max. Marks | Min. Pass | |
| Sr.No | Paper / | Papar / | | Pass | Ass. | Pass | Ass. | (Credits) | marks | |
| 51.110 | Code | Course | (Credit | Marks | (Credit | Marks | Min.Pass | | (Min. Grade | |
| • | . Code | | s) | (Min. | s) | (Min. | Mar. | | Point) | |
| | | | | Grade | | Grade | (Grade Pt.) | | | |
| | | | | Pt.) | | Pt.) | (5+7) | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 1 | 1SA-1 | C | 80 | 32 | 20 | 08 | 40 (04) | | | |
| 1 | | | (04) | (04) | (01) | (04) | | | | |
| 2 | 1SA-2 | C | 80 | 32 | 20 | 08 | 40 (04) | | | |
| | | | (04) | (04) | (01) | (04) | | | | |
| 3 | 1SA-3 | C | 80 | 32 | 20 | 08 | 40 (04) | | | |
| 3 | | | (04) | (04) | (01) | (04) | | | | |
| 4 | 1SA-4 | E | 80 | 32 | 20 | 08 | 40 (04) | | | |
| 4 | | | (04) | (04) | (01) | (04) | | | | |
| 5 | 1SA-5 | Lab-I | | | | | | 100 (03) | 40 (04) | |
| 6 | 1SA-6 | Lab-II | | - | | | | 100 (03) | 40 (04) | |

Total Marks : 600; Minimum Total Credits : 26

- Note: (1) If the student has scored minimum marks or minimum grade points mentioned in Column No.8 out of the sum of total marks of theory and internal assessment taken together then he/she will be declared to have cleared with (04+01) 05 credits.
 - (2) If the student has scored minimum marks or minimum grade points in either theory or in internal assessment then he/she will be declared to have cleared in that particular head.

Appendix-B

Examination Scheme under C.B.C.S. for the subject other than Mathematics, Biotechnology and Computer Science in the faculty of Science

M.Sc. Part-I Semester-II

SA-Subject abbrivation; C-Core; E-Elective; GIC-General Interest Course

| | | | | The | eory | | | Practical | | |
|--------|-----------------|---------|---------|-------|---------|-------|-------------|----------------|-------------|--|
| | | | Max. | Min | Int. | Min. | Th + Int. | Max. Marks | Min. Pass | |
| Sr.No | Donor / | | marks | Pass | Ass. | Pass | Ass. | Ass. (Credits) | | |
| 31.100 | Paper / Code | Course | (Credit | Marks | (Credit | Marks | Min.Pass | | (Min. Grade | |
| • | Code | | s) | (Min. | s) | (Min. | Mar. | | Point) | |
| | | | | Grade | | Grade | (Grade Pt.) | | | |
| | | | | Pt.) | | Pt.) | (5+7) | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| 1 | 2SA-1 | С | 80 | 32 | 20 | 08 | 40 (04) | | | |
| 1 | | | (04) | (04) | (01) | (04) | | | | |
| 2 | 2SA-2 | C | 80 | 32 | 20 | 08 | 40 (04) | | | |
| | | | (04) | (04) | (01) | (04) | | | | |
| 3 | 2SA-3 | С | 80 | 32 | 20 | 08 | 40 (04) | | | |
| 3 | | | (04) | (04) | (01) | (04) | | | | |
| | 2SA-4 | Е | 80 | 32 | 20 | 08 | 40 (04) | | | |
| 4 | Or | and/or | (04) | (04) | (01) | (04) | | | | |
| | 2GIC-X | GIC | | | | | | | | |
| 5 | 2SA-5 | Lab-III | | | | | | 100 (03) | 40 (04) | |
| 6 | 2SA-6 | Lab-IV | | | | | | 100 (03) | 40 (04) | |

Total Marks: 600; Minimum Total Credits: 26

- Note: (1) If the student has scored minimum marks or minimum grade points mentioned in Column No.8 out of the sum of total marks of theory and internal assessment taken together then he/she will be declared to have cleared with (04+01) 05 credits.
 - (2) If the student has scored minimum marks or minimum grade points in either theory or in internal assessment then he/she will be declared to have cleared in that particular head.

Appendix-C

Examination Scheme under C.B.C.S. for the subject other than Mathematics, Biotechnology and Computer Science in the faculty of Science M.Sc. Part-II Semester-III

SA-Subject abbrivation: C-Core: E-Elective: GIC-General Interest Course

| | | | | The | eory | | | Practical | | |
|-------------|---------|--------|-----------------|---------|-----------|---------|----------------|------------|-------------|--|
| | | | Max. | Min | Int. Ass. | Min. | Th + Int. Ass. | Max. Marks | Min. Pass | |
| | Paper / | | marks | Pass | (Credits) | Pass | Min.Pass | (Credits) | marks | |
| Sr.No. Code | | Course | (Credits) Marks | | | Marks | Mar. | | (Min. Grade | |
| | Code | Code | | (Min. | | (Min. | (Grade Pt.) | | Point) | |
| | | | | Grade | | Grade | (5+7) | | | |
| | | | | Pt.) | | Pt.) | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | | 10 | |
| 1 | 3SA-1 | C | 80 (04) | 32 (04) | 20 (01) | 08 (04) | 40 (04) | 40 (04) | | |
| 2 | 3SA-2 | C | 80 (04) | 32 (04) | 20 (01) | 08 (04) | 40 (04) | - | | |
| 3 | 3SA-3 | C | 80 (04) | 32 (04) | 20 (01) | 08 (04) | 40 (04) | - | - | |
| | 3SA-4 | Е | 80 (04) | 32 (04) | 20 (01) | 08 (04) | 40 (04) | | | |
| 4 | Or | and/or | | | | | | | | |
| | 3GIC-Y | GIC | | | | | | | | |
| 5 | 3SA-5 | Lab-V | | | | | | 100 (03) | 40 (04) | |
| 6 | 3SA-6 | Lab-VI | | | | | | 100 (03) | 40 (04) | |

Total Marks : 600: Minimum Total Credits : 26

- **Note :-** (1) If the student has scored minimum marks or minimum grade points mentioned in Column No.8 out of the sum of total marks of theory and internal assessment taken together then he/she will be declared to have cleared that (04+01) 05 credits.
 - (2) If the student has scored minimum marks or minimum grade points in either theory or in internal assessment then he/she will be declared to have cleared in that particular head.

