EXAMINATION LEADING TO THE POST GRADUATE DIPLOMA IN COMPUTER SCIENCE AND APPLICATIONS (PGDCS & A) IN THE FACULTY OF SCIENCE (CREDIT GRADE SYSTEM) ORDINANCE, 2017.

WHEREAS, it is expedient to provide an ordinance in respect of examinations leading to the post Graduate Diploma in computer Science and Application, for the purpose here after appearing, the Management council is here by pleased to make the following ordinance :-

1. This ordinance may be called “Examination leading to the Post Graduate Diploma in Computer Science and Application in the Faculty of Science (Credit Grade system ordinance, 2017)”

2. This ordinance shall come into force with effect from the Academic session 2016-17.

3. The duration of the course shall be of one Academic year. At the end of Academic year there shall be university examination.

4. The examination shall be held at such places and on such dates as may be appointed by the university.

5. Subject to their compliance with the provisions of this ordinance and of other ordinances in force from time to time, the candidate who has prosecuted a regular course of study for not less than one academic year shall be eligible for admission to the examination.

6. Post Graduate Diploma in Computer Science and Application shall be One year course with bi-annual examination pattern. Additional /supplementary examination shall be conducted parallel to the other semester end examination.

7. Eligibility: - A candidate who has passed B.Sc. with Mathematics or Computer as one Subject or Bachelor of Computer application (B.C.A.) or B.Sc. (I.T.) shall be enrolled for this examination.

8. There will be 5 theory papers, two practical papers and one Project.

9. The fees for the examination, tuition, laboratory and other shall be as prescribed by the university from time to time.

10. a) The scope of the subjects shall be as prescribed in the syllabus,  
    b) The medium of instruction and examination shall be English.

11. The number of papers and the maximum marks assigned to each paper and minimum marks/grade an examinee must obtain, in order to pass examination shall be as prescribed in the scheme of teaching examination provided under Appendix A, appended with this ordinance .the scheme of teaching and examination shall be as provided under the Appendix – A.

12. Scheme and Passing Criteria :-

   1) Minimum Passing marks shall be 40% separately in Theory, Internal Assessment, Practical and Project. Student must pass separately in Practical and Project by scoring minimum marks in Internal and External.

   2) Each theory paper shall be 80 marks and minimum passing marks in Theory paper shall be 32.


   4) Minimum passing marks in Project examination shall be 40 (20 + 20) out of 100 (50+50) Marks.

   5) Minimum passing marks in Internal Assessment shall be 08 out of 20 marks.

   6) Internal Assessment marks shall comprise of at least 4 activities of the following:-
       a. Home Assignment,
       b. Class Test Examination Performance,
       c. Seminar,
       d. Case Studies,
e. Group Discussion,
f. Field Work,
g. Study Tour,
h. Paper Presentation,
i. Book Review, and
j. Involvement in Departmental and College Activities.

13. Practical & Project Examination Scheme :-
   i) **Time:** Minimum 2 Hours and 30 Min. for conducting the practical examination subject to availability of the number of computers and printers at the center. If ratio of student and number of computer are same.
      a. If there are less number of computer (50%) than total number of enrolled students for practical examination, then additional 2 hours.
      b. If there are less number of computer (25%) than total number of enrolled students for practical examination, then additional 4 hours.

   ii) **Scheme for evaluation in Practical Examination :-**

   1) One question to Write and Execute for Taking Printout of Program 20 Marks
   2) One question to Write Program or from Practical Index 10 Marks
   3) Record 10 Marks
   4) Viva 10 Marks

   Total 50 Marks

   iii) **Project:** Head/Co-ordinator of Computer Department shall reject the title which is already carried out in any course in the college. Record must be maintained regarding projects along with other details (like Project Title, Guide, Session, Platform and Number of students working on project) which were carried out so far and shall be shown to an external examiner at the time of examination. **If any project found duplicate in nature then it will considered be as copy and action will be taken against Head/Co-ordinator. In case of Non approved lecturer action will be taken against the Principal of the college.**

   **Classification of Marks regarding Project :-**

   | Report, Documentation and Project Execution | 70 Marks |
   | Viva voce | 30 Marks |

   Total 100 Marks

14. The classification of the examinee successful at the final examination shall be as per the guidelines and of credit grade system as provided under **Appendix B**, appended with this ordinance.

15. The names of the successful examinees passing the examination as a whole in the minimum prescribed period and obtaining prescribed number of places securing the grades equivalent to first and second division shall be arranged in order of merit as provided in ordinance No. 6 relating to examinations in General.

16. No candidate shall be admitted to an examination under this ordinance, if he/she has already passed the same examination of this university or of any other university.

17. Examinee successful at the final examination, on payment of the prescribed fees, shall be entitled for the award of the diploma in the prescribed form signed by the Vice Chancellor.

