

SELF ASSESSMENT REPORT

submitted to

NATIONAL BOARD OF ACCREDITATION, NEW DELHI

By



Name of the Programme:

Diploma in Civil Engineering

Dr. B.B.A.GOV.T.POLYTECHNIC ,
Karad(D.P.),
Madhuban Dam Road,
U.T. OF DADRA & NAGAR HAVELI-396240
Department of Technical Education,
Administration of Dadra & Nagar Haveli(U.T.),
GOVT.OF INDIA

Approved by All India Council for Technical Education

Affiliated to Gujarat Technological University, Ahmedabad

SAR CONTENTS

Serial code & link to the item	Item	Page No.
PART A	Institutional Information	03-08
PART B	Criteria summary	
	Program level Criteria	
1	Vision ,Mission, Program educational Objectives	09-21
2	Program Curriculum and Teaching-learning processes	22-43
3	Course Outcomes and Program Outcomes	44-61
4	Student's Performance	62-69
5	Faculty information and contributions	70-77
6	Facilities and Technical Support	78-81
7	Continuous Improvements	82-84
	Institute Level Criteria	
8	Student Support System	85-86
9	Governance, Institutional Support and Financial Resources	87-101
PART C	Declaration by the Institution	102
Annexure-1	Program Outcomes and Program Specific Outcomes	103

PART A: Institutional Information

1.Name and Address of the Institution: Dr. B.B.A. Govt. Polytechnic,
Address: Karad(D.P.), Madhuban Dam Road,
Behind Electric Sub Station, U.T. of Dadra & Nagar
Haveli, Pin:396240,INDIA

2.Name and Address of the Directorate of Technical Education: Director of Technical Education,
PWD Complex, Silvassa, U.T. of Dadra & Nagar
Haveli,Pin-396230

3. Year of Establishment: 1994

4.Type of Institution:

University	<input type="checkbox"/>
Deemed University	<input type="checkbox"/>
Autonomous	<input type="checkbox"/>
Affiliated	<input checked="" type="checkbox"/>
Any other(please specify)	<input type="checkbox"/>

5. **Ownership status**

Central Government	<input checked="" type="checkbox"/>
State Government	<input type="checkbox"/>
Government Aided	<input type="checkbox"/>
Self financing	<input type="checkbox"/>
Trust	<input type="checkbox"/>
Society	<input type="checkbox"/>
Section 25 Company	<input type="checkbox"/>
Any other(Please specify)	<input type="checkbox"/>

Provide Details:

6. Other Academic Institutions of the Trust/Society/etc., if any: Not applicable

Name of the Institution	Year of Establishment	Programs of study	Location
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Note: Add rows as required

7. Details of all the programs being offered by the Institution under consideration:

Sl. No.	Program Name	Year of Commencement	Intake Capacity	Increase in Intake, if any	Year of Increase	AICTE Approval	Accreditation Status
1	Diploma in Mechanical Engg.	1994	60	90	2011	Yes	Applying First time
2	Diploma in Electrical Engg.	1994	60	90	2011	Yes	Applying First time
3	Diploma in Civil Engg.	1994	60	60	-----	Yes	Applying First time

. Write appropriate option from the list:

- . Applying first time (√)
- . Granted provisional accreditation for two years for the period (specify period)
- . Granted provisional accreditation for five years for the period (specify period)
- . Not accredited (Specify visit dates, year)
- . Withdrawn (Specify visit dates, year)
- . Not eligible for accreditation
- . Eligible for accreditation
- . Eligible but not applied

8. Programs to be considered for accreditation vide this application:

S.No.	Program Name
1	Diploma in Mechanical Engineering
2	Diploma in Electrical Engineering
3	Diploma in Civil Engineering

9. Total Number of Employees:

A. Regular *Faculty and Staff:

Items		CAY(2018-19)		CAY(2017-18)		CAY(2016-17)		CAYm1(2015-16)		CAYm2(2014-15)	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Faculty in Engineering & Technology	M	11	11	11	11	12	12	12	12	12	12
	F	02	02	02	02	02	02	02	02	02	02
Faculty in	M	01	01	01	01	01	01	01	01	01	01

Science & Humanities	F	01	01	01	01	01	01	01	01	01	01
Non Teaching staff	M	13	13	13	13	13	13	13	13	13	13
	F	02	02	02	02	02	02	02	02	02	02

B. Contractual Staff (Not covered in Table 9.A)

Items		CAY(2018-19)		CAY(2017-18)		CAY(2016-17)		CAYm1(2015-16)		CAYm2(2014-15)	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Faculty in Engineering & Technology	M	10	10	10	10	10	10	10	10	10	10
	F	04	04	04	04	04	04	04	04	04	04
Faculty in Science & Humanities	M	02	02	02	02	02	02	02	02	02	02
	F	01	01	01	01	01	01	01	01	01	01
Non Teaching staff	M	12	12	12	12	12	12	12	12	01	01
	F	01	01	01	01	01	01	01	01	01	01

10. Total Number of students:

Items	CAY(2018-19)	CAYm1(2017-18)	CAYm2(2016-17)	CAYm3(2015-16)	CAYm4(2014-15)
Total no. of Boys	616	586	645	612	640
Total no. of girls	130	98	104	86	80
Total no. of students	746	684	749	698	720

11. Contact Information of the Institution and NBA Coordinator:

I. Head of the Institution:

Name: Shri Nilesh Gurav(DANICS)

Designation: Principal, Dr. B.B.A. Govt. Polytechnic, Karad(D.P.), U.T. of Dadra & Nagar Haveli