Appendix-D

Examination Scheme under C.B.C.S. for the subject other than Mathematics, Biotechnology and Computer Science in the faculty of Science M.Sc. Part-II

M.Sc. Part-II Semester-IV

SA-Subject abbrivation; C-Core; E-Elective; GIC-General Interest Course

| | | | | The | eory | | | Practical | | |
|--------|---------|---------|--|---------|-----------|---------|----------------|------------|-------------|--|
| | | | Max. | Min | Int. Ass. | Min. | Th + Int. Ass. | Max. Marks | Min. Pass | |
| | Paper / | | marks Pass (Credits) Pass Min.Pass (Cr | | (Credits) | marks | | | | |
| Sr.No. | Code | Course | (Credits) | Marks | | Marks | Mar. | | (Min. Grade | |
| | Code | | | (Min. | | (Min. | (Grade Pt.) | | Point) | |
| | | | | Grade | | Grade | (5+7) | | | |
| | | | | Pt.) | | Pt.) | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 8 9 | | |
| 1 | 4SA-1 | C | 80 (04) | 32 (04) | 20 (01) | 08 (04) | 40 (04) | | | |
| 2 | 4SA-2 | C | 80 (04) | 32 (04) | 20 (01) | 08 (04) | 40 (04) | | | |
| 3 | 4SA-3 | C | 80 (04) | 32 (04) | 20 (01) | 08 (04) | 40 (04) | - | | |
| | 4SA-4 | Е | 80 (04) | 32 (04) | 20 (01) | 08 (04) | 40 (04) | | | |
| 4 | Or | and/or | | | | | | | | |
| | 4GIC-Z | GIC | | | | | | | | |
| 5 | 4SA-5 | Lab-V | | | | | | 100 (03) | 40 (04) | |
| 6 | 4SA-6 | Project | | | | | | 100 (03) | 40 (04) | |

Total Marks: 600; Minimum Total Credits: 26

- **Note :-** (1) If the student has scored minimum marks or minimum grade points mentioned in Column No.8 out of the sum of total marks of theory and internal assessment taken together then he/she will be declared to have cleared with (04+01) 05 credits.
 - (2) If the student has scored minimum marks or minimum grade points in either theory or in internal assessment then he/she will be declared to have cleared in that particular head.

Appendix-E

Examination Scheme under C.B.C.S. for the subject Mathematics in the faculty of Science M.Sc. Part-I Semester-I

| | | | | Theory | | | | | | | | |
|---------|---------|--------|-----------|--------|-------------|------|-----------|-----------|-------------|-------------|---------------|----------|
| | | | Max. | marks | Mir | Pass | Int. | Int. Ass. | | . Pass | Th+I1 | nt. Ass. |
| Sr.No. | Paper / | Course | (Credits) | | M | arks | (Credits) | | Marks | | Min. Pass | |
| 51.110. | Code | Course | | | (Min. Grade | | | | (Min. Grade | | M | arks |
| | | | | | | Pt.) | | Pt.) | | (Min. Grade | | |
| | | | | | | | | | | | Points) (5+7) | |
| 1 | 2 | 3 | | 4 | | 5 | 6 | | 7 | | 8 | |
| 1 | 1MTH-1 | C | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 2 | 1MTH-2 | C | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 3 | 1MTH-3 | C | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 4 | 1MTH-4 | Е | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 5 | 1MTH-5 | Е | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| | | | 400 | (20) | | · | 100 | (05) | | | | · |

Total Marks: 500; Total Credits: 25

- **Note :-** (1) If the student score Minimum Marks or Minimum Grade Points mentioned in Column No.8 out of the sum total marks of theory and internal assessment taken together then he/she will be declared to have clear (04+01) 05 credits.
 - (2) If the student score Minimum Marks or Minimum Grade Points in either theory or internal assessment then he/she will be declared to have clear either of the head.

Appendix-F
Examination Scheme under C.B.C.S. for the subject Mathematics in the faculty of Science
M.Sc. Part-I
Semester-II

| | | | | | • | Jemesie | | | | | | |
|---------|---------|--------|------|--------|------|---------|------|--------|-------|---------|--------|----------|
| | | | | · | | | The | eory | | · | | |
| | | | Max. | marks | Miı | n Pass | Int. | Ass. | Min | . Pass | Th+I1 | nt. Ass. |
| Sr.No. | Paper / | Course | (Cre | edits) | M | arks | (Cre | edits) | M | arks | Min | . Pass |
| 51.110. | Code | Course | | | (Min | . Grade | | | (Min. | . Grade | M | arks |
| | | | | | 1 | Pt.) | | | F | Pt.) | (Min. | Grade |
| | | | | | | | | | | | Points | s) (5+7) |
| 1 | 2 | 3 | | 4 | | 5 | | 6 | | 7 | | 8 |
| 1 | 2MTH-1 | C | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 2 | 2MTH-2 | C | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 3 | 2MTH-3 | C | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 4 | 2MTH-4 | E | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| | 2MTH-5 | Е | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 5 | and/or | and/or | | | | | | | | | | |
| | 2GIC-X | GIC | | | | | | | | | | |
| | | | 400 | (20) | | | 100 | (05) | | | | |

Total Marks : 500; Total Credits : 25

- **Note :-** (1) If the student score Minimum Marks or Minimum Grade Points mentioned in Column No.8 out of the sum total marks of theory and internal assessment taken together then he/she will be declared to have clear (04+01) 05 credits.
 - (2) If the student score Minimum Marks or Minimum Grade Points in either theory or internal assessment then he/she will be declared to have clear either of the head.