18. This course shall be based on credit grade pattern and therefore, it will be regulated by the guidelines provided under appendices (**A & B**) which are the part of this ordinance.
(Statement of Object and Reasons)

The vice- Chancellor of the university has issued Direction No. 109 of 2012 on dated 27/06/2012 in respect of “Examinations leading to the post graduate Diploma in computer science of Application (P.G.D.S & A) Credit Grade System under provison of subsection (8) of section 14 of the Maharashtra universities Act,1994 to regulate the matter for time being.

The said Direction is required to be converted into an ordinance; hence this Draft ordinance is prepared for consideration of the Academic council and the management council of the university.

Appendix-A
(See Para 11)

Scheme of Teaching and Examination for the Graduate Diploma in Computer Science & Application (PGDCS & A) in the faculty of science

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Paper Code</th>
<th>Papers/Practicals</th>
<th>C R E D I T</th>
<th>Teaching Scheme per week (hrs.)</th>
<th>Examination Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Theory (T)</td>
<td>Practical (E)</td>
</tr>
<tr>
<td>1</td>
<td>PGDCSA1</td>
<td>Information Communication Technology</td>
<td>4</td>
<td>4 - 4</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>PGDCSA2</td>
<td>E-Commerce and Web Designing</td>
<td>4</td>
<td>4 - 4</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>PGDCSA3</td>
<td>System Analysis and Design</td>
<td>4</td>
<td>4 - 4</td>
<td>80</td>
</tr>
<tr>
<td>4</td>
<td>PGDCSA4</td>
<td>Data Structures and File System</td>
<td>4</td>
<td>4 - 4</td>
<td>80</td>
</tr>
<tr>
<td>5</td>
<td>PGDCSA5</td>
<td>Event Driven Programming with Visual Basic</td>
<td>4</td>
<td>4 - 4</td>
<td>80</td>
</tr>
<tr>
<td>6</td>
<td>PGDCSA6</td>
<td>Practical-I based on Theory Paper-1,2with IT Lab (Ms-Office)</td>
<td>3</td>
<td>- 6</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>PGDCSA7</td>
<td>Practical-II based on Theory Paper-4 and 5</td>
<td>3</td>
<td>- 6</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>PGDCSA8</td>
<td>Project</td>
<td>2</td>
<td>- 4</td>
<td>4</td>
</tr>
</tbody>
</table>

| Total | 28 | 20 | 12 | 36 | 500 | 200 | 700 | 280 |

- **Internal Theory Paper Marks:** It includes Seminar, Assignment, Unit Test, Book Reviews etc
GUIDELINES FOR CREDIT-GRADE SYSTEM FOR P.G.DIPLOMA IN COMPUTER SCIENCE & APPLICATION COURSE:-

Course credit:

It is the unit of measurement of course works. Each course shall have an integer number of credits which reflects its weightage. One Credit means one period of one hour duration.

The number of Credits of a course in a given semester shall ordinarily calculated as under

Number of Credits = L + T + P/2

Where L, T and P represent the number of Lecture, Tutorial and Practical hours per week. The fraction is to be rounded off to next integer value. One Practical / Lab without theory of one hour equal to one credit.

Grade:

It is the measure of performance quality. At the end of each semester, a student is awarded a letter grade in each of his/her course taking into account his/her performance based on the various component of evaluation i.e. on the basis of total marks in each theory course and in each laboratory course.

When the performance exhibited by examinees is assessed in qualitative terms and impressions so obtained by the examiners are directly expressed in terms of letter grades, it is called ‘Direct grading’.

The method that is based on a predetermined standard which become a reference point for a learner’s performance is called “Absolute grading”.

The Absolute grading system of Seven (07) points is the most popular grading system.

<table>
<thead>
<tr>
<th>Marks Obtained %</th>
<th>Grade</th>
<th>Grade Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>75 &amp; above</td>
<td>O</td>
<td>6</td>
</tr>
<tr>
<td>74.99 to 75</td>
<td>A</td>
<td>5</td>
</tr>
<tr>
<td>64.99 to 55</td>
<td>B</td>
<td>4</td>
</tr>
<tr>
<td>54.99 to 50</td>
<td>C</td>
<td>3</td>
</tr>
<tr>
<td>49.99 to 45</td>
<td>D</td>
<td>2</td>
</tr>
<tr>
<td>44.99 to 40</td>
<td>E</td>
<td>1</td>
</tr>
<tr>
<td>39.99 &amp; 00</td>
<td>F</td>
<td>0</td>
</tr>
</tbody>
</table>

Grade Proposed Norms:-
O: Outstanding
A: Very Good
B: Good
C: Average
D: Satisfactory
E: Pass
F: Fail

Conversion of Marks to Grades and Calculations of GPA (Grade Point Average)

In the Credit and Grade Point System, the assessment of individual Course in the concerned examinations will be on the basis of marks only, but the marks shall later be converted into Grades by some mechanism wherein the overall performance of the Learners can be reflected after considering...
the Credit Points for any given course. However, the overall evaluation shall be designated in terms of Grade. There are some abbreviations used here that need understanding of each and every parameter involved in grade computation and the evaluation mechanism. The abbreviations and formulae used are as follows:-