Mobile No: +91-9599024414

Email id:

II. NBA Coordinator, if designated:

Name: Dr. Bikram Keshori Dandapat

Designation: Lecturer (Selection Grade) Mechanical Engineering Department
& Vice-Principal Dr. B.B.A. Govt. Polytechnic, Karad(D.P.),
U.T. of Dadra & Nagar Haveli

Mobile No.: +91-8460259963

Email Id: bikramkeshori_d@yahoo.com

LIST OF EMPLOYEES WORKING IN THE
DR. B.B.A. GOVERNMENT POLYTECHNIC, KARAD (D.P.)
during
Academic Years:2016-2019

Sr. No.	Name & Designation
<u>Group "A"</u>	
01	Shri C.S. Rao, Lect. in Mech. Engg.
02	Dr. B.K. Dandapat, Lect. in Mech. Engg.
03	Shri Swapnil S.Shrawge, Lect. in Mech. Engg.
04	Shri B. Moharana, Lect. in Mech. Engg.
05	Shri P.V. Gadge, Lect. in Prod. Engg.
06	Shri D.L. Sahu, Lect. in Civil Engg.
06	Dr. B. Jha, Lect. in Civil Engg.
08	Shri K.B. Patel, Lect. in Civil Engg.
09	Shri R.N.D. Sarma, Lect. in Civil Engg.
10	Shri S. Mishra, Lect. in Electrical Engg.
11	Smt. C.N. Desai, Lect. in Electrical Engg.
12	Shri A.K. Swain, Lect. in Electrical Engg.
13	Smt. M.G. Desai, Lect. in Electronics
14	Shri S. Chennappa, Lect. in Computer Engg.
15	Dr. J.B. Rana, Lect. in Chemistry
16	Shri D.N. Shinde, Lect. in Maths
<u>Group "B"</u>	
17	Shri P.N. Parmar, Office Superintendent
<u>Group "C"</u>	
18	Shri B.H. Chauhan, Sr. Store Keeper
19	Shri P.U. Vyas, Accountant
20	Shri Tonny L. Naronha, Jr. Steno
21	Shri A.L. Dhodi, UDC
22	Shri A.M. Harijan, LDC
23	Smt M.S. Desai, Asstt. Librarian

24	Shri M.B. Rohit, W.I
25	Shri B.S. Korda, W.I
26	Shri S.C. Patel, W.I
Group "D"	
27	Shri V.L. Patel, Laboratory Attendant
28	Shri R.J. Varli, Mali
29	Shri C.N. Harijan, Sweeper
30	Smt. S.V. Egde, Peon
31	Shri A.N. Solanki, Watchman

Sr. No.	Name & Designation
<u>Contract Lecturers</u>	
32	Shri A. D. Desai, Lect. in Physics
33	Shri S. M. Chavan, Lect. in English
34	Shri M. S. Billiwala, Lect. in Civil Engg.
35	Smt K. R. Jadeja , Lect. in Electrical Engg.
36	Shri J. K. Rohit, Lect. in Electrical Engg.
37	Shri Vishal Dhoke, Lect. in Mechanical Engg.
38	Shri Dipan Patel, Lect. in Mechanical Engg.
39	Smt H. H. Parmar, Lect. in E&C Engg.
40	Smt A. N. Patel, Lect. in E&C Engg.
41	Shri S. S. Mecwan, Lect. in Computer Engg.
42	Shri S. N. Solanki, Lect. in Computer Engg.
43	Shri A. A. Patil, Lect. in Computer Engg.
44	Shri B. K. Doshi, Lect. in I.T.
45	Smt U. C. Patel, Lect. in I.T.
<u>Short Term Contract Multi Tasking Staff</u>	
46	Ms. Nisha M. Shingda, MTS
47	Shri Ajay S. Patel, MTS
<u>Short Term Contract Lab. Assistant / Lab. Technician</u>	
48	Shri Suraj Mahala, Lab. Assistant
49	Shri Vad Ritesh B., Lab. Technician
50	Shri Bij Prakash B., Lab. Technician
<u>Short Term Contract Workshop Instructor (Turner)</u>	
51	Shri Dalu Nadge, W.I. (Turner)
<u>Short Term Contract Lab. Attendant</u>	
52	Shri Akshay Solanki, Lab. Attendant

53	Shri Patel Anilbhai M., Lab. Attendant
54	Shri Dodia Shailesh, Lab. Attendant
55	Shri Kamdi Kalpesh, Lab. Attendant
56	Shri Santoshbhai Gangoda, Lab. Attendant
57	Shri Bij Jitubhai, Lab. Attendant
58	Shri Mali Vikram, Lab. Attendant

List of Visiting Lecturers for 2018-19

Sr. No.	Name & Designation
<u>Contract (Guest/Visiting) Lecturers</u>	
1	Shri Kundan Lal Gupta, Lect. in Textile Manufacturing Technology
2	Shri Vaibhav P. Chaudhary, Lect. in Textile Manufacturing Technology
3	Shri Dharmesh Mishra , Lect. in Civil Engg.
4	Smt.Heena Damania, Lect. in Electronics & Comm.Engg.
5	Shri Chandrasekhar Kumar Mishra, Lect. in Electronics & Comm.Engg.
6	Smt Poonam Kanwar, Lect. in Mathematics

Part B

CRITERION 1	Vision ,Mission and Program Educational Objectives	50
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1.1 Vision and Mission (List and articulate the vision and mission statements of the institute and department)

The vision of Dr.B.BA.Govt.Polytechnic is:

The establishment of Dr. B.B.A. Govt. Polytechnic, at Dadra and Nagar Haveli will help the UT Administration to meet its man power needs and also in development of tribal regions. Moreover, the Territory must have a Polytechnic of its own to meet the aspirations of the local people, by transforming the students to be technically skilled managers, innovative leaders and environmentally receptive citizens.