Appendix-G

Examination Scheme under C.B.C.S. for the subject Mathematics in the faculty of Science M.Sc. Part-II Semester-III

| | | | | | | | Th | eory | | | | |
|--------|---------|--------|------|--------|----|---------|------|--------|----|---------|--------|----------|
| | D / | | | marks | | n Pass | | Ass. | | . Pass | | nt. Ass. |
| Sr.No. | Paper / | Course | (Cre | edits) | | arks | (Cre | edits) | | arks | | . Pass |
| | Code | | | | ` | . Grade | | | , | . Grade | | arks |
| | | | | | ŀ | Pt.) | | | ŀ | Pt.) | ` | Grade |
| | | | | | | | | | | | Points | s) (5+7) |
| 1 | 2 | 3 | | 4 | | 5 | | 6 | | 7 | | 8 |
| 1 | 3MTH-1 | C | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 2 | 3MTH-2 | C | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 3 | 3MTH-3 | C | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 4 | 3MTH-4 | E | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| | 3MTH-5 | Е | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 5 | and/or | and/or | | | | | | | | | | |
| | 3GIC-Y | GIC | | | | | | | | | | |
| | | | 400 | (20) | | | 100 | (05) | | | | |

Total Marks: 500; Min.Total Credits: 25

- **Note :-** (1) If the student score Minimum Marks or Minimum Grade Points mentioned in Column No.8 out of the sum total marks of theory and internal assessment taken together then he/she will be declared to have clear (04+01) 05 credits.
 - (2) If the student score Minimum Marks or Minimum Grade Points in either theory or internal assessment then he/she will be declared to have clear either of the head.

Appendix-H
Examination Scheme under C.B.C.S. for the subject Mathematics in the faculty of Science
M.Sc. Part-I
Semester-IV

| | | | | | | | Th | eory | | | | |
|--------|---|---|-----|-----------------|-----------|-----------------------------------|-----|----------------|-----------|-------------------------------|--------------------|-------------------------------------|
| Sr.No. | Paper / Code | Course | | marks edits) | M (Min | n Pass arks . Grade Pt.) | | Ass. edits) | M (Min | arks arks Grade Pt.) | Min Ma (Min. | nt. Ass. . Pass arks Grade |
| 1 | 2 | 3 | | 4 | | 5 | | 6 | | 7 | | 8 |
| 1 | 4MTH-1 | С | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 2 | 4MTH-2 | С | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 3 | 4MTH-3 | С | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 4 | 4MTH-4 | Е | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| 5 | 4MTH-5 and/or 4GIC-Z and/or Project | E and/or GIC and/or Project | 80 | (04) | 32 | (04) | 20 | (01) | 08 | (04) | 40 | (04) |
| | | | 400 | (20) | | | 100 | (05) | | | | |

Total Marks : 500; Min.Total Credits : 25

- **Note :-** (1) If the student score Minimum Marks or Minimum Grade Points mentioned in Column No.8 out of the sum total marks of theory and internal assessment taken together then he/she will be declared to have clear (04+01) 05 credits.
 - (2) If the student score Minimum Marks or Minimum Grade Points in either theory or internal assessment then he/she will be declared to have clear either of the head.

Appendix-I

Scheme of Teaching and Examination under C.B.C.S. for the Subject Biotechnology
M.Sc. (Biotechnology) SEMESTER PATTERN
M.Sc.Part-I (SEMESTER-I)

T: Lectures, P: Practical, TU: Tutorial/Assignment; G.I.C. – General Interest Course

| S | Subject | Paper | Course | | Hrs/ | C | redits | | | | | Examination Schem | ne | | | |
|---|---------|--------|--------|----|----------|--------|-----------|-------|--------------------|-------------------|-------|-------------------------|--------------------|----------------------|-------|----------------------------|
| N | Code | | | , | Week | | | | | Theory | | | | Practi | cal | |
| | | | | | | | | Paper | Max | Max | Total | Min | Max | Max | Total | Min |
| | | | | Т | P/ TU | Theory | Practical | Hrs | External; Marks | Internal Marks | | Passing Grade Points | Marks Practical | Marks Int. Ass | | Passing Grade Points |
| 1 | 1BTB-1 | I | С | 04 | 06 | 04 | | 3 | 100 | | 100 | 4 | | | | |
| 2 | 1BTB-2 | II | С | 04 | 06 | 04 | | 3 | 100 | | 100 | 4 | | | | |
| 3 | 1BTB-3 | III | C | 04 | 06 | 04 | | 3 | 100 | | 100 | 4 | | | | |
| 4 | 1BTB-4 | IV | С | 04 | 06 | 04 | | 3 | 100 | | 100 | 4 | | | | |
| 5 | 1BTB-5 | Lab-I | | | P 01 | | 12 | | | | | = | 80 | 20 | 100 | 5 |
| 6 | 1BTB-6 | Lab-II | | | P 02 | | 12 | | | | | | 80 | 20 | 100 | 5 |
| | | | | 16 | 24 | 16 | 24 | | | | 400 | | | | 200 | |

Total Credits: 40

Appendix-J

Scheme of Teaching and Examination under C.B.C.S. for the Subject Biotechnology

M.Sc. (Biotechnology) SEMESTER PATTERN M.Sc.Part-I (SEMESTER-II)

