

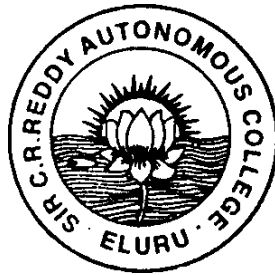
ANNEXURE-III

SIR C R REDDY COLLEGE, ELURU

(Aided & Autonomous)

(Affiliated to Adikavi Nannayya University)

(Thrice-Accredited with 'A' Grade by NAAC: An ISO 9001:2015 Certified Institution)



Examination Process Manual
(Revised in the Academic Year 2020-21)

Office of the Controller of the
Examinations

2020-2021

I. PROGRAMMES OFFERED

1. Under the autonomous status, the institution offers the following programs in the Academic year 2020-21:

Undergraduate Programmes

- 1 B.A. History, Economics, Politics (HEP)
- 2 B.A. Social Work, Economics, Politics (SWEP)
- 3 B.A. Political Science, Economics, Computer Science (PECS)
- 4 B.A. History, Politics, Computer Science (HPCS)
- 5 B.Sc. Mathematics, Physics, Chemistry (MPC)
- 6 B.Sc. Mathematics, Physics, Geology (MPG)
- 7 B.Sc. Mathematics, Physics, Computer Science (MPCS)
- 8 B.Sc. Mathematics, Electronics, Computer Science (MECS)
- 9 B.Sc. Mathematics, Chemistry, Computer Science (MCCS)
- 10 B.Sc. Mathematics, Geology, Computer Science (MGCS)
- 11 B.Sc. Mathematics, Statistics, Computer Science (MSCS)
- 12 B.Sc. Mathematics, Statistics, Data Science (MSDS)
- 13 B.Sc. Mathematics, Computer Science, Economics (MCSE)
- 14 B.Sc. Botany, Zoology, Chemistry (BZC)
- 15 B.Sc. Zoology, Fisheries, Chemistry (FZC)
- 16 B.Com.(Bachelor of Commerce)
- 17 B.Com.C.A.(Bachelor of Commerce with Computer Applications)

Postgraduate Programmes

- 1 M.B.A. (Master of Business Administration)
- 2 M.Com.(Master of Commerce)
- 3 M.Sc. (Mathematics)
- 4 M.Sc. (Physics)
- 5 M.Sc. (Organic Chemistry)
- 6 M.Sc. (Analytical Chemistry)
- 7 M.A.(Economics)

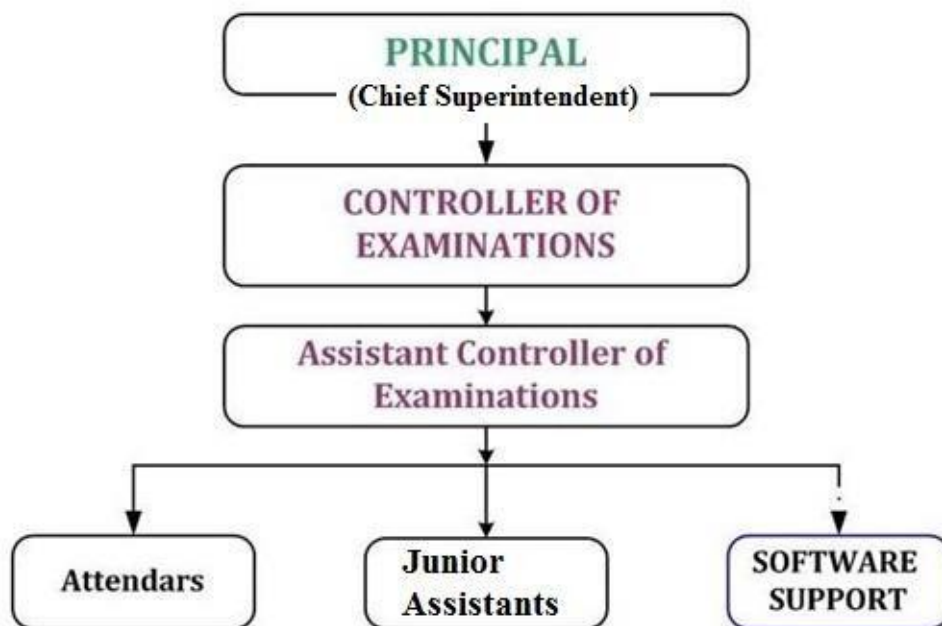
B.Voc Programmes:

1. *B.Voc (Internet of Things)*
2. *B.Voc (Data Analytics)*
3. *B.Voc (Logistics Management)*
4. *B.Voc (Retail Management and Information Technology)*
5. *B.Voc (Electronic Equipment and Information Technology)*
6. *B.Voc (Remote Sensing and Geographical Information System)*
7. *B.Voc (Food Processing and Quality Management)*

2. Organizational Structure:

The conduct of examinations and declaration of results is one of the important activities of Office of the Controller of Examinations of the Sir C R Reddy College. The Examination Section is the backbone of the examination system. It is of paramount importance that the examinations are conducted with utmost precision, fairness and objectivity to gain public credibility and esteem. In order to achieve this, all rules and procedures relating to the examinations should be so well delineated as to leave nothing to chance and assumption.

*Office of the Controller of the Examinations:
Organizational Structure*



3. Examination Infrastructure

Description of Area

1. **Strong Room: All stationery required for examination, printing of question papers as well as Printing Units, StrongRoom:**
 2. Storage of examination gazettes is done in strong room.
 3. **Working Area:** Area for working of exam related staff along with control room during Internals and Semester End Examination and Supplementary / Advanced Supplementary Examination.
1. Examination Section consists of two copy printers with a capacity of printing 60 pages in one minute and PHOTO COPIER Machine one Black & white and two printers with two scanners and relevant material for examination.
 2. Examination Section has strong room used for storage of stationery and printing of question papers as well as storage of examination gadgets.

Computer and Server:

Examination Section is having one server room with 5 computers, two projectors with licensed copies of Microsoft, Windows 7 and MS-Office 2010.

Telephone and Internet

Examination Section is well connected with internet lines of 8 Mbps speed, telephone facility with intercom.

Stationary, Notice Boarded...

1. Examination Section prints their stationary like answer books, supplements, graph papers, drawing sheets, grade sheets, and provisional certificates for an academic year. Answer books and supplements are serially numbered and the usage is recorded.
2. There are 4 dedicated notice boards for examination section which displays grade gazette, time-table and examination related notice from time to time along with uploading Examination calendar, time-table and notice regular college website.
3. Also, there are four dedicated PC's exclusively for examination related work

II. FUNCTIONS AND RESPONSIBILITIES OF EXAMINATION CELL

Guidelines for Formation of Examination Committee

UGC Guidelines

1. Autonomous College shall have an Examination Cell headed by Controller of Examinations who will be a permanent faculty nominated by the Principal on the basis of potential of the person. The Principal of the college shall be the Chief Controller, Examinations.
2. The Controller of Examinations will create his / her own team with the approval of the Principal of the College. The team shall consist of at least one faculty from each department and 3 assistant clerks, the number of persons to be nominated shall depend on the quantum of work in the Examination Cell. Teachers working in the college shall be nominated in the Examination Cell for tenure of 3 years. They will continue doing their teaching work as scheduled by the college.
3. There shall be a team of Office Assistants, Computer Programmers, Data Entry Operators and other helpers in the Autonomous Cell.

4. Examination Cell will have appropriate printing unit also for printing of question papers and other relevant confidential material.
5. All part-time/full time functionaries of the Examination Cell shall be paid honorarium for the extra work being done by them apart from usual work. Such honoraria shall be proposed by the Finance Committee and shall be approved by the Governing Body.
6. Governing Body may also approve appointment of full-time office staff in the examination cell on contractual basis on the recommendation of Finance Committee. The salary of such staff will also be decided by the same mechanism. There shall be continuous, comprehensive evaluation of students through internal and external examination.
7. In order to motivate students to be free of rote learning, various mechanism of internal evaluation should be adopted such as group discussion, paper reading, home assignments and viva-voce.
8. Remuneration for examination work should be decided by the finance committee and should be approved by the Governing Body. In no case it should be less than that paid by the parent University.
9. The **parent university will award degrees** to the students evaluated and recommended by autonomous colleges. The degree certificates will be in a common format devised by the University. The name of the college will be mentioned in the degree certificate, if so desired.
10. The Autonomous College / Recognized Institution / University Department / University Institution shall conduct the examinations at specified period (s) as it may determine and notify. The examinations and evaluation systems shall be as may be determined by the competent authorities of the Autonomous College / Recognized Institution / University Department / University Institution as the case may be. The examination and evaluation shall be carried out in such a manner as to enhance the faith and the credibility in the minds of the students and the society by being fair and rational.
11. The students passing the examinations conducted according to the standards set by the Autonomous College / Recognized Institution / University Department / University Institution shall be awarded Degree / Diploma / Certificate. As the case may be, as per the provisions of the Act.