The Mission of Dr.B.BA.Govt.Polytechnic is:

To produce skilled Engineering Diploma Passouts.

To Ensure Optimal utilization of available resources and manpower.

To Nurture students with knowledge, attitude and skill for their employability and professionally ethical citizens.

The Vision of the Civil Engineering Department :

To provide excellence knowledge and enrich the problem solving skills of the students in the field of Civil Engineering with a focus to prepare the students for industry need, recognized as innovative leader, responsible citizen and improve the environment.

The Mission of Civil Engineering Department :

*Prepare the students with strong fundamental concepts, analytical capability, and problem solving skills. Create an ambience of education through faculty training, self learning, sound academic practices and research endeavors.

*Provide opportunities to promote organizational and leadership skills in students through various extra- curricular and co-curricular events.

*To make the students at par with industry requirement and fit for higher education

*To explore department industry collaboration through interaction with professional society-bodies through seminar/workshops etc.

*Imbibe social awareness and responsibility in students to serve the society and protect environment.

1.2 Program Educational Objectives (PEOs) (5)

The Program Educational Objectives (PEOs) of the department of Civil Engineering Department are given below:

PEO1: To produce Diploma Passouts in Engineering with high capability to deliver effectively role of Supervisors at Engineering project sites.

PEO2: To produce Diploma Passouts with knowledge of basic fundamentals of Civil engineering concepts, so that they can be selected for admission in B.E./B.Tech. programs.

PEO3: To produce Diploma Passouts with high moral values, behavioral skills, Communication, presentation skills,

PEO4: To inculcate socially, environmentally and financially sound proactive leadership quality in Diploma Passouts.

1.3 Indicate where the Vision, Mission and PEOs are published and Disseminated among stakeholders (10)

The Vision and the Mission of the Department are the fundamental bedrocks for its activities.

The entire program offered by the Department follow these.

1.3.1 Indicate how and where the Vision and Mission are published and disseminated

The Mission and Vision are published and disseminated through

College website: www.drbbagpks.org

HOD Chamber
Notice Boards of the
department Library
Department Laboratories
Department Corridor

1.3.2 State how and where the PEOs are published and disseminated

Dissemination of PEOs

The PEOs are published and disseminated through

College Website

Notice Boards of the department

Library

Department Laboratories

Department Corridor

HOD Chamber

1.3.3 List the stakeholders of the program

The stakeholders of the program are

Students

Alumni

Faculty Members

Parents

Employers

1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (15)

1.4.1 Mention the process for defining Vision and Mission of the department

The process for defining Vision and Mission of the department was discussed in the department level and it was established through a consultative process involving the stakeholders of the department, the future scope of the department and the societal requirements .

In establishing the vision and mission of the department, the following steps were followed:

Step 1: Vision and Mission of the Institution are taken as basis

Step 2: Views are taken from stakeholders of the department such as students, faculty members, parents, Employers and alumni.

Step 3: The views about the vision and mission of the department are formulated by the team of faculty members of the department.

Step 4: The vision and mission are analyzed and reviewed to check the consistency with the vision and mission of the department at the college level by NBA Committee

Step 5: Finally the Principal, Dr. B.B.A. Govt. Polytechnic approve the vision and mission of the department.

1.4.2 State the process for establishing the PEOs

(Describe the process that periodically documents and demonstrates that the PEOs are based on the needs of the program various stakeholders.)

* The department draws upon constituents input to construct and periodically revise our PEO's. Data are collected from constituents in various ways, some formal, systematic, and some not. We have learned that some modes of input are much more effective than others in generating useful information, and constantly improving our processes for gathering input from constituencies in response to these experiences.

* The Program Educational Objectives are established through a consultation process involving the core constituents such as: **Student, Alumni, Faculty, Employers and Parents**. The PEOs are established through the following process steps.

Step 1: Vision and Mission of the college are taken as basis.

Step 2: Vision and Mission of the department are taken as a basis to interact with various stakeholders.

Step 3: The program coordinator collects the views of the stakeholders.

Step 4: On considering the views that were collected from the stakeholders, the PEOs are formulated by the team of senior faculty members identified for the program.

Step 5: The PEOs are represented before the Civil Department faculties for additional inputs to improvise the program

Step 6: Finally approves the PEOs.

1.4.2.1The following are the various assessment process used to assess the attainment of **PEO**

Principal

Lesson plan/Curriculum

NBA – quality Cell

Parent Teachers Meet

Student feedback

Faculty Feedback

Employer Feedback

Workshops/ Guest Lectures/ Seminars

Assessment Process	Assessment Criteria	Data collection frequency	Responsible Entity
Principal	Course content to meet industry requirements and to pursue higher Studies	Once in a Year	College Level
Lesson Plan	Content Delivery	Once in a semester	Department
College level NBA Committee	Improvements and Suggestions	Once in a Semester	College level
Workshops/ Guest Lectures/ Seminars	Cutting edge Technology	Frequently Conducted with at least 1 per semester	Department
Attendance Log Book	Conduct of classes	Thrice in a semester (I,II & III internals)	HOD

Feedback	Assess Quality	Once in a year/Semester	College/Department
	Suggestions		

M1=Prepare the student with strong fundamental concepts, analytical capabilities and skills

M2= Create ambience education through faculty training, self learning, sound academic practices.