T. Lactures P. Practical TII. Tutorial/Assignment: G.I.C. General Interest Course

| S | Subject | Paper | Course | | Irs/ | C | redits | | | | | Examination So | cheme | | | |
|---|----------------------------|---------|--------------------|----|----------|--------|-----------|-------|--------|----------|-------|-------------------------|--------------------|----------------------|-------|----------------------------|
| N | Code | | | W | eek | | | | | Theory | | | | Practical | | |
| | | | | | | | | Paper | Max | Max | Total | Min | Max | Max | Total | Min |
| | | | | Т | P/ TU | Theory | Practical | Hrs | Theory | Internal | | Passing Grade Points | Marks Practical | Marks Int. Ass | | Passing Grade Points |
| 1 | 2BTB-1 | V | С | 04 | 06 | 4 | | 3 | 100 | | 100 | 4 | | | | |
| 2 | 2BTB-2 | VI | С | 04 | 06 | 4 | | 3 | 100 | | 100 | 4 | | | | |
| 3 | 2BTB-3 | VII | С | 04 | 06 | 4 | | 3 | 100 | | 100 | 4 | | | | |
| 4 | 2BTB-4 and/or 2GIC-X | VIII | E and/or GIC | 04 | 06 | 4 | | 3 | | 100 | 100 | 4 | | | | |
| 5 | 2BTB-5 | Lab-III | | | P 02 | | 12 | | | | | | 80 | 20 | 100 | 5 |
| 6 | 2BTB-6 | Lab-IV | | | P 02 | | 12 | | | | | | 80 | 20 | 100 | 5 |
| | | Total | | 16 | 25 | 16 | 24 | | | | 400 | | | | 200 | |
| | | | | | | | | | | | | | | | | |

Appendix-K

Scheme of Teaching and Examination under C.B.C.S. for the Subject Biotechnology
M.Sc. (Biotechnology) SEMESTER PATTERN
M.Sc.Part-II (SEMESTER-III)

T: Lectures, P: Practical, TU: Tutorial/Assignment; G.I.C. – General Interest Course

| S | Subject | Paper | Course | | Irs/ | Cre | edits | | | | | Examination Scheme | e | | | |
|---|---------|------------------------|-----------------|----|----------|--------|-----------|-------|--------|----------|-------|-------------------------|--------------------|----------------------|--------|----------------------------|
| N | Code | | | W | 'eek | | | | | Th | eory | | | Prac | ctical | |
| | | | | | | | | Paper | Max | Max | Total | Min | Max | Max | Total | Min |
| | | | | T | P/ TU | Theory | Practical | Hrs | Theory | Internal | | Passing Grade Points | Marks Practical | Marks Int. Ass | | Passing Grade Points |
| 1 | 3BTB-1 | IX | С | 04 | 06 | 04 | | 3 | 100 | | 100 | 4 | | | | |
| 2 | 3BTB-2 | X | C | 04 | 06 | 04 | | 3 | 100 | | 100 | 4 | | | | |
| 3 | 3BTB-3 | XI and 3GIC-Y | C and GIC | 04 | 06 | 04 | | 3 | 100 | | 100 | 4 | | | | |
| 4 | 3BTB-4 | Lab-V | | | P 02 | | 18 | | | | | | 80 | 20 | 100 | 5 |
| 5 | 3BTB-5 | Internal Assessment | | | 01 | | 02 | | | | | | | 75 | 75 | 5 |
| 6 | 3BTB-6 | Assignment | | | | | 02 | | | | | | | 50 | 50 | 5 |
| 7 | | Seminar | | | 01 | 1 | | - | | | | | | 75 | 75 | 5 |
| | | Total | | 12 | 20 | 13 | 22 | - | | | 300 | | | | 300 | |

Total Credits: 35

Appendix-L

Scheme of Teaching and Examination under C.B.C.S. for the Subject Biotechnology $M.Sc.\ (Biotechnology)\ SEMESTER\ PATTERN$

M.Sc.Part-II (SEMESTER-IV)

T: Lectures, P: Practical, TU: Tutorial/Assignment; G.I.C. – General Interest Course

| S | Subject | Paper | Course | 1 | Irs/ | | edits | | | | | Examination Schem | e | | | |
|---|----------------------------|---------|--------------------|----|----------|--------|-----------|--------------|---------------|-----------------|-------|--------------------------------|---------------------------|-----------------------------|--------|-----------------------------------|
| N | Code | | | W | eek | | | | | Th | eory | | | Pra | ctical | |
| | | | | T | P/ TU | Theory | Practical | Paper Hrs | Max Theory | Max Internal | Total | Min Passing Grade Points | Max Marks Practical | Max Marks Int. Ass | Total | Min Passing Grade Points |
| 1 | 4BTB-1 | XII | C | 04 | 06 | 04 | | 3 | 100 | | 100 | 4 | | | | |
| 2 | 4BTB-2 | XIII | С | 04 | 06 | 04 | | 3 | 100 | | 100 | 4 | | | | |
| 3 | 4BTB-3 and/or 4GIC-Z | XIV | E and/or GIC | 04 | 06 | 04 | | 3 | | 100 | 100 | 4 | | | | |
| 4 | 4BTB-4 | Lab-VI | | | | | 18 | | | | | | 80 | 20 | 100 | 5 |
| 5 | 4BTB-5 | Project | | | 06 | | 06 | | | | | | 200 | | 200 | 5 |
| | | Total | | 12 | 24 | 12 | 24 | - | | | 300 | | | | 300 | |

Appendix-M

Scheme of Teaching and Examination under C.B.C.S. for the subject Computer Science M.Sc. (Computer) SEMESTER PATTERN M.Sc.Part-I (SEMESTER-I)