**Abbreviations and Formula’s Used:**

G: Grade
GP: Grade Points
C: Credits
CP: Credit Points
CG: Credits X Grades (Product of credits & Grades)
∑CG: Sum of Product of Credits & Grades points
∑C: Sum of Credits points

\[ SGPA = \frac{\sum CG}{\sum C} \]

**Semester Grade point average (SGPA):**

It is indicative of performance of a student in the given semester. The Grade Point average for a semester is obtained by adding the products of Actual Grade points and relative weightage for different courses as shown in the scheme for respective semester and dividing the total credit hours for that semester as illustrated below.

\[ SGPA = \frac{C_1G_1 + C_2G_2 + \ldots + C_nG_n}{C_1 + C_2 + \ldots + C_n} \]

SGPA: Semester Grade Point Average shall be calculated for individual semesters. (It is also designed as GPA)

**Cumulative Grade Point Average (CGPA):**

The cumulative Grade Point Average (CGPA) is indicative of the overall academic performance of a student in all the courses registered up to and including the latest completed semester. It is the cumulative total of the products of actual grade point and its weightage upto last semester divided by total credits of all the semesters.

\[ CGPA = \sum_{i=0}^{n} c_i g_i \sum_{i=0}^{n} c_i \]

CGPA: Cumulative Grade Point Average shall be calculated for the entire Program by considering all the semesters taken together.

A student will be allotted a cumulative Grade Point Average (CGPA) after clearing all the semesters. Again as there is no differential weight system for semesters, the CGPA of a student will be Average of the SGPA’s of that student.

Note: If a student is permitted to repeat any semester/course, the new letter grade will replace the old letter grade in the computation of the CGPA.

After calculating the SGPA for an individual semester and the CGPA for entire program, the value can be matched with the grade in the Grade Point table as per the Seven (07) Points Grading System and expressed as a single designated GRADE such as O, A, B, etc.
### Final Grade Points

<table>
<thead>
<tr>
<th>Grade Points</th>
<th>Final grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0 to 6.0</td>
<td>O</td>
</tr>
<tr>
<td>4.50 to 4.99</td>
<td>A</td>
</tr>
<tr>
<td>3.50 to 4.49</td>
<td>B</td>
</tr>
<tr>
<td>2.50 to 3.49</td>
<td>C</td>
</tr>
<tr>
<td>1.50 to 2.49</td>
<td>D</td>
</tr>
<tr>
<td>0.50 to 1.49</td>
<td>E</td>
</tr>
<tr>
<td>0.00 to 0.49</td>
<td>F</td>
</tr>
</tbody>
</table>

The formula for GPA will be based on Weighted Average. The final GPA will not be printed unless a student passes course equivalent to minimum 100 Credits.

If the GPA is higher than the indicated upper limit in the three decimal digit, then the student will be awarded higher final grade (e.g. a student getting GPA of 4.492 may be awarded ‘A’).

While declaring the result, the existing relevant ordinances are applicable. For verification and revaluation existing rules will be applicable.

The description for each of the grades will be as follows:

**Grade Proposed Norms**

**O: Outstanding:** Excellent analysis of the topic, (75% and above)
Accurate knowledge of the primary material, wide range of reading, logical development of ideas, Originality in approaching the subject, Neat and systematic organization of content, elegant and lucid style;

**A: Very Good:** Excellent analysis of the topic, (65 to 74%)
Accurate knowledge of the primary material, acquaintance with seminal publications, logical development of ideas, Neat and systematic organization of content, effective and clear expression;

**B: Good:** Good analysis and treatment of the topic (55 to 64%)
Basic knowledge of the primary material, logical development of ideas, Neat and systematic organization of content, effective and clear expression;

**C: Average:** Some important points covered (50 to 54%)
Basic knowledge of the primary material, logical development of ideas, neat and systematic organization of content, good language or expression;

**D: Satisfactory:** Some points discussed (45 to 49%)
Basic knowledge of the primary material, some organization, acceptable language or expression;

**E: Pass:** Any two of the above (40 to 44%)

**F: Fail:** None of the above (0 to 39%)

**Reporting of Learners Performance (Grade Card):**

The grade cards can be issued to the Learners on the basis of the above calculations in a uniform format given by the University. The grade cards of the Examinations conducted by the University shall be signed by the Controller of Examinations.

The grade card will reflect the marks obtained by the Learner, Credit points of the individual Course as well as Semester, conversion of marks into grades, calculation of SGPA for each individual semester and the CGPA for the complete Program at the end of the final semester.

The grade card shall be issued with SGPA & Grade in case of middle semesters or CGPA & Grade in case of final semester only to those learners who have completed all the semesters of that program successfully. However, the learners who are unsuccessful or carry the course under ATKT rule will not get the SGPA & Grade in case of middle semesters or CGPA & Grade in case of the final semester unless and until they successfully complete their pending course or semester under the concerned program.