M3=Provide opportunities to promote organizational leadership and skills of students through various extracurricular activities and events.

M4=To make the students as far as possible industry ready to enhance their employability in the Industries.

M5=Imbibe social awareness and responsibility in students to serve the society and protect environment

PEO1: To provide the imperatives knowledge of science and engineering concepts fundamental for a civil Engineer professional and equip the proficiency of fundamentals of civil Engineering and to Design, Drawing, test, estimate, planning ,construction and documentation of basic Civil Engineering practical skills for competent problem solving ability.

PEO2: To inculcate ability in creativity & Design, Drawing, test, estimate, planning, construction society needed products and engage in construction, repair & maintenance of Components of Civil Engineering

PEO3: To exhibit leadership capability, triggering social and economical commitment and inculcate community services and protect environment

PEO4: Pursue higher education, research or entrepreneurship.

1.5 Establish consistency of PEO's with Mission of the Department (15)

PEO Statements	M1	M2	M3	M4	M5
PEO1	3				
PEO2	3			3	2
PEO3		2	3		3
PEO4	3	3	2		2

1;slight(low) 2: Moderate(medium) 3:Substantial(high)

1.5.1. Justify the academic factors involved in achievement of the PEOs

Listed below are the factors that are involved in the attainment of the PEOs.

- *Curriculum and Syllabi
- *Lesson Plan
- *Course File
- *Assessment
- *Feedback

Curriculum and Syllabi :

The various courses for each program were selected in accordance with the PSOs of the program. The courses both regular and elective were mapped along with the achievement of the PSO and accordingly distributed among the various semesters of the program. The Syllabi for the courses are designed in line with the principles of outcome based education and prime objective of attainment of the PSOs.

Lesson Plan :

A good curriculum and syllabi is effective only by a well planned teaching Learning Process. In order to aid this, all the faculty prepare a lesson plan well before the commencement of the classes. This includes the theory and lab courses. It involves not only the contents of the syllabi but focus is given to content beyond syllabus. This lesson plan is duly signed by the head of the department, discussed in the first class committee meeting and then circulated amongst the concerned students also.

Course File :

It is a practice to maintain a course file for each theory courses. This keeps track of all the activities carried out in the class room during the course delivery. This includes the time table, lesson plan, record of content delivery, assessment component details, sample evaluated answer scripts, marks of the continuous assessments tests and the performance analysis sheet and remedial action. The performance analysis sheet and remedial actions taken sheet provides a way for the course teacher to keep track of the students who have not performed well and also monitor their performance in the next test. The course file also includes the internal assessment, end semester marks and statement of grades. This course file is duly monitored by the Head of the Department and maintained in the Department Library thus serving as a reference for the teachers who handle the courses.

Assessments:

The students are evaluated on the basis their performance. This evaluation is done by way of the continuous assessment tests and end semester examinations. For Diploma students two continuous assessments (mid semester test and internal exam) and an end semester examination is conducted for every course. An entry of the internal marks is made in the GTU website of Institutional login by every course teacher. The results are available for students by GTU website.

Feedback:

The NBA Team at Dr. B.B.A. Govt. Polytechnic thus monitors the quality of the entire process for every course. An NBA- Quality Assurance Cell (NBA-QC) is an integral part of the system. By assuring that all the above mentioned are duly carried out the PEO's are achieved.

1.5.2. Explain how administrative system helps in ensuring the attainment of PEOs

The following administrative setup is put in place to ensure the attainment of PEOs

NBA- QC

- *Program coordinator
- *Course coordinator
- *Department Assessment Committee Program (DCP)

Program Coordinator

Interacts and maintains liaison with key stake holders, students, faculty, Department Head and employer.

Monitor and reviews the activities of each year in program (I/III/V & II/IV/VI) independently with course coordinators

Schedules program work plan in accordance with specifications of program objectives and outcomes

Oversees daily operations and coordinates activities of program with interrelated activities of other programs, departments or staff to ensure optimum efficiency and compliance with appropriate policies, procedures and specifications given by HOD.

Conducts and interprets various surveys required to assess POs and PEOs.

Course Coordinator

*Coordinates and supervise the faculty teaching the particular course in the module.

*Responsible for assessment of the course objectives and outcomes

*Recommend and facilitate workshops, faculty development programs, meetings or conferences to meet the course outcomes

*Analyzes results of particular course and recommends the Program coordinator and/or Head of the Department to take appropriate action

*Liaise with students, faculty, program coordinator and Head of the Department to determine priorities and policies

National Board of Accreditation – Quality Assurance Cell (NBA-QC)

*Supervises and guides the activities of department Committees and Teams.

*Plans various development, delivery and assessment activities of PEOs and POs.

*Prepare an outcome-based assessment plan (OBAP) with the same broad structure across all programs to assessment PEOs and PO attainment.

*Act as a guiding and monitoring body for all departments committees and teams.

*Assumes responsibility of assessing availability of required resources and needed for achieving PEOs and POs for each program based on the departmental Committees recommendations.

*Present the results to the Principal for improvements or corrective action. *Through TPO administers the survey with external stakeholders.

*Obtain results of assessment of internal and external stakeholders including analysis of student performance in tests, exams, assignments projects etc. from Assessment Committee - Program (ACP).

*Analyze the results of the assessment and present the same to DAC.