T: Lectures, P: Practical, TU: Tutorial/Assignment; G.I.C. – General Interest Course, C-Core

| S | Subject | Paper | Course |] | Hrs/ | Cı | redits | | | | | Exami | nation Sch | eme | | | |
|---|---------|--------|--------|----|----------|--------|-----------|--------------|------------------|-----------------|-------|-------|-------------|--------------|--------------|-------|----------------|
| N | Code | | | V | Veek | | | | | Theor | y | | | | Prac | tical | |
| | | | | _ | | | T | Paper Hrs | Max External; | Max Internal | Total | | lin sing | Max Marks | Max Marks | Total | Min Passing |
| | | | | Т | P/ TU | Theory | Practical | 1115 | Marks | Marks | | | Points | Practical | Int. Ass | | Grade Points |
| 1 | 1MCS-1 | I | С | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 | 4.00 | | | | |
| 2 | 1MCS-2 | II | С | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 | 4.00 | | | | |
| 3 | 1MCS-3 | III | C | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 | 4.00 | | | | |
| 4 | 1MCS-4 | IV | C | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 | 4.00 | | | | |
| 5 | 1MCS-5 | V | C | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 | 4.00 | | | | |
| 6 | 1MCS-6 | Lab-I | - | - | 7 | - | 03 | | | ı | | | | | | | |
| 7 | 1MCS-7 | Lab-II | - | - | 7 | - | 03 | | | 1 | | | • | 100 | - | 100 | 40 4.0 |
| | | Total | | 25 | 14 | 25 | 06 | | | | | | | 100 | - | 100 | 40 4.0 |

Total Credits: 40

Appendix-N

Scheme of Teaching and Examination under C.B.C.S. for the subject Computer Science

M.Sc. (Computer) SEMESTER PATTERN M.Sc.Part-I (SEMESTER-II)

| T: Lecture | s, P: Practical, | TU: Tutorial | Assignment; (| G.I.C. – Gene | eral Interest (| Course, C-Core | | | | | | | | | | |
|------------|------------------------|--------------|---------------|---------------|-----------------|----------------|----------|-------|--------|----------|-------|---------------|-----------|-------------|-------|--------------|
| S | Subject | Paper | Course | Н | rs/ | Cred | lits | | | | | Examination S | cheme | | | |
| N | Code | | | W | eek | | | | | Theory | | | | Practica | 1 | |
| | | | | | | | | Paper | Max | Max | Total | Min | Max | Max | Total | Min |
| | | | | T | P/ | Theory | Practica | Hrs | Theory | Internal | | Passing | Marks | Marks | | Passing |
| | | | | | TU | | 1 | | | | | Grade Points | Practical | Int. Ass | | Grade Points |
| 1 | 2MCS-1 | VI | С | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 2 | 2MCS-2 | VII | С | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 3 | 2MCS-3 | VIII | С | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 4 | 2MCS-4 | IX | С | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 5 | 2MCS-5 Or 2GIC-X | X | E or GIC | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 6 | 2MCS-6 | Lab-III | - | - | 7 | - | 03 | - | - | - | - | | | | | |
| 7 | 2MCS-7 | Lab-IV | - | - | 7 | - | 03 | - | - | - | - | | 100 | - | 100 | 40 4.0 |
| | | | | 25 | 14 | 25 | 06 | | | | | | 100 | - | 100 | 40 4.0 |

Scheme of Teaching and Examination under C.B.C.S. for the subject Computer Science

M.Sc. (Computer) SEMESTER PATTERN M.Sc.Part-II (SEMESTER-III) **Appendix-O**

T: Lectures, P: Practical, TU: Tutorial/Assignment; G.I.C. – General Interest Course

| S | Subject | Paper | Course | H | Irs/ | | edits | | | | | Examination Scheme | e | | | |
|---|------------------------|--------|----------|----|----------|--------|-----------|--------------|---------------|-----------------|-------|--------------------------------|---------------------------|-----------------------------|-------|-----------------------------------|
| N | Code | | | W | eek | | | | | The | eory | | | Prac | tical | |
| | | | | T | P/ TU | Theory | Practical | Paper Hrs | Max Theory | Max Internal | Total | Min Passing Grade Points | Max Marks Practical | Max Marks Int. Ass | Total | Min Passing Grade Points |
| 1 | 3MCS-1 | XI | С | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 2 | 3MCS-2 | XII | С | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 3 | 3MCS-3 | XIII | С | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 4 | 3MCS-4 | XIV | Е | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 5 | 3MCS-5 Or 3GIC-Y | XV | E or GIC | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 6 | 3MCS-6 | Lab-V | - | - | 7 | - | 03 | | | - | | | | | | |
| 7 | 3MCS-7 | Lab-VI | - | - | 7 | - | 03 | | | - | | | 100 | - | 100 | 40 4.0 |
| | | Total | | 25 | 14 | 25 | 06 | | | | | | 100 | - | 100 | 40 4.0 |

Total Credits: 35

Scheme of Teaching and Examination under C.B.C.S. for the subject Computer Science

M.Sc. (Computer) SEMESTER PATTERN M.Sc.Part-II (SEMESTER-IV)

