

EXAMINATION MANUAL

Version 1.1

Effective from Academic Year 2021-22

Published on

Bhilai Institute of Technology, Durg

An Autonomous Institution affiliated to **Chhattisgarh Swami Vivekanand Technical University, Bhilai (Chhattisgarh)**

An ISO 9001:2015 Certified Institution.

NAAC Accredited with 'A' Grade.

All UG Programs Accredited by NBA

NIRF 2020 ranked under Engineering Category

Recipient of AICTE “Utkrishth Sansthan Vishvakarma Award” 2020 under category-3

This document is to be read in conjunction with the Academic Regulations Manual of the Institute.

Bhilai Institute of Technology, DURG

Foreword

Institute has been conferred the Autonomous Status by University Grants Commission to Bhilai Institute of Technology, Durg from the Academic Session 2020-21.

Institute will aim for the following Objectives:

1. Institute will devise methods to improve the quality of Technical Education.
2. Institute will prescribe its own courses of study and syllabi and restructure and redesign the courses to suit local needs.
3. Institute will improvise the methods of assessment of students' performance, the examination pattern and its conduction along with the notification of results.
4. Institute will promote use of modern tools of educational technology to achieve higher standards and greater creativity.
5. Institute will promote healthy practices such as community service, extension activities, and projects for the benefit of the society at large.
6. Institute will modernize and frame its own curricular to make them acceptable to the local environment that, in turn will provide better job opportunities to the students.
7. Institute being familiar with its Strength, Weaknesses, Opportunities and Challenges (SWOC) will adopt measures to promote academic excellence.

Index

S. No.	Title	Page No.
-	Foreword	2
-	Index	3
1	Examination Cell	4
2	Examination System	4
3	Continuous Assessment	4
4	End Semester Examination (ESE)	5
5	Appointment of Paper Setters / Practical Examiners / Valuers	5
6	Examination Committee	6
7	Examination Sub-Committees	7
8	Course Codes (Annexure-I)	11

Bhilai Institute of Technology, Durg

An Autonomous Institute

1.0 Examination Cell

- 1.1 The Institute shall have an Examination Cell headed by Controller of Examinations (CoE).
- 1.2 The Controller of Examinations will be a permanent faculty member of the Institute, nominated by the Principal.
- 1.3 The Controller of Examinations shall be assisted by Deputy Controller of Examinations, along with other office support.
- 1.4 The Principal shall be the Chief Controller of Examinations.
- 1.5 In case of any dispute, difference of opinion in interpretation of these guidelines or any other matter not covered in these guidelines, the decision of the Chairman, Academic Council of the Institute shall be final and binding.
- 1.6 Notwithstanding anything contained in these guidelines, the Chairman, Academic Council of the Institute may, in emergent situations take action on behalf of the Academic Council of the Institute, as he deems appropriate and report it to the next meeting of the Academic Council of the Institute for its approval.

2.0 Examination System

- 2.1 The medium of Examination for all the programs shall be English.
- 2.2 The Examination system shall have two components: Continuous Assessment (CA) and End Semester Examination (ESE).
- 2.3 Benefit of Attendance (if any) to be given to student on account of participation in different events / prolonged illness shall be as per the Academic Rules of the Institute.

3.0 Continuous Assessment

Continuous Assessment shall have two components: Class Test (CT) and Teacher's Assessment (TA).

3.1 Class Test

- 3.1.1 There will be two Class Tests in each theory subject in a semester. The type of questions in each class test viz. Multiple-Choice type Questions / Subjective type Questions / combination of Multiple-Choice type and Subjective type Questions will be decided by Internal Quality Assurance Cell (IQAC) from time to time.
- 3.1.2 The marks obtained by the students along with valued test answer books will be shown to the students and corrections (if any) will be incorporated, under intimation to the Controller of Examinations.
- 3.1.3 The format of Class Test Question Papers will be as suggested in All India Council for Technical Education (AICTE) Examination Reforms policy Booklet.
- 3.1.4 The students who do not perform well in the class tests will have to appear in the improvement tests.