Based on directions/decisions of DAC, initiate corrective actions in revision of PEOs and POs.

The NBA Quality assurance Cell(NBA-QC) has been formed in the Dr.B.B.A.Govt. Polytechnic, having NBA Co-ordinator and Head of the Departments of Mechanical, Electrical and Civil Engineering as Members in 2017.

Department Assessment Committee (DAC)

Assessment Committee Program consists of Program Coordinator, Module Coordinator and faculty representatives

Chaired by Program Coordinator, the committee monitors the attainment of PO and PEO's. Evaluates program effectiveness and proposes necessary changes

Prepares periodic reports records on program activities, progress, status or other special reports for management key stake holders.

Motivates the faculty and students towards attending workshops, developing projects, working models, paper publications and research

Interact with students, faculty, and Program Coordinators, Module Coordinator and outside/community agencies (through their representation) in facilitating program educational objectives

ACP meets at least once in 6 months to review the program and submits report to Department Industrial Advisory Committee.

Department Assessment Committee List

The DAC has been formed in 2017 in Dr.B.B.A.Govt.Polytechnic for Civil Engineering.

S.no	Name	Position held	Responsibilities
1	Shri R.N.D.Sarma	HOD	Department In charge
2	Shri K.B.Patel	NBA committee Member	NBA Incharge
3	Shri D.L.Sahu Shri R.N.D.Sarma	Course outcome, Program Outcome, Program Specific Outcome	Formulation of Attainment
4	Shri Mitesh Billiwala	Continuous Improvement	Attainment of PO and PSO

Various Committee in charge of Department

Sl.No.	Committee

1	Time table	Shri K.B.Patel
2	Mentor	Dr.B.Jha
3	Internal Test Cell	Dr. B.Jha
4	Website Over all	Shri R.N.D.Sarma

5	Departmental Website	Shri Mitesh Billiwala
6	Conference/Workshop, etc	Dr. B.Jha
7	Professional bodies	Dr. B.Jha
8	Slow Learners/ Rank Holders	Shri R.N.D.Sarma
09	Parent- Teachers Meeting	Shri. K.B.Patel
10	1st Year Co-ordinators	Shri.R.N.D.Sarma
11	II year Class Teacher	Shri.D.L.Sahu
12	III year Class Teacher	Shri. K.B.Patel
13	Placement	Dr.B.Jha
14	Industrial visits	Shri.R.N.D.Sarma
15	Newsletter	Dr.B.Jha
16	Cultural	Shri.R.N.D.Sarma
17	Sports	Shri. R.N.D.Sarma
18	Alumni	Shri. D.L.Sahu

19	Student Seminar/ Mini Project	Dr. B.Jha
	/Project	
20	Over all Lab Coordinator	Shri.R.N.D.Sarma
	/Project	

CRITERION 2	Program Curriculum and Teaching learning Processes	200
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2.1 Program Curriculum (50)

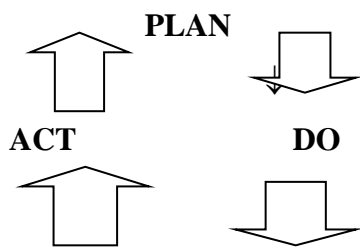
2.1.1. State the process used to identify extent of compliance of the board curriculum for attaining the program outcomes (POs) and program Specific Outcomes (PSOs) as mentioned in Annexure1. Also mention the identified Curricula gaps. If any (30)

A. Process used to identify extent of compliance of the University Curriculum for attaining the Program Outcomes and Program Specific Outcomes.

The Dr. B.B.A. Govt. Polytechnic, Karad (D.P.), U.T. of Dadra & Nagar Haveli is affiliated under Gujarat Technological University, Ahmedabad.

So our program curriculum is as per the scheme and syllabus of affiliated university. Generally Curriculum maintains the balance in the composition of basic science, humanities, professional courses and their distribution in core and elective and breadth offerings. If some components, to attain CO's/ PO's, are not included in the curriculum provided by the affiliated university then the Institution makes additional efforts to impart such knowledge by covering aspects through "CONTENTS BEYOND SYLLABUS". We add content beyond syllabus by proper "GAP analysis" process.

Quality Loop for Attaining the Program Outcomes -



CHECK**(Closing the Quality loop)****STEPS-**

- (i) Plan the activity
- (ii) Do it
- (ii) Measure the performance
- (iii) Initiate appropriate action based on what was planned and what was achieved

All the processes required for accreditation need to have the step of "closing the loop".

Steps of Gap Identification

1. A subject teacher does a thorough study of the curriculum. After discussion with other subject teachers a common platform is created wherein the link between various subjects is discussed. The curricular and knowledge gaps are identified and the strategy to overcome these gaps is arrived at.

2. Recent advances in the industry are identified with discussion between visiting faculties and departmental staff. The discussion also highlights the need for students to have knowledge of these advancements. Accordingly, symposiums, Seminars, Workshops, Training programs are arranged.

3. A review of curriculums offered by autonomous institutes is taken into consideration and the necessary contents are added in the seminars.

At PO, PSO level (Curriculum Gap Analysis)

- i. POs and PSOs are achieved through formal courses and other co-curricular and extracurricular activities.
- ii. Target levels of attainment of POs and PSOs are set; program is delivered; actual attainment of POs and PSOs is determined; The loop is closed either by increasing the target level for the next cycle of the program or by planning suitable improvements in all the relevant activities to increase the actual attainment
- iii. Closing the loop must be carried out, in a similar manner, at the level of PEOs also.
- iv. This process view of quality implicitly central to accreditation.