IV. BOARD OF EXAMINERS

4.1 Constitution of Board of Examiners

The categories of examiners and their duties shall be decided by the AC from time to time. The panel of external and internal examiners for theory paper valuation for each course shall be prepared by the Chairman, BoS, in consultation with the two seniors most members of the department and shall be forwarded to the CoE in the prescribed format. It shall consist of names of no less than 20% excess of the probable numbers required for each subject for a period of three years.

The CoE is the competent authority to constitute Committees / Board consisting of the Chairman and Chief Examiners in the same or different subjects.

4.2 Term of Appointment of Examiners

Examiners shall be appointed for odd or even semesters and shall be eligible for reappointment. This may be waived in special cases by the AC, provided that the number

of new examiners appointed in any semester, who have not previously been examiners, shall not exceed one half of the total number appointed to a Board.

4.3 General Conditions for the Appointment of Examiners

1. Generally, a person with a minimum teaching experience of three years in a college or university department or research institute is eligible for appointment as examiner. However, this may be waived by the AC in special cases.

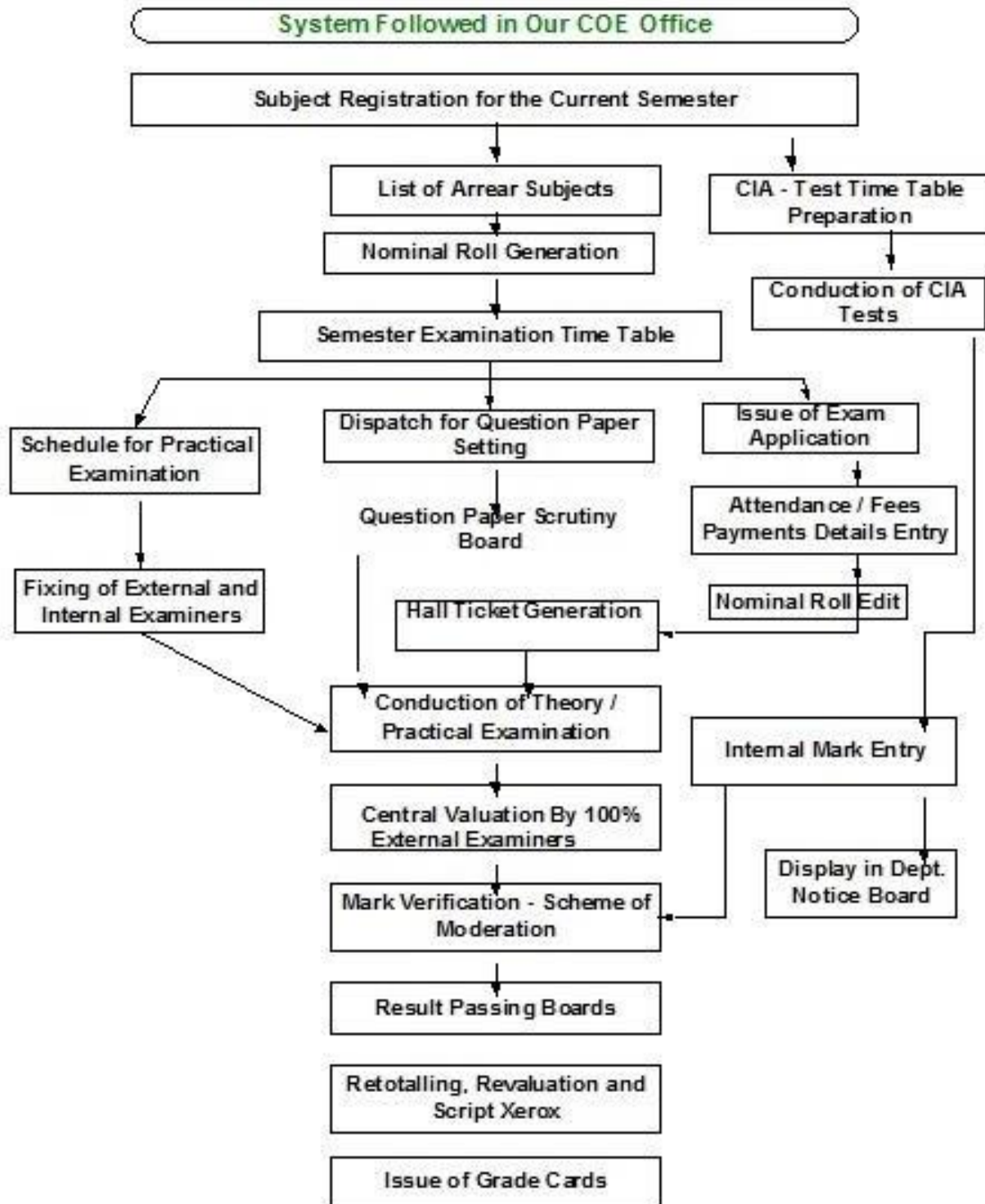
NB: 5 years standing at the industry may be considered equivalent to three years teaching experience for examinations in law. In the case of internal examiners, the minimum teaching experience shall be one year.

2. For selecting new examiners, the first preference shall be given to those with three years or more of teaching experience and who have not been appointed so far.
3. No person above the age of 65 shall be appointed or allowed to continue as an examiner. However, this can be waived by the AC in special cases.

4.4 Duties of the Board of Examiners

1. The appointment of examiners for each semester shall be made and confirmed before 30 days of commencement of the examination for both theory and practical.
2. Only persons having the prescribed qualifications and at least three years of teaching / research experience at the appropriate level shall be included in the panel.
3. The Comprehensive Examination shall constitute a Board of Examiners for each subject for odd and even semesters. The evaluation of answer scripts shall be carried out by the Board of Examiners.
4. Every Board constituted in this way shall have a chairperson who will be appointed by the Comprehensive Examination. All examiners shall be required to attend meetings, if any, convened by the college. If a member does not turn up for the meeting(s) without sufficient reasons, the CE may remove him/her from the panel of examiners.
5. It shall be the duty of the Chairman, Board of examiners, to assign duties to the members of the respective boards and give such instructions that are necessary for the efficient conduct of work relating to that board.
6. The Chairman, Board of Examiners, if the situation warrants, reserves the right to review the scripts valued by the examiners and suggest ways and means to achieve objectivity in valuation. The Chairman will also scrutinize the work by the examiners and forward to the CE all necessary documents such as valued answer scripts, mark books, remuneration bills of members countersigned by him, etc., as the case may be on or before the dates specified by the college.

Examination Process Flow Chart
Sir C R Reddy College, Office of the Controller of Examinations



VI. Pre- Examination Activities

6.1. Question Paper setting

Two different sets of question papers should prepare from the identified subject experts for both UG & PG programmes.

6.1.1. Question Paper Setters

The following guidelines shall be followed in the constitution of Board of Question paper setters if question papers are set by outside question paper setters: -

1. There shall be separate panels of question paper setters for each subject for various PG & UG programs.
2. The panels of question paper setters are to be prepared by the Chairman, Board of Studies (BoS) of the concerned subject in consultation with two seniors most members of the department and forwarded to the CE at the start of the semester itself.
3. The panel prepared by the Chairman, BoS shall be treated as highly confidential.
4. There shall be a minimum of five members in the panel of question setters for each course/paper and the validity of the panel shall be for two years.
5. Every two years, the existing panel available with the CE shall be forwarded to the Chairman of the BoS for revision.
6. The CE shall select the required number of persons from the panel for consideration for appointment as question paper setters. Communications are sent to all such persons to obtain their consent to serve as question paper setters according to the terms and conditions of the Autonomous College. If any person declines the nomination, another person selected by the CE from the panel is addressed and his/her consent is obtained. When adequate number of persons is available for a subject, a formal order of appointment is issued to them with the approval of the Principal.
7. The appointment of question paper setters shall be made by the CE in the first month of each semester with the approval of the Principal.
8. Question Paper Setters shall be appointed for one year and shall be eligible for reappointment for successive years following the year of first appointment.
9. The period of appointment of all paper setters shall be limited to the date of publication of results of the examinations for which he/she is appointed. However, they are eligible for consideration for re-appointment in subsequent examinations. Copies of all communications from the examination cell, which have relevance in the conduct of examinations, shall be maintained in the office of the CE.

6.1.2. Qualifications of Question Paper Setters

1. A person engaged in teaching with not less than three years of experience in relevant subject in any University, Research Institute or College affiliated to Universities shall be appointed to set question papers. Retired professors can also be included as question paper setter/Chairman.

6.1.3. Instructions to Question Paper Setters

1. All question paper setters are required to keep their appointments strictly confidential.
2. Question papers can be sent to the question paper setters preferably by password protected email or in compact disc. Hand written questions shall be submitted in exceptional cases where the questions must be legibly written in the paper setters' own handwriting on one side of paper and shall contain no alterations, additions, or erasures as far as possible. (In writing questions, care shall be taken to see that words or phrases peculiar to India, and technical terms and proper names are clearly written in Block letters to prevent the possibility of mistakes. Abbreviations of any kind shall be avoided). Special care must be taken in the delineation of mathematical signs and index figures.
3. In the case of other language papers, except English, the used font should be copied in it.
4. Each question paper must contain the name of the examination, the name of the subject, the total marks assigned, the duration of the paper and special directions as given in the model question paper provided. In the case of question papers which are common to two or three examinations may be mentioned in the heading itself. The marks assigned to each question shall be noted against the concerned question on the question papers except when it is stated that all questions carry equal marks. The maximum marks for the whole paper shall also be noted at the top of each question paper. Marks for subdivisions of questions shall also be indicated. Any special instructions needed like use of graph paper; Clark's table, ordinary calculators, etc. may be mentioned.
5. All the question papers shall be complete in respect of headings and directions to candidates, if any, and in form ready for transmission to press.
6. All the pages shall be numbered. While numbering the pages, the total number of pages shall also be indicated e.g., 1/3, 2/3, 3/3 where 1, 2 etc. refers to the numbers of pages and 3 the total number of pages.
7. The questions shall be typed /written on blank sheets on one side of the paper only. The paper setter shall not sign his/her name or put his/her initials on any part of the sheet on which the questions are written.