Appendix-P

T: Lectures, P: Practical, TU: Tutorial/Assignment; G.I.C. – General Interest Course

| S | Subject | Paper | Course | · | Irs/ | | edits | | | | | Examination Schem | e | | | |
|---|------------------------|-------------------------|----------|----|------|--------|-----------|--------------|---------------|-----------------|-------|-------------------|--------------|--------------|--------|-----------------|
| N | Code | | | W | eek | | | | | Th | eory | | | Prac | ctical | |
| | | | | т | P/ | Theory | Practical | Paper Hrs | Max Theory | Max Internal | Total | Min Passing | Max Marks | Max Marks | Total | Min Passing |
| | | | | 1 | TU | Theory | Fractical | | J | | | Grade Points | Practical | Int. Ass | | Grade Points |
| 1 | 4MCS-1 | XVI | C | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 2 | 4MCS-2 | XVII | С | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 3 | 4MCS-3 Or 4GIC-Z | XVIII | E or GIC | 5 | - | 5 | - | 3 Hrs | 100 | - | 100 | 40 4.00 | | | | |
| 4 | 4MCS-4 | Lab-VII | - | - | 7 | - | 03 | 4 Hrs | - | - | - | - | 100 | | 100 | 40 04 |
| 5 | 4MCS-5 | Project | - | - | 7 | - | 03+1 | | | - | - | - | 100 | 50 | 100 | 40 04 |
| 6 | 4MCS-6 | Seminar | - | 02 | - | - | 01+1 | | | - | - | - | 100 | 50 | 150 | 60 04 |
| 7 | 4MCS-7 | Internal Assessement | - | 06 | - | - | 02 | | - | - | - | 40 4.00 | | 50 | 50 | 20 04 |
| | | Total | | 23 | 14 | 15 | 11 | | | | | | | | | |
| | | | | | | | | | | | · | | | <u>'</u> | | |

Appendix-Q

List of General Interest Courses (GIC) to be opted by the student/s in Semester-II

Sr.No. Subject Code Elective Subject Equivalent General Interest Course Code 1 2CHE3 2GIC-1 1 Chemistry 2GIC-2 2CHE4 2 Physics 2PHY3 2GIC3 2PHY4 2GIC4 3 Mathematics 2MTH4 2GIC5 2MTH5 2GIC6 4 Zoology 2ZOO3 2GIC7 2ZOO4 2GIC8 5 Botany 2BOT3 2GIC9 2GIC-A 2BOT4 Statistics 6 2SCA3 2GIC-B 2GIC-C 2SCA4 7 Biotechnology 2BTB3 2GIC-D 2BTB4 2GIC-E 2GIC-F 8 Computer Science 2CMS3 2GIC-G 2CMS4 9 Microbiology 2MCB3 2GIC-H 2MCB4 2GIC-I 2GIC-J 10 Electronics 2ELE3 2GIC-K 2ELE4 11 Biochemistry 2BMC3 2GIC-L 2BMC4 2GIC-M 12 Geology 2GIC-N 2GEO3 2GIC-O 2GEO4 2GIC-P 13 Bioinformatics 2BIT3 2BIT4 2GIC-Q 14 Environmental Science 2ENV3 2GIC-R 2GIC-S 2ENV4 15 Geoinformatics 2GIT3 2GIC-U 2GIT4 2GIC-V 16 Computer Software 2CSW3 2GIC-W 2GIC-1A 2GIC-1B 2CSW4 Remote Sensing and GIS 17 2RSG3 2RSG4 2GIC-1C 18 Pharmaceutical Chemistry 2GIC-1D 2PCH3 2GIC-1E 2PCH4

Note: Title of the paper shall prescribed in the respective prospectuses.

SANG GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI

DIRECTION

No.: 27 / 2010 Date: 24.6.2010

Subject : Examinations leading to the Degree of विज्ञान पारंगत (Master of Science) (Four Semester Degree Course), Direction, 2009.

Whereas, Ordinance No.4 of 2008 in respect of Examinations leading to the Degree of विज्ञान पारंगत (Master of Science) (Four Semester Degree Course) Ordinance, 2008 is in existence in the University.

AND

Whereas, the Academic Council in its meeting held on 28.5.2010 vide item No.36 has approved the policy decision regarding introduction of Scheme for Choice Based Credit System (CBCS) and Awarding Grades to the Post Graduate Students in the Faculty of Science, for all subjects along with Draft Regulation in this behalf.

AND

Whereas, due to implementation of Scheme for Choice Based Credit System (CBCS) and Awarding Grades to the Post Graduate Students in the Faculty of Science, the provision under Ordinance No.4 of 2008 need to be revised accordingly.

AND

Whereas, admission to students for M.Sc. Part-I (Semester-I) for all subjects in the faculty of Science are to be made in the Academic Session 2010-11 in choice based credit system (C.B.C.S.).

AND

Whereas, making amendments in Original Ordinance No.4 of 2008 is likely to take some time.

Now, therefore, I, Dr. Kamal Singh, Vice Chancellor of Sant Gadge Baba Amravati University, in exercise of powers conferred upon me under sub-section (8) of section 14 of the Maharashtra Universities Act., 1994, do hereby direct as under:

- 1. This Direction may be called "Examinations leading to the Degree of विज्ञान पारंगत (Master of Science) (Four Semester Degree Course), Direction, 2009".
- 2. This direction shall come into force from the date of its issuance.
- 3. The word "or Biochemistry" in clause i) of sub-para (i) of para 5 shall be deleted.
- 4. The title of the subject "Electronics (Instrumentation)" be substituted as "Electronics" wherever occur in the Ordinance.
- 5. Following shall be the eligibility criteria for admission to M.Sc. Part-I Semester-I for the subjects (i) Pharmaceutical Chemistry, (ii) Biotechnology, (iii) Computer Science.
 - (a) for admission to M.Sc. Pharmaceutical Chemistry a candidate shall have offered Chemistry or Industrial Chemistry or Biochemistry as a subject of study and examination at the B.Sc. Degree.
 - (b) following shall be the eligibility for admission to M.Sc. Semester-I (Biotechnology) -
 - (i) B.Sc. in any discipline of Life Sciences, Bio Sciences or Bachelor's Degree in Agriculture, Veternary and fishery Sciences, Pharmacy, or Bachelor of Medicine and Bachelor of Surgery (M.B.B.S.) or Bachelor of Dental Surgery or equivalent examination recognized by Sant Gadge Baba Amravati University are eligible to appear in entrance test as given in para (iii) below.
 - (ii) The student should have minimum 50% marks as aggregate in the degree course.
 - (iii) The student will have to pass entrance examination for admission in M.Sc. Semester-I (Biotechnology) as per the Sant Gadge Baba Amravati University rules.
 - (c) following shall be the eligibility for admission to M.Sc. Semester-I (Computer Science) -
 - i. A person who has passed the Degree of Bachelor of Science of this university with Computer Science / Computer Application (Vocational) as on the subjects.
 OR
 - ii. A person who has passed B.A. / B.Sc. with Mathematics plus Post Graduate Diploma in Computer Science of this University.
 - iii. A person who has passed a Degree of Bachelor of Computer Science.
- 6. The following subject be inserted in para 9) of the Ordinance after Sr.No. "15. Bioinformatics".
 - "16. Computer Software,
 - 17. Computer Science
 - 18. Biotechnology, and
 - 19. Pharmaceutical Chemistry.