List of Program Outcomes

PO1	An ability to apply knowledge of basic mathematics, science and engineering to solve the broadly defined Civil engineering problems. (Basic knowledge)
PO2	An ability to apply discipline - specific knowledge to solve broadly defined Civil

	Engineering problems. (Discipline knowledge)
PO3	An ability to conduct standard tests and measurements, and to conduct, analyze, and interpret experiments (Experiments and practice)
PO4	An ability to apply the knowledge, techniques, skills, and modern tools of Civil Engineering to narrowly-defined engineering technology activities. (Engineering Tools)
PO5	Demonstrate knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering practice (The engineer and society)
PO6	Understand the impact of the engineering solutions in societal and environmental contexts, and demonstrate the knowledge and need for sustainable development. (Environment and sustainability)
PO7	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. (Ethics)
PO8	Function effectively as an individual, and as a member or leader in diverse/multidisciplinary teams. (Individual and team work)
PO9	An ability to apply written, oral, and graphical communication in both technical and nontechnical environments and the ability to use appropriate technical literature (Communication)
PO10	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the context of technological changes (Life-long learning)

List of PSO's

PSO1: The program should demonstrate that diploma Engineer can apply specific program principles to Drawing, test, estimate, planning, construction or documentation of basic Civil Engineering.

PSO2: The program should make diploma Engineer Draw, test, estimate, planning and construction of society needed products and engage in construction, repair & maintenance of such quality products with utmost environment safety and commitment and provide good service to the society.

Process for “Curriculum GAP ANALYSIS”

Identified Curriculum Gaps

1. Certain gaps like knowledge of fundamentals in Mathematics and Science(10th level) which is prerequisite in the curriculum have been observed to be weak in students coming from villages, however through Teachers in lecture class, students are prepared to fill up this gap, so that they can understand the Diploma Educational concepts effectively.

2. Level of Overall Personality of students has been observed to be low in 1st semester. There has been need to improve their soft skills. However at College level soft skill training programs and extra curricular activities are promoted among the students with full financial , management and coordination support by the Department.. It is also achieved through subject such as Contributory Personality Development(CPD). Other essential skills such as stress management, interview techniques, importance of team work etc. are covered by inviting experts in respective fields.

B. List the curricular gaps for the attainment of defined POs and PSOs.

Recommended subjects to bridge academic and industry

Formation →	Notification →	Implementation
<ul style="list-style-type: none"> •The Program outcomes & program specific outcomes are prepared taking annexure 1 into consideration. •Allocation of course curriculum to faculty •Identification of links between various courses •Enumerate the identified curricular gaps 	<ul style="list-style-type: none"> •Recent advances, identified curricular gaps are discussed with faculty of Dr. B.B.A. Govt. Polytechnic 	<ul style="list-style-type: none"> •Seminars •Workshops •Training •Technical Quiz

2.1.2. State the delivery details of the content beyond the syllabus for the attainment of POs and PSOs (10)

CAYm1(2018-19)

S.N o.	Gap	Action taken	Date-month year	Resource Person	No.of students present	Relevance to POs&PS Os
1	Knowledge of fundamentals in Mathematics and Science(10th	Faculties are giving special care to poor	During whole academic year in lecture	(1)Shri D.N.Shinde (Lect. in Maths) (2)Shri Anand Desai, Lect. in	30% of the class	PO1,PO2 ,PO9

	level) which is not covered in the curriculum.	students	classes	Physics 3.Shri Sachin Chouhan, Lect. in English		
2	Soft Skills Organised by Jai Corp Ltd.	Experts from Industry used to take lectures	During the academic session	Dr.Pankaj Sharma,C osultant and PRO at S.S.R.Coll ege,Silvas sa,D&NH	60	PO 1,P 09

CAYm1(2017-18)

S.No.	Gap	Action taken	Date-month year	Resource Person	No.of students present	Relevance to POs&PSOs
1	knowledge of fundamentals in Mathematics and Science(10th level) which is not covered in the curriculum	Faculties are giving special care to poor students	During whole academic year in lecture classes	(1)Shri D.N.Shinde (Lect. in Maths) (2)Shri Anand Desai, Lect. in Physics 3.Shri Sachin Chouhan, Lect. in English	30% of the class	PO1,PO2,PO9
2	Expert Lecture in Civil Engg. (Sub:	Expert from SVNIT, Surat was	Dated: 04.10.2017 (12.45 to 13.45 and	Prof.Dr.K.A. Chouhan,Dept. of Civil Engg.,SVNIT,	35 students of 5th Sem.	PO1,PO2,PO7, PO9

	Estimation, costing & valuation)	invited to take Expert Lecture	03.00pm to 5.00pm)	Surat	Civil Engg.	
3	Expert Lecture in Civil Engg. (Sub: Design of Steel Structures)	Expert from SVNIT, Surat was invited to take Expert Lecture	Dated: 07.10.2017 (12.45 to 13.45 and 03.00pm to 5.00pm)	Prof.Dr.A.J.Shah ,Dept. of Civil Engg.,SVNIT, Surat	35 students of 5th Sem. Civil Engg.	PO1,PO2,PO7,PO9

CAYm2(2016-17)