8. Any “special direction to candidates” and instructions regarding the answering of different sections in different answer books, the number of questions to be answered or the choice amongst them shall be specific, precise and free from ambiguity.
9. No question shall be set calling for a declaration of religious or political belief on part of the candidate.
10. Questions must be set with relation to the prescribed program and the books recommended by the Academic Council of the College and must conform to the standard and syllabi laid down by the College. Question paper setters shall preserve the strictest secrecy with regard to copies of text books or notes or extracts used in setting question papers, and drafts or copies of question papers shall be kept with the same care and secrecy as question papers themselves. These papers shall be destroyed as soon as the question papers are finally prepared and sent to the office of the controller of the examinations. All the soft copies of the draft and question papers shall be deleted from the computer after submitting the same to the office of the controller of the examinations.
11. All questions shall be clear and unequivocal in language. They should be logical in terms of the form and nature of the answer expected. Questions shall not be farfetched, or beyond the scholastic level expected of the student. Questions are to be evenly distributed over the whole course and cover all the prescribed texts, as specified in the syllabus.
12. Question papers shall prepare in such a manner so that a candidate, well prepared in the subject, can reasonably, answer the paper completely within the allotted time and secure full marks.
13. The special attention of question paper setters is drawn to the instruction that question papers shall be so set as to allow optional questions to be selected by the candidates. More questions shall be set than the candidates are required to answer so as to permit choice of questions.
14. Information regarding drawing sheets, squared paper, tables and charts, if any, to be supplied to the candidates may be given in the question paper itself to avoid wastage and delay. These details may also be furnished to the CoE separately.
15. The question papers of the previous year will be supplied to the question paper setters. If an examination is taking place for the first time, model question papers shall be furnished instead. Comments, if any, made on such papers will also be sent with the papers for information and guidance.
16. Questions shall not be mere reproduction from standard text books or other question papers set for earlier examinations in this or in other Universities/Colleges.

17. No paper setter shall undertake or shall have undertaken private tuition in the subject of his/her paper for any candidate who appears for the examination in the subject concerned during the academic year immediately preceding the examination for which he/she accepts appointment.
18. Question paper setters after finishing the work of setting question papers shall send to the CoE along with the memorandum showing the work done by them and their remuneration bills at the earliest. The remuneration shall be paid after the successful completion of the scrutiny by the chairman /and board of question paper setters.

6.1.4. Appointment of question paper setters and their duties

Appointment of question paper setters and the confidentiality of the process are considered the most important responsibility of the college.

1. The CoE shall issue a communication to the question paper setters which shall contain the names, residential address, mobile numbers and the email id of the members of the board. No setter shall ordinarily be assigned more than three question papers.
2. The paper setters are required to set 2 sets of question papers without answer key / scheme of valuation for each course, one for use in the ensuing examination and one for the next session (if applicable). They may be advised to avoider petition questions these two question papers. The following materials are to be sent along with the request.
 1. Guidelines to the Question Paper Setter,
 2. Question Paper Setter – Acceptance Form,
 3. Question Paper Setter - Remuneration Claim Form
 4. Syllabus
 5. Question Paper Format and Pattern
3. The question paper setters shall send the question papers through mail and acceptance and claim forms are send in separate covers properly labeled to the COE before the last date intimated.
4. Remuneration will be fixed by finance committee

6.2. Scrutiny Board

The CoE shall constitute a Scrutiny Board consisting of the Chairman and one senior member of the board of question setters for each subject to scrutinize the question papers. The question papers received from the setters shall be confidentially and meticulously scrutinized by the board in the office of the Controller just before the commencement of examinations on the day of examination only. The objectives of the scrutiny shall be to ensure that the questions are:

- a. In conformity with the prescribed syllabi and schemes of examinations

- b. Of the required standard
- c. Free of typographical and grammatical errors
- d. In conformity with marks allotted are in accordance with the direction issued in the scheme and as per the model question paper supplied.
- e. Prepared with the right answer key and correct mark distribution.
 - The scrutiny shall modify, if required, the question papers/ answer key to achieve the objectives mentioned above. After scrutiny, the Chairman/ expert shall personally hand over all the question papers along with answer keys in properly labeled and securely sealed separate envelopes to the CoE . Enveloped and related stationery shall be supplied by the College for this purpose.
 - The details of the question papers received by the CoE shall be entered in a register and will be sent for printing. The bills for remuneration and TA/DA received from the setters will be transferred to the section dealing with the appointment of paper setters for arranging payment.
 - If the question paper is identified as difficult / out of syllabus / deviation from the pattern / etc. after the conduct of examinations, feedback given by the subject expert through the Head of the department, it will be reviewed by the Central valuation chairman/chairperson with CoE and marks will be awarded.

IX. CONDUCT OF THE COMPREHENSIVE EXAMINATIONS

9.1. Preparation of Answer Books

- The answer books separate for UG and PG examinations, shall be prepared well in advance with specific format and different serial codes. There should be provision for invigilators to sign on the facing sheet after verification of entries made by candidates.
- Required number of blank answer books shall be handed over to the chief superintendent of the examinations.

9.2. *Appointment of Chief Superintendent, Additional Chief Superintendent etc.*

The Principal shall be the Chief Superintendent of all examinations conducted in the college. However, the Principal can officially hand over the charge to a senior teacher, taking into account his/her experience and efficiency in related matter, under special circumstances. An additional Chief Superintendent and such other staff as required for the conduct of the examinations shall be appointed by the Principal. Such persons shall be paid remuneration, as fixed by our College from time to time.

9.3. *Instructions to Chief Superintendent and Additional Chief Superintendent*

at the Examination Venue

The Additional Chief Superintendent is responsible for the efficient conduct of examination sat the venue. The Additional Chief Superintendent shall be a senior teacher appointed by the Principal. The following guidelines may be followed for the smooth conduct of the examinations:

1. The Additional Chief Superintendent shall ensure that(a)the list of candidates appearing for the examination (b) required number of answer books and (c) the stationery required for packing answer books are received at least three days before the commencement of examinations.
2. S/he should ensure that the question papers are received before the examination from the office of the CE.
3. Before opening the outer packets of the question papers, verify and assure that it is the right one for the day/session.
4. The following arrangements shall be made for the conduct of the examination.
 - a. Seating arrangement for the candidates (register number to be written on the desk at the right upper corner)
 - b. Examination room is clean, properly illuminated and that no writing or graffiti is there on the desks/walls or black board.
 - c. Room-/ hall- wise seating plan for candidates is displayed at a visible and prominent place in the portico of the college.
 - d. Selection of appropriate number of invigilators from among the faculty members, well in advance as per the norms, in this regard.
5. The question booklet cover shall be opened only 30 minutes before the commencement of the examination. This should be done in the presence of an invigilator and the observer/additional chief superintendent appointed by the Principal. S/he should ensure that the seal of the question paper cover is intact. They should sign in the space provided for the same.
6. Ensure that the invigilator for each room collects the question booklets and answer books 15 minutes before the commencement of examination and that they proceed to the examination room.
7. Mobile phones, programmable calculators and other electronic gadgets should not be allowed in the examination room even if they are switched off. If any student brings in such gadgets to the examination room, they have to be taken into custody by the invigilator and submitted to the Chief Superintendent at the earliest.
8. Allow only hall-ticket and pen, pencil, eraser and standard calculator in the examination room. Hand bags should not be permitted inside the examination

rooms.

9. Keep utmost vigil throughout the examination process. The additional Chief Superintendent has to frequently visit examination hall and ascertain that the invigilators are performing their duties and are not engaged in talking, standing on the veranda, or reading/writing inside the examination hall.
10. A candidate shall not be allowed to write the examinations, if s/he does not have a valid hall ticket. However, if a student reports that his/her hall ticket is lost, the additional Chief Superintendent, after receiving a written request from him/her along with required fees, shall forward it to the college to obtain a duplicate hall-ticket. Or else, if there is a system of downloading duplicate hall tickets from the college website, the additional Chief Superintendent may be permitted to issue a duplicate hall ticket to the candidate, after charging the required fees. This can be allowed only if his/ her name is included in the nominal roll issued by the college.
11. All used answer books shall be packed within 30 minutes after the examination is over.
12. The Chief Superintendent shall go through the 'Instructions for the Invigilators' and give necessary directions as and when required.
13. The Chief Superintendent shall decide which series of answer books should be issued on a particular session/day. This decision should be taken one hour prior to the commencement of the examination.
14. Consolidated Absentee Statement - The consolidated list of absence should be prepared and forwarded to CE's office daily as per the direction contained in the printed instructions. They should be forwarded at the end of each category of examinations without fail to the Controller of examinations.
15. Report Regarding Invigilation Works-

Chief Superintendent / Additional Superintendent should keep a detailed list of invigilators with their signature, indicating their room numbers, in a given format. After the completion of the particular comprehensive semester examinations, the Chief /additional Superintendent must give a schedule of work done by each invigilator with the above format, stating the date and session and hall number s/he has invigilated. This statement is very much required in the malpractice cases reported during valuation time.