3.2 Teacher's Assessment

3.2.1 Teacher's Assessment shall depend on attendance, assignments, closed and open book tests, group assignments, Viva-Voce, quizzes etc.

3.3 Marks Awarded in Continuous Assessment

3.3.1 Final Continuous Assessment (Class Test & Teacher's Assessment) marks awarded to students should be sent to the Controller of Examinations by the concerned Head of the Department before the last date notified for the purpose.

3.3.2 After submission of these marks to the office of Controller of Examinations, alteration / correction in marks shall not be accepted.

3.3.3 Any change in the marks submitted shall be accepted by Controller of Examinations in exceptional cases only, after approval from the Principal.

4.0 End Semester Examination (ESE)

4.1 At the end of each semester, there shall be an examination (hereinafter called End Semester Examination) conducted by the Institute as per the programme announced at the beginning of each academic year.

4.2 The End Semester Examinations will generally be held in Nov/Dec. and April/May in each year.

4.3 The duration of examination period normally should not exceed 20 working days.

4.4 The time table for the End Semester Examination shall be declared by the Controller of Examination 15 days before the start of examination, with the approval of the Principal.

5.0 Appointment of Paper Setters / Practical Examiners / Valuers

5.1 A paper setting committee for each faculty shall be entrusted with the task of suggesting the panel of the Paper Setters / Practical Examiners at least one month before the start of examinations of that Academic Session.

5.2 The paper setting committee for each faculty shall consist of Board of Studies (BoS) Chairman, one Senior member of BoS and one nominee of Principal (from relevant discipline).

5.3 The panel for each subject would include names of two external and two to four internal paper setters / practical examiners.

5.4 Paper Setters appointed to perform such work shall have relevant qualifications enforced from time to time, and shall be a regular employee of an Institute / Organization.

5.5 Principal will give the final approval for two paper setters for each subject and the same will be communicated to paper setters through Controller of Examination.

5.6 Controller of Examination shall select any one set from the two sets of papers for each subject, ensuring that 40% of the papers in a particular semester are from external paper setters.

5.7 Maximum marks and duration of examination in Question paper for the end semester examination shall be as specified in the scheme of teaching and examination (typically, of maximum marks 100 and maximum duration 3 hours).

- 5.8 Paper Setter(s) shall set the question paper as per the pattern and template prescribed by the Institute from time to time.
- 5.9 The Paper Setter shall ensure strict confidentiality and shall not disclose his/her appointment.
- 5.10 Appointment of Internal and External Examiner for Practicals for each subject (from the panel of examiners suggested by paper setting committee) shall be done by the controller of examination, with the approval of the Principal.
- 5.11 Appointment of Valuers for each subject (from a panel of valuers suggested by paper setting committee) shall be done by the controller of examination, with the approval of the principal.
- 5.12 No person can claim appointment as Paper Setter / Practical Examiner / Valuer or any other appointment related to examination work as a matter of right.
- 5.13 The Paper Setters / Practical Examiners (Internal / External) / Valuers shall have at least two years of teaching experience and at least one-year experience of teaching the course for which appointment is to be made. In case the appointee is from Industry / Organization / Field, he/she shall have at least two years of professional experience in the relevant field.
- 5.14 However, if a paper setter / practical examiner is not available as per the norms mentioned above, as an exceptional case, the norms may be relaxed for the appointments with prior approval from the Principal.
- 5.15 In case the Paper Setter / Practical Examiner / Valuer is from outside the Institute he/she shall communicate his/her acceptance immediately. However, if it is not possible for him/her to accept the said appointment he/she shall communicate the same to the concerned authority immediately after the receipt of the appointment, and in case of Practical Examination at least a week before the date of examination. In case no communication is received from Paper setter / Practical Examiner / Valuer within prescribed time limit it may be presumed that the appointment is accepted.
- 5.16 The Paper Setter / Practical Examiner / Valuer shall follow all the directions given by the Controller of Examination from time to time with regards to pattern of question papers, setting of question papers, Memorandum of Instructions for valuation etc.
- 5.17 The faculty members of the Institute cannot refuse to accept the assignment of the examination work. However, if there is a genuine inability in accepting the appointment, the concerned faculty member shall communicate reasons in writing to the Controller of Examinations within the prescribed time limit. The Controller of Examinations shall place the letter received from the faculty member for the consideration before the Paper Setting Committee.