S.No.	Gap	Action taken	Date-month year	Resource Person	No.of students present	Relevance to POs&PS Os
1	knowledge of fundamentals in Mathematics and Science(10th level) which is not covered in the curriculum	Faculties are giving special care to poor students	During whole academic year in lecture classes	(1)Shri D.N.Shinde (Lect. in Maths) (2)Shri Anand Desai, Lect. in Physics 3.Shri Sachin Chouhan, Lect. in English	30% of the class	PO1,PO2, PO9
2	Principal -TPO MEET	Expert from Board of	Dated: 21.09. 2016 (meeti	Shri N.C.G angde, Asst.D	Whole class of Final year	PO1, PO2, PO7, PO9

		Apprenticeship Training, West. Zone, (MHRD, Mumbai) was invited on the occasion	ng from 11.00 to 12.00 am, Induction program for students 1.30 to 3.30 pm)	irector, & Asst. Apprenticeship Advisor, BOAT, MHRD, Mumbai		
3	Industry Visit by Students	Water Treatment Plant by Final year students, Silvassa Municipal Council, D&N H	22/09/2016 at 11.00am onwards	Silvassa Municipal Council, D&N H	27 Students & 01 faculty	PO2, PO9
4	Industry Visit by Students	Ultra tech ready mix plant, Moraji Circle, Gunjan	27.09.2016 At 11.00am onwards	Plant Incharge, Ultra tech ready mix plant,	27 students of final year & 01 lecturer	PO2, PO9

				Moraji Circle, Gunjan		
5	Industry Visit by Students	Ultra tech Cement Plant	28.09.2016 At 10.30 am onwards	Plant Head, Ultra tech Cement Plant, Surat	27 students of final year and 02 faculties	PO2, PO9
6	Industry Visit by Students	Sanatan Textiles Ltd. Surangi, Dadra and Nagar Haveli	19.09.2016 At 10.30 am onwards	Plant Incharge, Sanatan Textiles Ltd. Surangi, Dadra and Nagar Haveli	students of final year and 01 faculty	PO2, PO9
7	Industry Meet	All Local Industries (About 40)	20.10.2016	Director Education and Presidents of Industries Association, DNH	For the students placement	

B. Delivery details of content beyond syllabus

Library/internet assignments on contemporary issues. Additional laboratory experiments

Pre-placement Training
 Training on Soft skills and value added programs
 Creative /Projects
 Guest lectures
 Workshops/conference
 Industrial Visits and internships

C. Mapping of content beyond Syllabus with the PO's & PSO's

PO's Topics	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
Pre-placement Training							√	√	√	
Training on Soft skills								√	√	√
Creative / Hobby Projects			√	√	√	√				
Guest lectures	√	√								
workshops	√	√	√	√						
Industrial Visits	√	√				√				

PSOsTopics	PSO1	PSO2
Pre placement Training	√	
Training on soft skills		
Creative/Hobby Projects	√	
Guest lectures	√	
Workshops	√	√
Industrial visits	√	√

2.2 Teaching Learning Process (150)

2.2.1 Describe processes followed to improve quality of teaching and learning

A. Adherence to Academic calendar (Institute and Department calendar):

From the GTU(University) calendar of events a department calendar of events is derived which is specific to the department.

Lesson plan with course objectives and course outcomes are prepared by the subject handling faculty before the commencement of the semester and is dually approved by the Head of the department and made available to the students. Lesson plan is published by the GTU website.. According to the lesson plan, work done has been inculcated in the academic file to ensure coverage of syllabus dually monitored by Head of the department.

Maintenance of Course files:

For each course, a course file is prepared by the concerned faculty. The course file consists of following items

Teaching Plan

Teaching plans for each and every course are prepared by the faculty. Whole syllabus is divided into 6 units and 42 lectures as per the teaching scheme prescribed by the university.

The course objectives are defined for each course in line with the POs.

Lesson plan: Lesson plans are prepared for each lecture in the teaching plan by the faculty before the commencement of the semester and it is duly approved after careful examination by the Head of the Department and made available to the students.

The lesson plan encompasses the learning outcomes and the assessment of outcomes.

Question Bank: Question banks are prepared for each topic in the course based on the course objectives and considering the nature of the university question papers. The previous question papers of University are also maintained in the course files.

B. Use of Various instructional methods and pedagogical initiatives: Lecture method and Interactive learning:

The faculty use chalk and board and audio visual aids in teaching. Students are also encouraged to actually interact during the lecture hour by getting the doubts clarified on the spot. Faculties using models, charts for interactive teaching

Project-based learning:

During the period of study in the 5th to 6th semester, many real time projects are given to the students and they are guided by both faculty and Industry/Research personnel.

Computer-assisted learning:

The College has required number of computers, printers, LCD projectors, These are effectively used for teaching.

SMART class Room

Most of the Faculties are using SMART class room to interactive session. Projector is used for demonstration, video (NPTEL).

Methodologies to support weak students and encourage bright students: Guidelines to identify weak students