9.4. *Instructions to the Invigilators*

Invigilation is a crucial task in an examination. Impartial invigilation helps not only to check the use of unfair means but also to keep the morale of the candidates high. A set of guidelines for the invigilators is given below:

1. Report to the Chief Superintendent at least half an hour before the

commencement of the examination.

2. Be present at the time of opening of the question paper cover.
3. Collect the correct number of question booklets and answer books from the Chief Superintendent and ensure that the question papers are for the examination scheduled for the day.
4. Candidates need to be admitted only if they have valid hall ticket. If not, direct them to the Chief Superintendent for necessary guidelines.
5. Help the candidates locate their seats. If any candidates are in possession of mobiles phones, calculators, or digital diary or any other electronic equipment, instruct them to keep them outside the examination hall.
6. Verify the identity of the candidate through the photograph on the hall ticket and mark their attendance.
7. Candidates shall be admitted to your hall, if his/ her register number is allotted to your seating plan. If the register number of a candidate does not appear in your seating plan, direct him/her to the control room for further verification and action.
8. Distribute the answer book 5 minutes before the commencement of the examination and direct the candidates to fill in the roll number and other entries in appropriate places. The invigilator shall mark the sign on the answer book after verifying that the details filled in / barcode affixed by the candidate are correct. Get their signature in the distribution sheet against their register number.
9. Distribute the question paper at the third stroke of the bell and ask the candidates to start writing immediately.
10. Ten minutes before the end of examination, along with the warning bell, announce 'last ten minutes' and do not allow any candidate to leave the room. After the last bell (3 strokes) ask the candidates to stop writing and put their pens down.
11. Collect the answer books and arrange them in the order of register numbers and hand over the same with attendance list and unused answer books to the chief superintendent. Report to the chief superintendent before leaving the examination premises.
12. The rule that candidates are not to leave the hall before the expiry of half an hour from the commencement of the examination should be strictly enforced. The question papers from such candidate should be collected.
13. No candidate who leaves the room during the examination shall be allowed to return.
14. Candidates who leave the examination hall more than half an hour earlier than

the scheduled time of the examination should surrender their question papers with their name and register number written on them to the Invigilator /Assistant Superintendent.

The candidate(s) may collect them back after the examination, if they so desire.

15. Candidates who leave the hall refusing to surrender the question papers, as stated above, shall not be allowed to take the examination on subsequent days and the matter may be reported to the chief superintendent and CE.
16. Candidates shall be permitted to leave the examination hall only after his/her answer book is taken charge of by the invigilator.

Important Notes

1. No candidate without valid hall ticket is to be admitted into the hall.
2. Candidates shall be admitted to the examination hall 5 minutes before the scheduled time.
3. No student shall be admitted to the examination hall 30 minutes after the commencement of the examination.
4. See to it that strict silence is maintained in the examination hall. Talking amongst candidates, borrowing of materials etc. should be strictly forbidden.
5. Do not give any clarification to the students regarding mistakes in the question paper, mode of answering etc., if any. If clarification is required, ask the candidate to give it in writing to the chief superintendent, who, in turn will forward the same to the CE.
6. Allow the use of logarithm tables, calculators, etc. only if their use is permitted as per the instructions given in the question paper.
7. Do not allow mobile phones or any electronic equipment in the examination hall.
8. Remain alert and vigilant, and check the use of unfair means in the examination hall. In case of any unfair indulgence, immediately take custody of the answer book and submit a written report to the chief superintendent who, in turn, will forward the same to the CE.
9. Do not allow any candidate to write on the question paper. Advise them to use the last page of the answer book for rough work.
10. Do not allow refreshments for the candidates in the examination hall.
11. Do not make any correction in the roll number written by a candidate on his/her answer book. In any such cases ask him/her to correct it and then counter sign it.
12. Candidates should not be allowed to leave the hall before the expiry of half an

hour from the commencement of the examination.

13. See that Candidates who leave the examination hall more than half an hour earlier than the scheduled time for the close of the examination surrender their question papers with their name and register number written on them.
14. Candidates who leave the hall refusing to surrender the question papers, as stated above, shall not be allowed to appear for the examination on subsequent days and the matter may be reported to the Chief Superintendent and the CE.
15. Permit the candidates to leave the examination hall only after handing over their answer books to invigilator.

9.5. *Instructions to Candidates*

1. Every student shall register for the college examination of the relevant semester in which's/he to obtain promotion to the next semester.
2. Every student who is eligible to write the examination should submit his/ her application through the Principal / HoD within two weeks after the commencement of classes or as stipulated by the college.
3. Candidate should ensure that they receive their hall tickets at least two days prior to the examinations, provided they have adequate attendance and paid required examination fees.
4. They should bring their hall ticket on all days of the examination failing which they will not be admitted to the examination hall.
5. If the hall ticket is lost, they should immediately submit an application for a duplicate hall ticket to the CE through the Principal/HoD, as the case maybe.
6. The candidates should enter the examination room at least 15 minutes before the commencement of examination and shall not leave the room during the last five minutes. In exceptional cases, the Chief Superintendent can permit relaxation up to a maximum of 30 minutes for candidates to enter the examination hall. No candidate shall be allowed to leave the examination room before 30 minutes after the commencement of examinations.
7. Candidates are permitted to use only blue or black ink pens for writing examinations. No other colored inked pens are allowed for writing the exam.
8. No materials except writing materials and hall ticket should be allowed in the examination room. Mobile phones, programmable calculators and other electronic equipment are strictly prohibited in the examination room. Logarithm tables, calculators and other drawing equipment may be allowed only if they are required for answering questions and the question paper contains a note to this effect.
9. Instances of malpractice such as copying using manuscripts, copying from other

candidates, smuggling of answer books, indecent behavior in the examination room, use of unfair means etc., are liable to be punished as per College rules.

10. The candidate should write their roll numbers / stick the bar code, name of examination etc., in the appropriate places in the answer books. Instructions given in the answer books and question paper should be strictly followed. They are not permitted to write any identification mark anywhere inside the answer paper. Also, they are not permitted to write roll number anywhere over additional/ main book.
11. They should not write anything on the question paper other than his/her name and register number. The last page of the main question booklet can be used for rough work.
12. Strict silence should be maintained in the examination hall. Candidates are not allowed to get clarification from other students. In case of any doubt, they can seek the help of the invigilator.
13. They should return all answer books and unused additional sheets before leaving the room. Candidates are not permitted to leave the examination hall without the permission of the invigilator during the course of the examination.
14. Candidates are forbidden to ask questions of any kind during the examination. Superintendents are instructed to refuse to answer any inquiries whatsoever related to the question papers, whether as explanation of meaning or correction of typographical errors. Candidates are not allowed to write anything except the register number and name on the question papers supplied to them.
15. Candidates shall take their places in the examination hall at least ten minutes before the time fixed for distributing the question papers. Candidates presenting themselves more than half an hour after the commencement of examination should not be admitted.
16. The rule that candidates should not be allowed to leave the hall before the expiry of half an hour from the commencement of the examination should be strictly followed.
17. Leaving examination hall early/Surrender of Question Paper. No candidates shall be allowed to leave the examination hall till the expiry of half an hour after a question paper has been given. No candidate who leaves the room during the period allotted for the papers shall be allowed to return within that period.
18. Candidates who leave the examination hall more than half an hour earlier than the scheduled time for the close of the examination should surrender their question papers with their name and register number written on them to the invigilator/ Assistant Superintendent. They may collect them after the examination, if they desire.
19. Candidates who leave the hall refusing to surrender the question papers, as stated

above, shall not be allowed to appear for examinations on subsequent days and the matter may be reported to the chief superintendent and CE.

20. Candidates shall be permitted to leave the examination hall only after his/her answer book is taken charge of by the invigilator on duty in. They should not be permitted to leave the hall after keeping their answer books in their seats.

9.6. Exclusion of candidates for disease

Any candidate shall be excluded by the Chief Superintendent from an examination on being satisfied that s/he is suffering from any infectious or contagious disease. Such cases shall immediately be reported to the CE.