- 7. A person who desire to improve the division obtained by him/her at M.Sc. examination shall be eligible for improvement of division under the provision of Ordinance No.6 of 2008. However, for improvement of division he/she shall have to offer the core courses only. In no case he/she shall be allowed for improvement of division/grade/CGPA by offering General Interest Course.
- 8. The number of papers and marks allotted to each subject and the minimum marks which an examinee must obtained in order to pass the examination shall be as indicated in Appendices, appended with the Regulation.
- 9. The classification in reference to the class/division/grade to be awarded to the examinee shall be as per the Table-III (Equivalence to Class / Division to CGPA) of para No.IX, appended to the Regulation.
- 10. As soon as possible after the examination, but not later than 30th, June following, the B.O.E. shall publish a list of successful examinees arranged in Division as mentioned in Table-III (Equivalence to Class / Division to CGPA) of para No.IX, appended to the Regulation. The names of examinees passing the examination as a whole in the minimum prescribed period and obtaining the prescribed number of places in each subject in the division as per Table-III of the Regulation shall be arranged in order of merit as provided in the Examinations in General Ordinance No.6.

Sd/-(Dr.Kamal Singh) Vice-Chancellor

DIRECTION

No. :39/ 2011 Date :23.8.2011

Subject: Corrigendum to Direction No. 26/2010

Whereas, the Direction No.26 of 2010 in respect of Scheme of Choice Based Credit System (CBCS) and awarding Grades to the Post Graduate students in the faculty of Science is in existence.

AND

Whereas, the Academic Council in its emergent meeting held on 28.5.2010 vide item No.36 has approved the decision regarding introduction of scheme for C.B.C.S. and Awarding grades to the P.G. students in the faculty of Science under Ordinance No.4 of 2008..

AND

Whereas, in sub-para V of para 3, under Direction No.26 of 2010, there shall be Programme Committee and the duties of the Programme Committee shall be to remove the difficulties if any faced during implementation of C.B.C.S. and report it to Hon'ble Vice-Chancellor for further action and any other matter as it think fit for the effective implementation of C.B.C.S.

AND

Whereas, the Programme Committee in its meetings held on 14.7.2011, 20.7.2011, 30.7.2011 & 9.8.2011 has recommended necessary corrections in the above Direction which will be effective from the academic session 2011-12. The minutes of the Programme Committee was accepted by Hon'ble Vice-Chancellor on dated 22.8.2011.

AND

Whereas, it is necessary to carry out the corrections in the above said Direction immediately.

Now, therefore, I, Dr.Mohan K.Khedkar, Vice Chancellor of Sant Gadge Baba Amravati University, in exercise of powers conferred upon me under sub-section (8) of section 14 of the Maharashtra Universities Act., 1994, do hereby direct as under:

- 1. This Direction may be called "Corrigendum to Direction No.26/2010.
- 2. This direction shall come into force from the date of its issuance.

Amravati

Date: 21/6/2010

- 3. (A) In Direction No.26/2010 in respect of Scheme of Choice Based Credit System (CBCS) and awarding Grades to the Post Graduate students in the faculty of Science following paras be corrected as follows:
 - i) In para II, sub para (i) of para 3 in the fifth line after the words 'less than' the figure, sign, and words '72 (52 core and elective)' be substituted by the figures, sign, and words '88(64 core and elective)'
 - ii) In para VI: the title "Departmental Committee" be replaced as "Programme Monitoring" and Para 1 be completely deleted. Instead of this, the new para should be "Every P.G. programme of the University/College shall be monitored by the Head of the Department of the University/College of the concerned subject."
 - iii) The para VII shall be substituted as given below -
 - "VII. Grievance Redressal
 - All the grievances regarding Internal Assessment shall be settled by H.O.D. or the teacher of the department nominated by H.O.D. / Principal".

iv) In para IX: Table I: the grades in column No.2 shall be substituted as under -

AA \mathbf{O} by AB A^{\dagger} by BB Α by by \mathbf{B}^{+} BC В CCby \mathbf{C} by CD by DD

- v) In para X:
 - i) In the first line the word 'Grade' be added after the word 'awarded' and before the word 'points'.
 - ii) In third line the words 'obtained in each subject' be substituted by the words 'obtained in Core and Elective courses of the subject'
- vi) In para XI:
 - In sub para (i) in the first line the word "Head of the Department' be inserted after the words & sign "each course," and before the words "every teacher".
 - The sentence "Normally the teacher concerned may conduct three written sessional examinations spread periodically during the semester and select best two for contributing to the final marks" shall be deleted.
 - Sub para (ii) & (iii) be deleted completely.
 - Sub para (iv) be renumbered as sub para (ii) and the word "teacher" in the second line of the original sub para (iv) be substituted by the words "Head of Departments".
 - Sub para (v) be renumbered as sub para (iii). In original sub para (v) the words "grade points and grades" be deleted.
 - Sub para (vi) be deleted completely.
- vii) The word 'Minimum' printed below the table in Appendix A, B, C, D, G, and H, shall be deleted.
- viii) Following special explanatory Note be added below the table in Appendix-D, H, L, and P respectively.