6.0 Examination Committee

The end semester exams will be conducted as per the academic regulations of the Institute by the Examination Committee.

The Examination Committee shall consist of:

- i) Principal (Chairman)
- ii) Controller of Examinations as Member Secretary
- iii) Deputy Controller of Examinations as Member.

6.1 Powers and duties of Examination Committee:

- 6.1.1 The committee shall ensure proper functioning of all examinations related works including paper setting, moderation, exam conduction, evaluation, tabulation, result analysis and declaration of results.
- 6.1.2 The committee shall finalize the time table of regular and backlog examinations.
- 6.1.3 The committee shall arrange for strict vigilance during the conduct of examination so as to avoid use of unfair means.
- 6.1.4 Undertake exercise towards examination reforms.
- 6.1.5 To scrutinize complaints against question papers (if any) and to take necessary action.
- 6.1.6 The committee shall meet at least twice during the academic year and such other times as may be required.
- 6.1.7 The committee shall perform such duties and responsibilities that are assigned from time to time by Academic Council / Governing Body.

7.0 Examination Sub-Committees

The Examination Committee shall also have few sub-committees to assist the conduction, valuation and result declaration. The following will be the sub-committees:

Sub Committees of Examination Committee:

- Central Valuation Committee
- Tabulation Committee
- Result Committee
- Unfair Means (UFM) Committee
- Examination Vigilance Squad

7.1 Central Valuation Committee

Central Valuation Committee, sub-committee of Examination Committee, shall ensure smooth valuation of End Semester Examination answer books.

The central valuation committee shall consist of the following members.

- i) Controller of Examinations (Chairman)
- ii) Prof. In-charge Central Valuation
- iii) Asst. In-charge Central Valuation

- 7.1.1 Assessment of answer books shall be done at the Central Valuation Centre (CVC).
- 7.1.2 Controller of Examinations, in consultation with Principal, shall appoint a senior faculty member as Prof. i/c Central Valuation. He may depute a faculty member to act as Assistant to the Prof. i/c Central Valuation.
- 7.1.3 Board of Studies will submit the subject wise valuer list for all the subjects under their board to the Examination Committee. Principal will give the final approval of the examiner for the end semester exam.
- 7.1.4 In order to have uniformity in the assessment of answer books, for the courses where more than one valuer is involved, the Central Valuation In-charge should conduct a meeting of all the valuers in the department / Central Valuation Centre and brief them with regard to the scheme of marking for the theoretical questions as well as questions involving numerical, as per the Memorandum of Instructions for valuation provided by the paper-setter.

7.1.5 Duties and Responsibilities of Prof. In-charge Central valuation:

- 7.1.5.1 Receive the answer books from the Controller of Examinations, in sealed envelopes/ bundles, count them and process them for masking.
- 7.1.5.2 Make bundles of specified (e.g. 20) answer books each, for every subject.
- 7.1.5.3 Issue a bundle of answer books to the valuer.
- 7.1.5.4 Valuer may preferably use red ink for valuation of answer books, write their name & put their signature on each answer book after valuation.
- 7.1.5.5 Accept the bundle of valued answer books from the valuer.
- 7.1.5.6 Process the answer books for de-masking. Prepare the foil/ counter foil of the marks.
- 7.1.5.7 Send a foil copy of marks in a sealed envelope to the Examination Committee. Counter foil copy has to be sent to Tabulation Committee after revaluation.
- 7.1.5.8 A copy of marks will be displayed on the main notice board along with date,-time and venue for showing answer papers to the students.
- 7.1.5.9 Revaluation will be done as per the Academic Regulation 14.17

7.2 Tabulation Committee

The committee shall be constituted as per the below guidelines:

- i) Controller of Examination (Chairman)
- ii) In-charge Tabulation Committee
- iii) Assistant In-charge Tabulation Committee
- iv) Validator

7.2.1 In-charge & Assistant in-charge Tabulation Committee shall be Faculty / Staff members of the institute working in the office of COE. They shall possess sufficient computer programming and database skill and experience.