9.7. Provisional Admission

No candidate shall be admitted to the examination hall without his/her hall ticket. However, the Chief Superintendent shall have power to admit a candidate provisionally who has lost his/her hall ticket or a candidate whose hall ticket has not been found among those issued / uploaded by the Exam Cell due to some mistake in transmission or in the registration/preparation of list of the candidates. Such candidates shall submit a written declaration to the effect that their applications have not been rejected by the college. The answer scripts of such candidates shall be separately forwarded on receipt of information regarding register number allotted to them. Such cases shall be reported to the CE forthwith whose office shall regularize it with sufficient proof subject to the eligibility of the candidate to appear for the examination

9.8. Opened Question Paper Covers

The Chief Superintendent will forward the opened covers to the Controller of Examinations along with the Examination Answer Scripts.

9.9. Unopened Question Paper Covers

In case where the only candidate registered for the examination absents himself, the Chief Superintendent should make a report thereof to the Controller of Examinations and return the unopened cover containing the question papers.

9.10. Exclusion of candidate's form is behavior

Candidates appearing for an examination shall be under the disciplinary control of the Chief Superintendent, and shall obey his/her instructions. In the event of a candidate disobeying instructions of the Chief Superintendent or invigilator or behaving insolently towards the Chief Superintendent or any invigilator, without prejudice to any other action that may be taken against him/her, the candidate may be excluded from the day's examination and if s/he persists in misbehavior, s/he may be excluded from the rest of the examinations by the Chief Superintendent. In all such cases, a full report of each case shall be sent to the CoE and the Examination Review Committee, after granting an opportunity to present his/her case may according to the gravity of

the offence, ratify the action taken by the Chief Superintendent or further punish a candidate by cancelling the Examination taken by him either in whole or in part or debarring him from appearing for any Examination in the college for a specified period or permanently.

9.11. Punishment for Malpractice

If the Examination Review Committee is satisfied after an enquiry that there have been malpractices in the conduct of examinations, the body, after providing an opportunity to present his/her case, may punish such person in such manner as it may deem fit.

9.11.1. Punishment for malpractice committed during Continuous Internal Assessment Examinations

Students who are found guilty of indulging in any kind of malpractice during CIA exams, will not be award demarks for CIA of the particular paper and it will be indicated as zero (0) in the Statement of Marks. In such cases, the marks obtained in Assignment / Seminar will also be considered as zero (0).

9.11.2 Punishment for malpractice committed during Comprehensive Examinations

The students, who indulge in any malpractice, while writing examination, will be immediately referred to the Chief Superintendent for the initiation of appropriate disciplinary proceedings. If they proved as guilty of malpractice, the Examination Disciplinary Action Committee has been empowered to impose punishment including fine, cancellation of paper(s) and debarring from writing examinations for the next 2–5 years, according to the cognizance (seriousness) of the malpractice.

Punishment for Malpractice Committed During Comprehensive Examinations

S. No.	NATURE OF MALPRACTICE	PUNISHMENT
1.a	Writing one's internal marks and request for a pass	Warning may be given for the first time. If repeated, the examination taken by the candidate will be cancelled
1.b	Writing one's Register Number in a page other than the title page in the main answer book	Fine of Rs. 200/- per paper for maximum of 2 papers (Rs.400/-). More than 2 papers Rs.500/= to be imposed
1.c	Letter of appeal coupled with promise of any form of consideration.	The particular examination / examinations, depending upon the seriousness of appeal, taken by the candidate will be cancelled

2	Possession of incriminating material for copying.	The particular examination / examinations taken by the candidate will be cancelled
3	Copying from notes, books or any written / printed material / electronic gadgets related to the subject of the examination. Borrowing the answer book of another candidate to copy	Current semester examinations will be cancelled. If repeated, the candidate will be debarred from appearing for ensuing 2 semester examinations
4.a	Inserting Previously written answer sheets brought from outside.	Current semester examinations will be cancelled and the candidate will be debarred from appearing for the ensuing 4 semester examinations
4.b	Aiding, passing and assisting for copying from main / additional book / any written or printed material (bits) / electronic gadgets prepared already.	Current semester examinations will be cancelled and the candidate will be debarred from appearing for the ensuing 6 semester examinations
5.a	Threatening the invigilator/any such insubordinate behavior	Current semester examinations will be cancelled and the candidate will be debarred from appearing for the ensuing 4 semester examinations
5.b	For manhandling / injuring the Superintendent, Hall Superintendent and other examination officials / personnel (College and other Institutions)	Current semester examinations will be cancelled and the candidate will be debarred from appearing for the ensuing 6 semester examinations. The matter will be referred to the police, if necessary, for further action
6	Case of impersonation (Current students and past students who are now appearing as private candidates)	Current semester examinations will be cancelled and the candidate will be debarred from appearing for the ensuing 6 semester examinations. The matter will be referred to the police, if necessary, for further action

7	Tampering in the statement of marks / provisional certificates / degree certificates issued by the College / University	The tampered certificates be retained by the College and no duplicate will be provided. Current semester examinations taken by the candidate will be cancelled. The candidate will be debarred from appearing for any examinations of this college for 5 years. The matter will be referred to police for further action, if warranted
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NOTE:

1. The matter regarding the malpractice will be placed before the Disciplinary Action Committee for enquiry and the decision of the Committee shall be the final.
2. Irrelevant writing and appeal by the candidate in the answer script will also be deemed as malpractice.
3. Cancellation of one or more papers written by the candidate who was found guilty of committing malpractice, will be indicated as zero (0) against the title of the respective paper in the Statement of Marks.
4. If a candidate is reported to have committed any malpractice for a second time, the Disciplinary Action Committee will enhance the punishment suitably.
5. Penalty will be levied from each candidate who was found guilty of committing malpractice, and given severe punishment as per the autonomous norms.
6. The particulars of candidates awarded punishment for malpractice will be displayed in the Notice Board.

9.12. Postponement of examinations under emergency circumstances

Normally the scheduled examinations dates shall not be postponed. If the date of an examination date is to be changed due to unavoidable reasons, the decision will be taken by the subcommittee chaired by the Principal. The subcommittee shall be constituted by the Principal which contains the CoE, academic coordinator, member secretary, two members from Academic Council, and the IQAC coordinator.

9.13. Conduct of Comprehensive Semester Lab Examinations

- Semester end lab examinations will be conducted after the last working day of the semester (as per the directions given by the Controller of the Examinations).
- Semester end lab examinations will be conducted by the teacher concerned and lab external examiner. The examination cell will receive three names of external lab examiners to conduct end lab examinations duly approved by HOD and the Principal.
- The CE will select one of the three external examiners submitted by HOD and inform

the concerned examiner the time and number of students appearing and obtain his/her consent to be the examiner. The Internal examiners will be appointed by the HODs concerned and inform to the Controller of the Examinations.

- The concerned HOD of the Department should prepare the time-table batch wise with respect to the equipment available in the department and forward the same to the examination cell. After the examination, the examiners should submit the marks after entering the software provided in COE office and absentees statements in sealed covers in the examination cell. Duly signed Remuneration bills should be submitted along with the marks awarded in Datasheets
- The College shall notify the examination schedule of conduct of Practical/ viva- voce examinations at least two weeks prior to the Practical examinations. Detailed time table of the Practical examinations, subject wise, batch wise etc shall be announced by the HOD, wherever necessary.
- The COE shall appoint Examiners (preferably Internal) for Practical examinations for different courses/ subjects from the panel of examiners submitted by the respective Boards of studies. Whenever Internal Examiners are appointed, all efforts should be made to appoint the faculty who handled the practical classes during the respective academic period. When several teachers are involved in handling the classes, they shall be appointed by rotation. The HOD of the concerned department shall be responsible for the conduct of the practical/ viva-voce examination(s) in the respective departments.
- The required number of answer booklets and other material shall be demanded and obtained from the COE well in time for practical examinations.
- Candidates shall be in possession of Hall Tickets on all the days of Practical examinations. In the event of non-possession or loss of Hall Tickets the HOD is empowered to permit the Candidate to appear in the examination in exceptional circumstances and after verifying the identity of the candidate.
- Practical answer scripts after the practical examination shall be packed in separate covers and sent to the College after completion of all the Practical examinations.
- Marks allotted by the examiners for the practical and viva-voce examination shall be entered in words and figures on prescribed format and enclosed in covers prescribed for the same.

9.14. Online Examinations

For online examination, the root/admin password of the server must be with Controller of Examinations. Controller of Examinations shall arrange to create necessary online examinations on the server and provide the username and password to the students. The COE/Assistant COE / COE Office Assistant shall add the questions to the online exam and verify that the online exam operates properly.

During the online examinations, access to the online course material, other resources on the same or other server, internet access must be disabled for the candidates of the examination. This should be ensured by COE/Assistant COE / COE Office Assistant. The COE/Assistant COE / COE Office Assistant shall be responsible for the proper conduct of the respective online examination.

After the online examination, all exam data must be downloaded to exam data server with all output files in excel so as to retrieve questions, attempts and grades of each students.

9.15. Remuneration/ Honorarium/Allowances

Remuneration/ Honorarium/Allowances etc., shall be paid to the Chairman and the Examiners, Paper-setters, Examiners, Chief Superintendents, Hall Superintendents, and others who have put in work in connection with the conduct of examinations, as per the rates fixed by the College authorities from time to time., after completion of the assigned duties and after necessary documentation, at the College, along with TA/DA, remuneration for valuation, as applicable

Remuneration for the appointed staff other than examiners shall be consolidated and claimed from the College on the prescribed form at approved rates.