"Special Explanatory Note: At the end of IVth semester, the students/examinee who accumulated atleast 88 credits (out of these 88 credits, 64 credits must be on core and elective course) and who has put in the minimum residence time shall be eligible to receive the degree in the subject he/she has admitted".

(B) The students should have accumulated 28 credits of M.Sc. Part-I, Sem-I & II taken together for admission to III Semester and should have completed the term of M.Sc. Part-I (Semester-I & II) satisfactorily.

Sd/-

Amravati (Mohan K.Khedkar)
Date: 22/8/2011 Vice-Chancellor

DIRECTION

No.: 00 / 2012 Date: 00/6/2012

Subject: Corrigendum to Direction No.26/2010 and 39/2011

Whereas, the Direction No.26 of 2010 in respect of Scheme of Choice Based System (CBCS) and awarding Grades to the Post Graduate Students in the faculty of Science is in existence.

AND

Whereas, University has issued corrigendum to Direction No.26 of 2010 vide Direction No.39 of 2011 on dated 23.8.2011.

AND

Whereas, in sub-para V of para 3, under Direction No.26 of 2010, there shall be Programme Committee and the duties of the Programme Committee shall be to remove the difficulties if any faced during implementation of C.B.C.S. and report it to Hon'ble Vice-Chancellor for further action and any other matter as it think fit for the effective implementation of C.B.C.S.

AND

Whereas, the Programme Committee in its meeting held on 1st March, 2012 and 18th April 2012 has recommended necessary corrections in the above said Directions which shall be effective for 2011-12 session and the minutes of the Programme Committee was accepted by the Hon'ble Vice-Chancellor.

AND

Whereas, the Academic Council in its meeting held on 13.1.2012, vide item No.14(5) F) R-3, I) R-2 & R6 has accepted additional eligibility criteria for Admission to M.Sc. (Zoology), Direct admission to M.Sc. Part-II (Computer Science) for the students who have passed the degree of M.Sc. (Computer Software), and revised syllabi of M.Sc. (Computer Science), which is to be implemented from the Academic Session 2012-13.

AND

Whereas, it is necessary for carryout the corrections in the above said Direction immediately.

Now, therefore, I, Dr.Mohan K.Khedkar, Vice Chancellor of Sant Gadge Baba Amravati University, in exercise of powers conferred upon me under sub-section (8) of section 14 of the Maharashtra Universities Act., 1994, do hereby

1. This Direction may be called "Corrigendum to Direction No.26/2010 and 39/2011".

- 2. This direction shall come into force from the date of its issuance.
- 3. In Direction No.26/2010 in respect of Scheme of Choice Based System (CBCS) and awarding Grades to the Post Graduate Students in the faculty of Science, following corrections shall be carried out-
 - A) i) In para 5th , the words and brackets "Degree of विज्ञान स्नातक (Bachelor of Science)" shall be substituted as "Degree of विज्ञान पारंगत (Master of Science)"
 - ii) The clause (i), of sub-para (II) of para 3 shall be deleted.
 - iii) The clause (i), of sub-para (II) of para 3 shall be renumbered as para ("i") and new para (ii) shall be added as follows.

"Minimum total credits that students shall have to accumulate in all four semesters for receiving the M.Sc. degree core subject shall be as shown in the table given as under –

| Subject/s | Minimum total credits (Core |
|---|-----------------------------|
| | Elective and GIC) |
| All subjects other than Mathematics, Computer | 104 |
| Science & Biotechnology | |
| Computer Science | 119 |
| Biotechnology | 150 |
| Mathematics | 100 |

- B) i) Under Table-III (Equivalence of Class/Division of CGPA) of Para IX,
 - (a) the figures shown '7.49', '5.99', and '5.49' against Sr.Nos.3, 4 & 5 in Column No.2 (CGPA) be substituted by the figures '7.50', '6.00', and '5.50' respectively.
 - (b) Following sub-para be added before the para 'X'.

"**Declearation of Merit List**: Merit list of M.Sc. (C.B.C.S.) examination shall be prepared from the examinee who have successively cleared minimum total credits including GIC as shown in the table assigned in the first attempt.

ii) Special Explanatory note shown under Appendix-D, H, I, L and P shall be deleted. The note No.(2) printed under Appendix-A, B, C, D, E, F & H shall be substituted as follows"If the student has not scored minimum marks or minimum grade points mentioned in column No. 8 and if the student scores minimum marks or minimum grade points in either theory or internal assessment then he/she will be declared to have cleared either of the head".

4. In Direction No.39 of 2011, under para IX), in Table-I & II, under column No.2, i.e. "Grade Points" and "Final Grade" shall be substituted respectively as under.

| "O | by | AA |
|----|----|-----|
| A+ | by | AB |
| A | by | BB |
| B+ | by | BC |
| В | by | CC |
| C+ | by | CD |
| C | by | DD" |

- 5. As the revised syllabi has been accepted by the Academic Council, for the subject Computer Science of four theory papers to each semester therefore the Scheme of Examination for M.Sc. Semester-I to IV shall be as per Appendices-A, B, C & D appended to Direction No.26 of 2010, which is to be implemented for Semester-I from Winter-2012, Semester-II from Summer-2012, Semester-III from Winter-2013 & Semester-IV from Summer-2014 respectively.
- 6. The students passing B.Sc. Agriculture with specialization Antomology and Fisheries shall be eligible for admission to M.Sc. Zoology with specialization Antomology and Fisheries respectively.

| | Sd/- |
|--------------|-------------------|
| Amravati | (Mohan K.Khedkar) |
| Date:/6/2012 | Vice-Chancellor |