7.2.2 There shall be restricted/ classified zones within the office of COE with adequate security measures to ensure that no unauthorized person has access to sensitive materials or information that would affect the outcome of examination process. Only authorized persons shall have access to these areas.

7.2.3. Tabulation Committee shall receive the continuous assessment marks from respective Departments through Examination Committee at least 15 days before the commencement of end semester examination.

7.2.4. Tabulation committee shall receive the end semester marks from the central valuation committee.

7.2.5. Tabulation Committee shall receive the practical marks of end semester exams from the department through examination committee within two days of the completion of the Practical Examination.

7.2.6. The results of each of the examinations shall be tabulated in the Examination Database maintained on well secured Computer server with restricted access.

7.2.7. Tabulation committee shall also prepare the analysis of the result to be declared and submit its report to Result Review Committee.

7.2.8. The Validator shall:

- (i) Check the posting made by the Marks-tabulators from the original statement submitted by the examiner
- (ii) Check the implementation of the resolutions of the minimum Passing criterion of the programme.
- (iii) Check the result prepared by the Marks-Tabulator for Pass, Pass by grace, Fail, Absentees, division, honors etc.
- (iv) Validate the Grades, SPI and CPI etc. computed on the basis of the marks obtained by the candidates in examination.
- (v) Validate the result analysis.
- (vi) Check all the posting made by the Marks-tabulator from the result tabulation sheet to marks sheet of all the students
- (vii) Any other discrepancy/ errata/ manipulation/ inconsistency etc. that might have crept into the marks database.

7.3 Result Committee

The Result Committee for each of the Faculties will be constituted by the Academic Council of the Institute. The committee shall be constituted as per the below guidelines:

- i) Principal as Convenor
- ii) Controller of Examinations as Member Secretary
- iii) Chairman Board of Studies as Members

7.3.1 The Result Committee will be giving the final approval for the result declaration.

7.3.2 Functions of the Results Committee

7.3.2.1 To scrutinize and pass the results of the examinations conducted after satisfying itself that the results on the whole and in various subjects are in conformity with the usual standards and to recommend to the Principal the action to be taken in any case where the result is unbalanced;

7.3.2.2 If the result committee feels the result of any subject needs to be reviewed before final declaration it may suggest for the same.

7.3.2.3 To decide cases of candidates whose answer books were lost.

7.3.2.4 To exercise such other powers as the Academic Council may delegate to it from time to time.

Note: If any action is to be taken against any Examiner, Controller of Examinations, Deputy Controller of Examinations or Invigilator the matter shall be referred to the Academic Council.

The Principal will publish the results of the examination as passed by the Results Committee, within the date prescribed in academic calendar, on the notice board of the office and /or website of the Institute. The results, when published, shall simultaneously be communicated to the respective Chairman Board of Studies.

7.4 Unfair Means Committee:

Unfair Means Committee to be appointed by Academic Council every year

Unfair Means Committee shall consist of the following member:

- i) Chairperson (Member of Academic Council).
- ii) Senior Faculty Member.
- iii) Controller of Examinations as Secretary of Unfair Means Committee.

If any Unfair Means by the student is reported by the Invigilator to the Examination Committee then the case has to be processed as per the Academic Regulation 15.23.