In cases of practical/ viva-voce examinations, the Examiners shall submit their remuneration claims in appropriate Form along with the marks-sheets, Answer- scripts, attendance statement of candidates to the COE.

The claims of assistants at practical/ viva-voce examinations shall be prepared by the assistants themselves on separate prescribed Form, countersigned by the examiners concerned.

10. RESULT PUBLICATION

10.1. Post-Evaluation Data Processing/Tabulation

The results of each of the examinations shall be tabulated in the Examination Database maintained on well secured Computer server with restricted access. The persons responsible for such activity may be referred to as Marks- Tabulators.

Marks-Tabulator(s) shall be appointed by COE. Marks-Tabulator(s) shall be staff members of the office of COE. They shall possess sufficient computer programming and database (SQL & RDBMS) skill and experience.

The marks tabulated by the Marks-Tabulator shall be scrutinized and validated by a Validator who shall be appointed by the COE.

The Validator shall:

- Check the posting made by the Marks-tabulators from the original statement submitted by the examiner
- Check totals/aggregates posted by Marks-tabulator;
- Check the implementation of the resolutions of the Passing Examination Review

Committee;

- Check the result prepared by the Marks-Tabulator for failures, honors such as Distinction, Pass, Fail, and Absentees etc.
- Validate the Grades, GPA and CGPA etc. computed on the basis of the marks obtained by the candidates in examination.
- Any other discrepancy/ errata/ manipulation/ inconsistency etc. that might have crept into the marks database.

10.2. Examination Review Committee Meeting

The committee shall meet at within the College campus on the assigned day with select members as appointed by Principal and COE from the respective Board of Examiners.

The members shall consider any moderation issues arising out of wrong/ out- of-syllabus questions/ unsolvable problems, etc. and the number of marks to be awarded to the candidates affected by such issues.

The members shall review the shortfall in marks of failed candidates for each subject and arrive at the criteria for awarding grace marks in such a manner that marginally failed candidates may clear the course/subject. The award of grace marks shall be subject to the conditions.

The moderation of marks may be done on the basis of the representation by the examinees concerned or on the basis of the unanimous decision of the committee concerned for valid reasons that have to be substantiated in the minutes of the committee meeting.

No grace marks shall be awarded in the case of failure in Practical examination(s).

Grace marks to the aggregate/ total marks prescribed for an examination will be awarded to a candidate failing theory papers, as the case may be in which minimum pass marks have been prescribed; provided the candidate passes the examination by the award of such Grace marks. Such grace marks shall be split in a manner that may serve to pass papers wherever applicable.

For UG and PG candidates a maximum of not exceeding 4 marks per Candidate in total.

A maximum of 8 Marks be awarded for final semester to a single subject in order to enable the student to get the Degree / Certificate / Diploma / Advanced Diploma.

10.3. Result Passing Board

When the tabulation of an examination is completed, the CE shall convene a meeting of the Pass Board constituted by the CE for each subject. The section dealing with the examination shall prepare statistics of the result with details such as: -

1. Name of examination with month and year.
2. Number of candidates registered for the examination.
3. Number of candidates appeared for the examination.

4. Number of candidates secured the minimum pass mark prescribed for each part of the examination and the aggregate marks required for a pass and number of candidates in each class.

5. Percentage of pass.

These statistics shall be furnished to the pass board for finalizing the results. The meeting of the pass board, constituted by the CoE for each examination, shall approve/ratify the results as such or the board may approve the results with moderation, if any, as it may decide. The minutes of the board shall be put up to the CoE for approval. The CoE shall issue orders to publish the results.

10.4. Result Finalization and Publication

The results of the concerned examinations shall ordinarily be declared within 15 days of the last examination and the College shall dispatch the result along with the statement of marks to the Departments within 30 days for distributing the same to the concerned students. The results shall be published on the college website.

10.5. Results Withheld and their Declaration

If there is discrepancy in the subjects mentioned in the examination form and actual examination given by the candidate, the results of such examinee will be withheld and will be declared after due confirmation of the term that he/she had kept with approval of the Chairman, committee & Controller of Examination.

The results of those candidates held in reserve for malpractice and/or lapse in the examination will be declared as per the resolution passed by the Examination Malpractice Enquiry Committee.

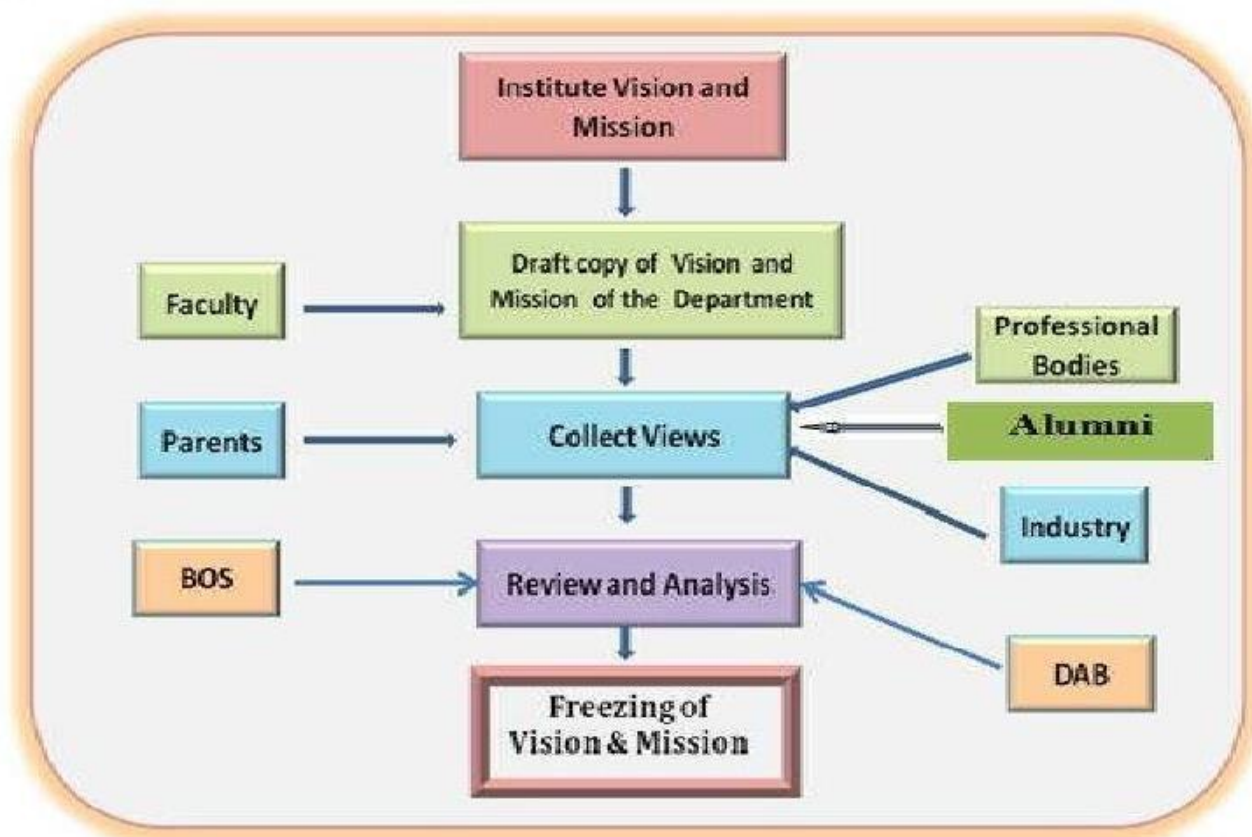
The result of the candidate writing wrong subject in the examination form and actually appearing for the different subject shall be withheld. The result of such candidate will be declared after confirming from the Chairman regarding the subject and payment of a prescribed fine.

The results reserved for dues payable to College shall be declared on confirmation of payment of the said dues.

ANNEXURE – IV

Attainment of Cos, PSOs, POs & PEOs

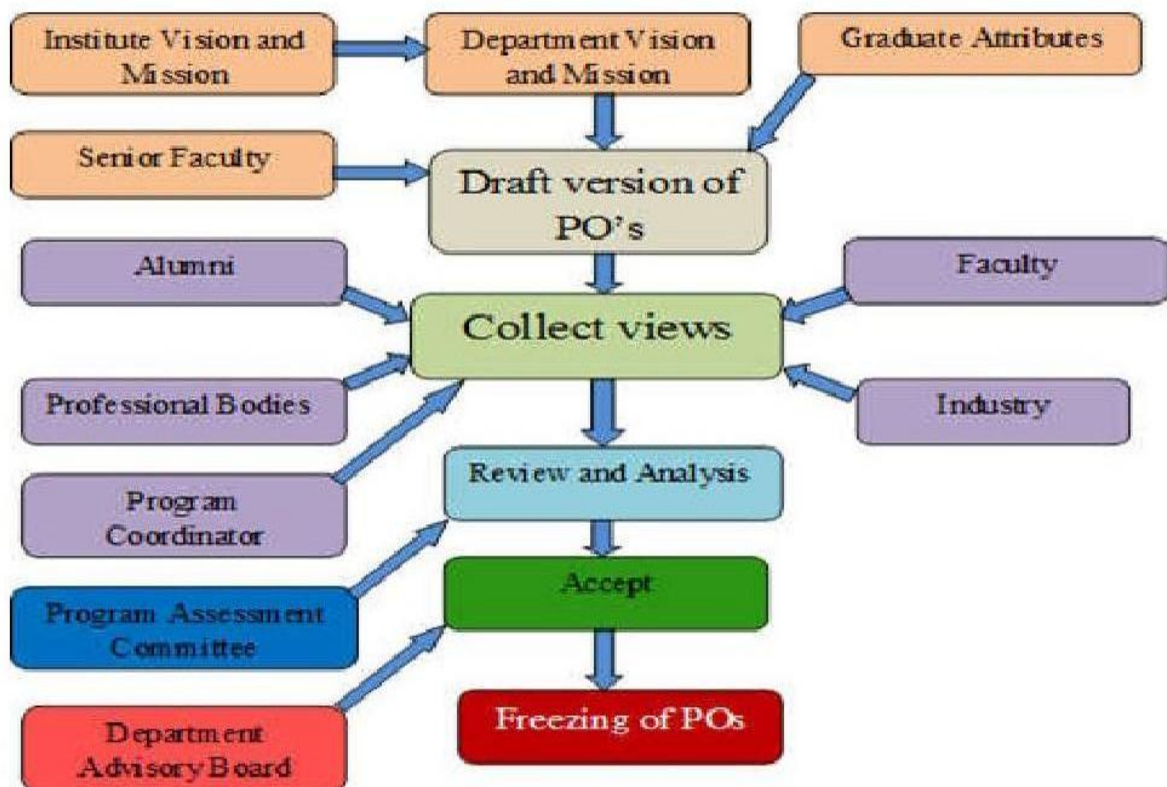
1. Institute Vision And Mission
2. Department Vision And Mission
3. COs,POs, PEOs & PSOs
4. Process for defining Vision and Mission of the Department



Process to Define PEO's of the Department



Process to Define Program Outcomes of the Department



Course Outcomes (COs): Statements indicating **what a student can do** after the successful completion of a course.

For every course there may be 5 or 6 COs. The keywords used to define COs are based on **Bloom's**

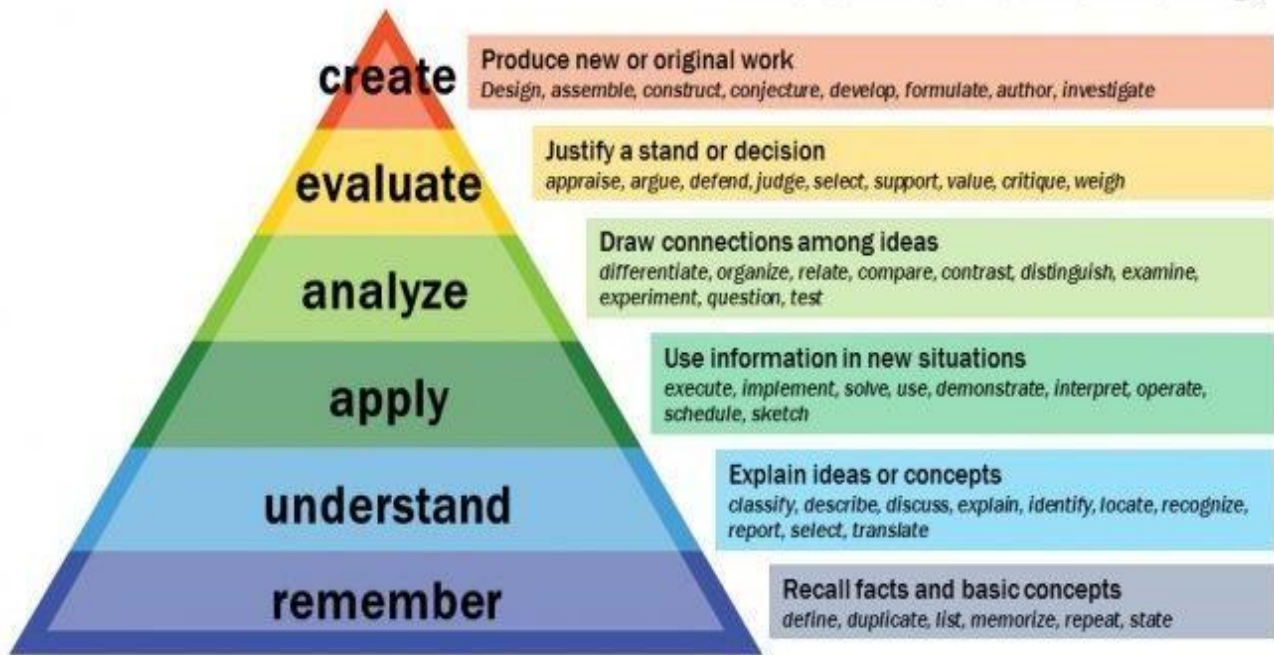
Taxonomy

SAMPLE CO STATEMENTS:

On successful completion of this course, students should be able to

CO1	Identify the troubles due to hardness of water and its maintenance in industrial applications.
CO2	Analyze issues related to conventional fuels and apply the concepts of advanced fuels like bio, nuclear and rocket fuels in energy production.
CO3	Analyze different types of electrodes and batteries for technological applications..
CO4	Apply principles of corrosion for design and effective maintenance of various equipments.
CO5	Identify the important applications of engineering materials like plastics, rubbers and lubricants.

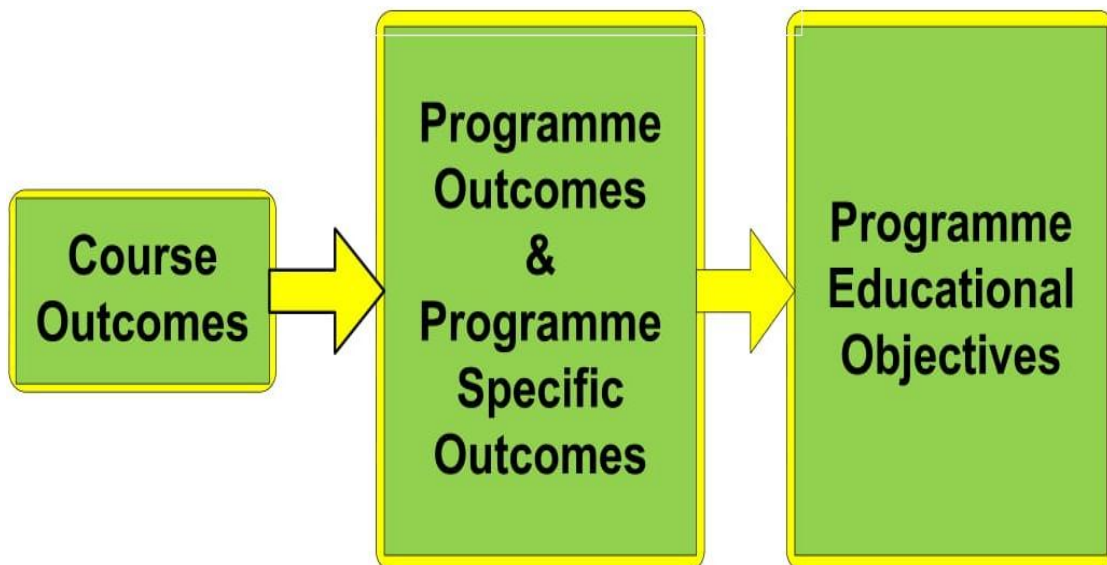
Bloom's Taxonomy



Vanderbilt University Center for Teaching

Levels of Outcomes:

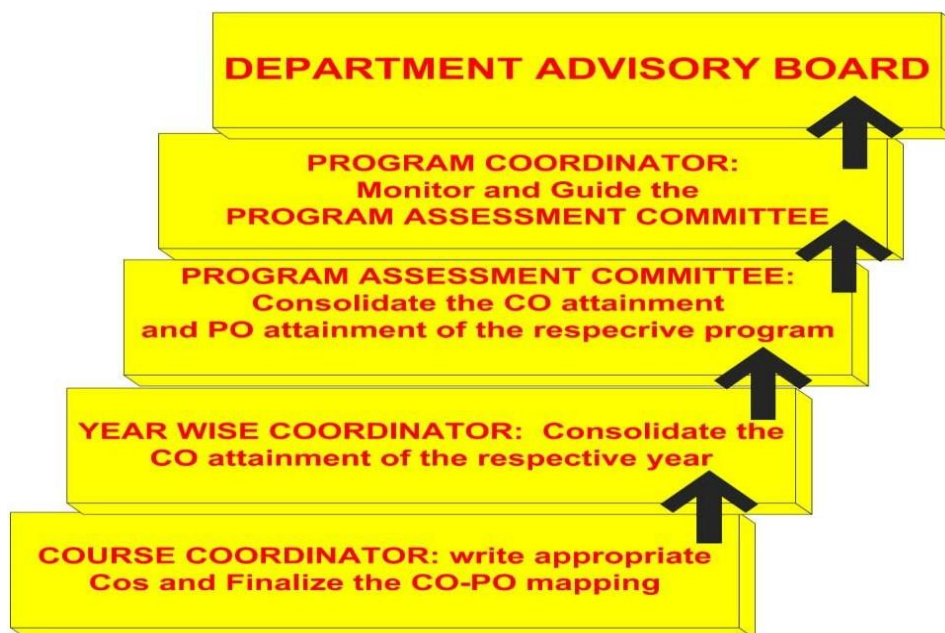
There are four levels of outcome such as Course Outcome (CO), Program Outcome (PO), Program Specific Outcome (PSO) and Program Educational Objective (PEO).