7.5 Examination Vigilance Squad:

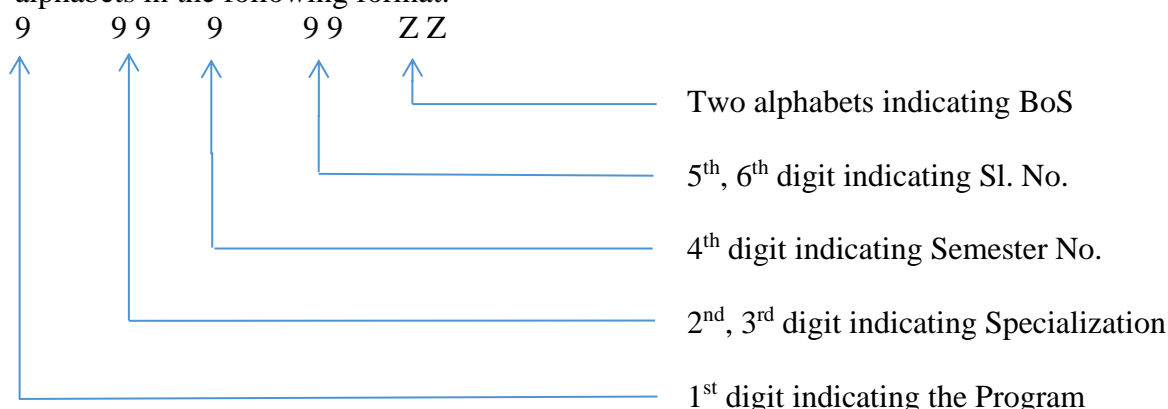
Principal shall appoint two External Observers, not below the rank of Professor, as members of Vigilance Squad.

The Vigilance Squad shall see that the conduct of the examination is strictly according to the rules and procedure laid down. In the event of the observer pointing out serious breach or procedure, the Principal may take such action as may be necessary including postponement or cancellation, wholly or in part, of the examination and if any such action is taken, a report of the action taken shall be made to the Academic Council at its next meeting.

Annexure - I

Course Code:

Every course of curriculum is allotted a unique code consisting of six digits followed by two alphabets in the following format:



The code at various positions and the particulars it indicates are as follows:

1st digit: This number indicates the program

Code	Program
1	Undergraduate (B.Tech.)
2	Postgraduate (M.Tech., MBA, MCA)
3	Ph.D.
4	B. Voc.

2nd and 3rd digit : This number indicates specialization of program in which the course is studied

B.Tech.

Code	Specialization
00	Courses common to all specialization <ul style="list-style-type: none"> • B.Tech. First year Courses • Non-Credit Courses • Open Elective Courses
01	Civil Engineering
02	Computer Science & Engineering
03	Electrical & Electronics Engineering
04	Electrical Engineering
05	Electronics & Telecommunication Engineering
06	Information Technology
07	Mechanical Engineering

M.Tech.

Code	Specialization
21	Computer Network
22	Data Sciences
23	Electrical Power & Energy System
24	Environmental Science & Engineering
25	e-Security
26	Industrial Drives & Control
27	Instrumentation & Control
28	Production Engineering
29	Structural Engineering

MBA

Code	Specialization
51	MBA

MCA

Code	Specialization
61	MCA

Ph.D.

Code	Specialization
00	Courses common to all specialization
01	Civil Engineering
02	Computer Science & Engineering
03	Electrical & Electronics Engineering
04	Electrical Engineering
05	Electronics & Telecommunication Engineering
06	Information Technology
07	Mechanical Engineering
46	Applied Chemistry
47	Applied Mathematics
48	Applied Physics
49	Humanities
56	Management
66	Computer Application

B.Voc.

Code	Specialization
71	Banking Finance Services and Insurance (BFSI)
72	Electronic Manufacturing Services
73	Graphics and Multimedia
74	Software Development

4th digit: This number indicates the semester in which the course is studied

Code	Semester
1	1 st Semester
2	2 nd Semester
3	3 rd Semester
4	4 th Semester
5	5 th Semester
6	6 th Semester
7	7 th Semester
8	8 th Semester

5th and 6th digit : This number indicates the Sl. No. of course in scheme of teaching of the semester

Code	Type of Course
01, 02, 03,20	Compulsory theory courses
21, 22, 23,40	Professional elective theory courses
41, 42, 43,90	Open elective theory courses
91, 92, 93,99	Practical courses including noncredit courses

7th and 8th place two alphabet: This indicates the Board of Study of the course

Code	Board of Studies
AC	Applied Chemistry
AM	Applied Mathematics
AP	Applied Physics
CE	Civil Engineering
CA	Computer Application
CS	Computer Science & Engineering
TE	Electrical & Electronics Engineering
EE	Electrical Engineering
ET	Electronics & Telecommunication Engineering
HM	Humanities
IT	Information Technology
MG	Management
ME	Mechanical Engineering