Relating the outcomes (CO-PO&PSO-PEO)

Process involved in CO-PO Mapping:

The role of CO-PO mapping will be assigned to the faculty as per hierarchy



**SAMPLE CO-PO AND CO-PSO MAPPING COURSE ARTICULATION MATRIX
(Correlation between COs, POs & PSOs):**

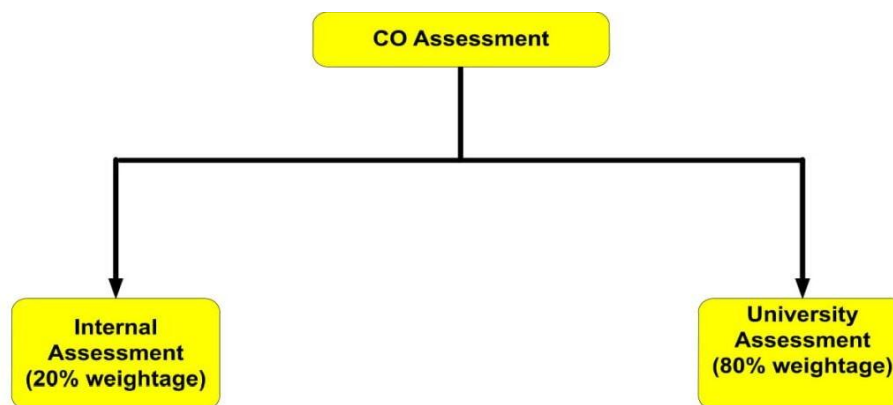
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	3	2	-	-	2	1	-	-	-	-	2	-	-	-
CO2	3	2	-	-	-	3	2	-	-	-	-	2	-	-	-
CO3	3	3	3	-	-	-	2	-	-	-	-	2	-	-	-
CO4	3	2	3	-	-	2	1	-	-	-	-	2	-	-	-
CO5	2	2	-	-	-	2	1	-	-	-	-	2	-	-	-

- “1” – Slight (Low) Correlation
- “2” – Moderate (Medium) Correlation
- “3” – Substantial (High) Correlation
- “-” indicates there is no correlation.

Assessment Process for CO Attainment:

For the evaluation and assessment of CO’s and PO’s, rubrics are used. The rubrics considered here are given below:

(i) CO Assessment Rubrics:



EVALUATION PROCESS (R17 Regulation):

Evaluation Task	Marks
Assignment-I (Unit-I)	A1=5
Assignment-II (Unit-II)	A2=5
I-Mid Examination (Units-I & II)	M1=20
I-Quiz Examination (Units-I & II)	Q1=10
Assignment-III (Unit-III)	A3=5
Assignment-IV (Unit-IV)	A4=5
Assignment-V (Unit-V)	A5=5
II-Mid Examination (Units-III, IV & V)	M2=20
II-Quiz Examination (Units-III, IV & V)	Q2=10
Attendance	B=5
Assignment Marks = Best Four Average of A1, A2, A3, A4, A5	A=5
Mid Marks =75% of Max(M1,M2)+25% of Min(M1,M2)	M=20
Quiz Marks =75% of Max(Q1,Q2)+25% of Min(Q1,Q2)	B=10
Cumulative Internal Examination (CIE) : A+B+M+Q	40
Semester End Examination (SEE)	60
Total Marks = CIE + SEE	100

Attainment of Course Outcomes through Mid Examinations:

CIE Attainment						
		CO1	CO2	CO3	CO4	CO5
MID-I	Q1a	78.44				
	Q1b	82.79				
	Q1c	82				
	Q1d	56.87				
	Q2a		82.68			
	Q2b		69.1			
	Q2c		68.97			
	Q2d		69.45			
	Q3a	90.97				
	Q3b	81.88				
	Q3c		64.29			
	Q3d		57.15			
MID-II	Q1a			83.34		
	Q1b			73.92		
	Q1c			89.52		
	Q1d			78.45		
	Q2a				85.33	
	Q2b				87	
	Q2c					
	Q2d				72.31	
	Q3a					85.3
	Q3b					83.34
	Q3c					82.15
	Q3d					
MID Attainment		78.9	68.7	81.4	81.6	83.6

2. Attainment of Course Outcomes through Assignments:

Assignment	A1	98.31				
	A2		100			
	A3			96.62		
	A4				96.62	
	A5					75.71
Assignment Attainment		98.4	100	96.7	96.7	75.8

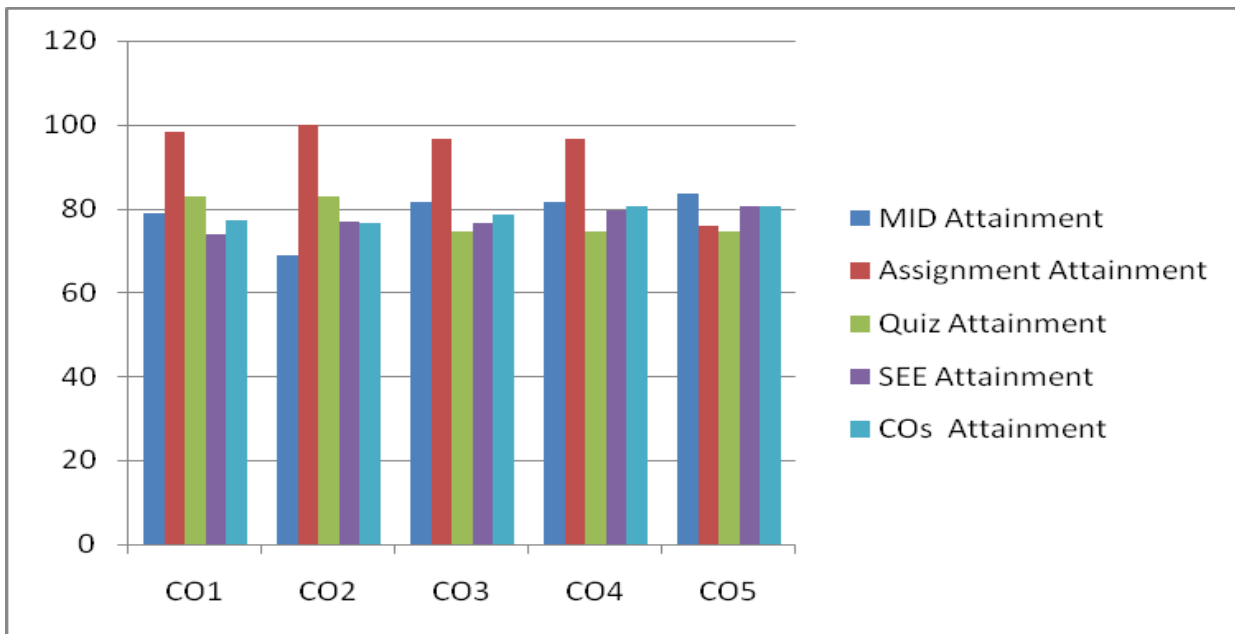
3. Attainment of Course Outcomes through Quiz Examinations:

Quiz	Q1	82.86	82.86			
	Q2			74.44	74.44	74.44
Quiz Attainment		82.9	82.9	74.5	74.5	74.5

4. Attainment of Course Outcomes through Semester End Examinations (SEE):

SEE Attainment					
	CO1	CO2	CO3	CO4	CO5
Q1a	71.55				
Q1b	75.64				
Q1c	66.22				
Q1d	81.43				
Q2a		72.96			
Q2b		66.22			
Q2c		87.28			
Q2d		81.36			
Q3a			85.83		
Q3b			72.89		
Q3c			72.89		
Q3d			73.78		
Q4a				82.48	
Q4b				79.17	
Q4c				89.42	
Q4d				67.08	
Q5a					72.48
Q5b					84.73
Q5c					78.79
Q5d					85.51
SEE Attainment	73.8	77	76.4	79.6	80.4

COs Attainment					
	CO1	CO2	CO3	CO4	CO5
MID Attainment	78.9	68.7	81.4	81.6	83.6
Assignment Attainment	98.4	100	96.7	96.7	75.8
Quiz Attainment	82.9	82.9	74.5	74.5	74.5
SEE Attainment	73.8	77	76.4	79.6	80.4
COs Attainment	77.3	76.7	78.5	80.5	80.4



Calculation of CO-PO attainment

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	3	3				2					2
CO2	3	2	3			2	1					2
CO3	2	2				2	1					2
CO4	3	3					1					2
CO5	2	3										1
Total	13	13	6	0	0	4	5	0	0	0	0	9
	79	79	77			78	78					78