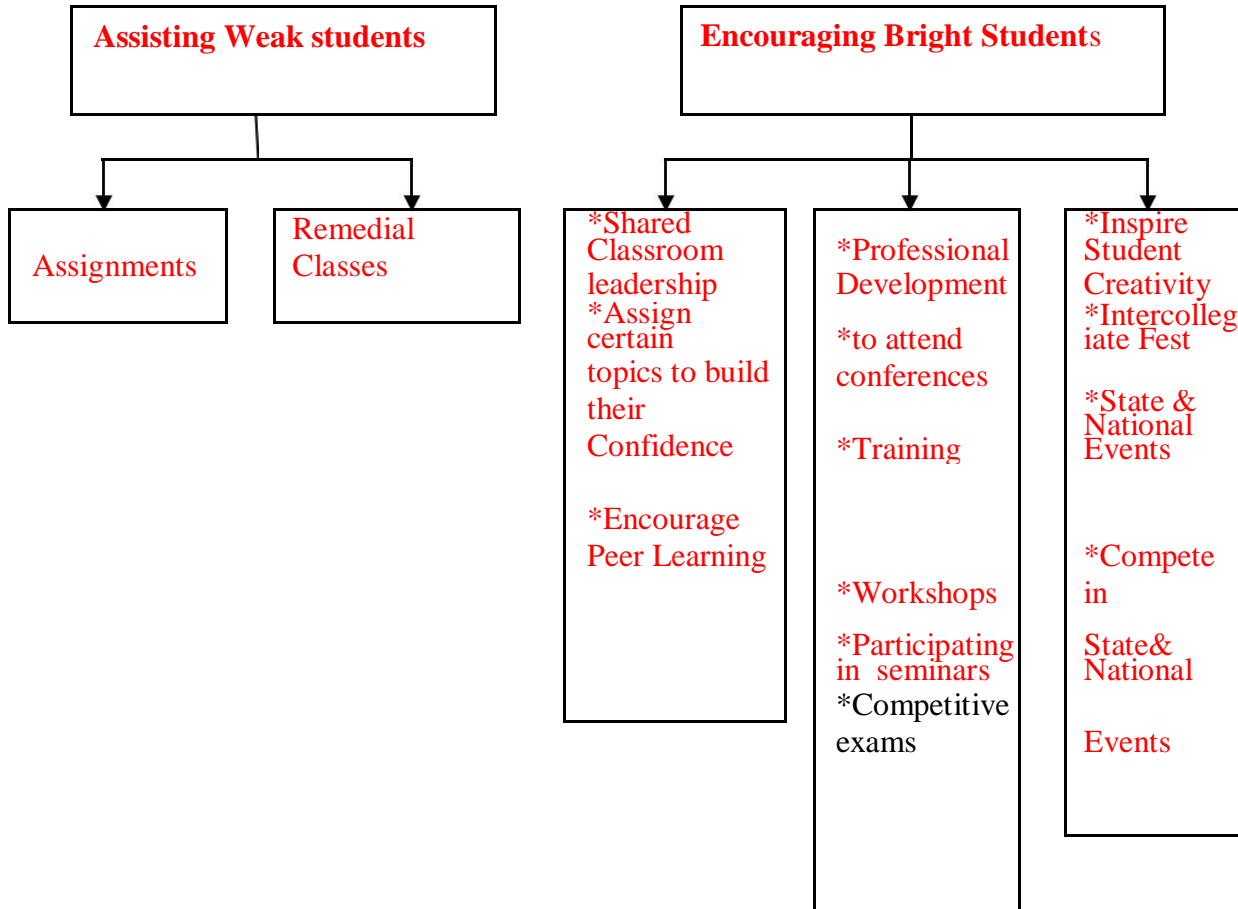
The Counselors regularly conduct meetings regarding progress of their mentees and are responsible to identify students who scored less than 60% marks in their internals. Under the

HOD direction, the students Counselors evaluates the progress card of those students who score below 60% marks in three or more subject and below 75% attendance are considered as **academically weak students** and same is also intimated to their parents.

MENTORING SYSTEM

Identification Criteria	Actions taken
Students scoring less than 60% of marks in Internal Assessment.	<ol style="list-style-type: none"> 1. Student counselor Follows their progress regularly advising students about attending classes, making up classes missed, and getting additional help. 2. Intimating parents to counsel their wards. 3. Conduction of remedial classes
Diploma students who entered with less basics of mathematics	Conduction of remedial classes.
Students who fail in semester exams and Mid-Semester Exam	Conduction of extra classes to those who failed in previous semester subjects.

Process for Encouraging bright Students and Assisting Weak Students



D. Quality of classroom teaching:

The following innovative teaching methods are adopted by the faculty:

- *Computers are used for teaching purposes and internet facility is available to and faculty and wifi for all.
- *Faculty members are taking advantage of sources like National Program on Technology Enhanced Learning (NPTEL), internet sources for effective teaching.
- *white Board, Greenboard, Demonstration method supported by PPTs (need based) etc. are used as teaching aids..
- * Online availability of various free e-journals on portal of Institution of Engineers, India,.
- * Lesson plans are prepared in advance in each semester for all theory and practical courses for proper implementation of course curriculum in each subject.

Conduct of Experiments:

Students carry out required number of experiments, as specified by the University. All laboratory have requisite equipments. Where ever we are having shortage of equipments, accessories or case of breakdown, students are carried out to the nearby Institutions or Industry. For the experiments detailed instruction manuals are provided and experimentwise leaflets / SOP are made available in the Lab. The observations are checked and verified by faculty and record books are maintained systematically. One faculty member is assigned for each practical class.

F. Continuous Assessment in laboratory:

Continuous assessment system is also implemented for assessment of laboratory work. The assessment is done on the basis of submission of laboratory records, understanding of the experiment through oral viva voce questions and participation in performing the experiment. Neatness of the laboratory record book is also given weight age in the assessment.

G. Student feedback of teaching learning process and actions taken:

At the end of the semester, all the students are required to fill a feedback-form apprising the faculty using a scale of 1 (high) through 10 (low).

Lecture classes are monitored by HOD, Vice-Principal and Principal. They give constructive comments to improve the quality of teaching and the teaching- learning process.

Counseling by the respective HOD for those faculty members who have secured low scores and negative comments, if any, in the feedback. This motivates them to improve their skills and abilities.

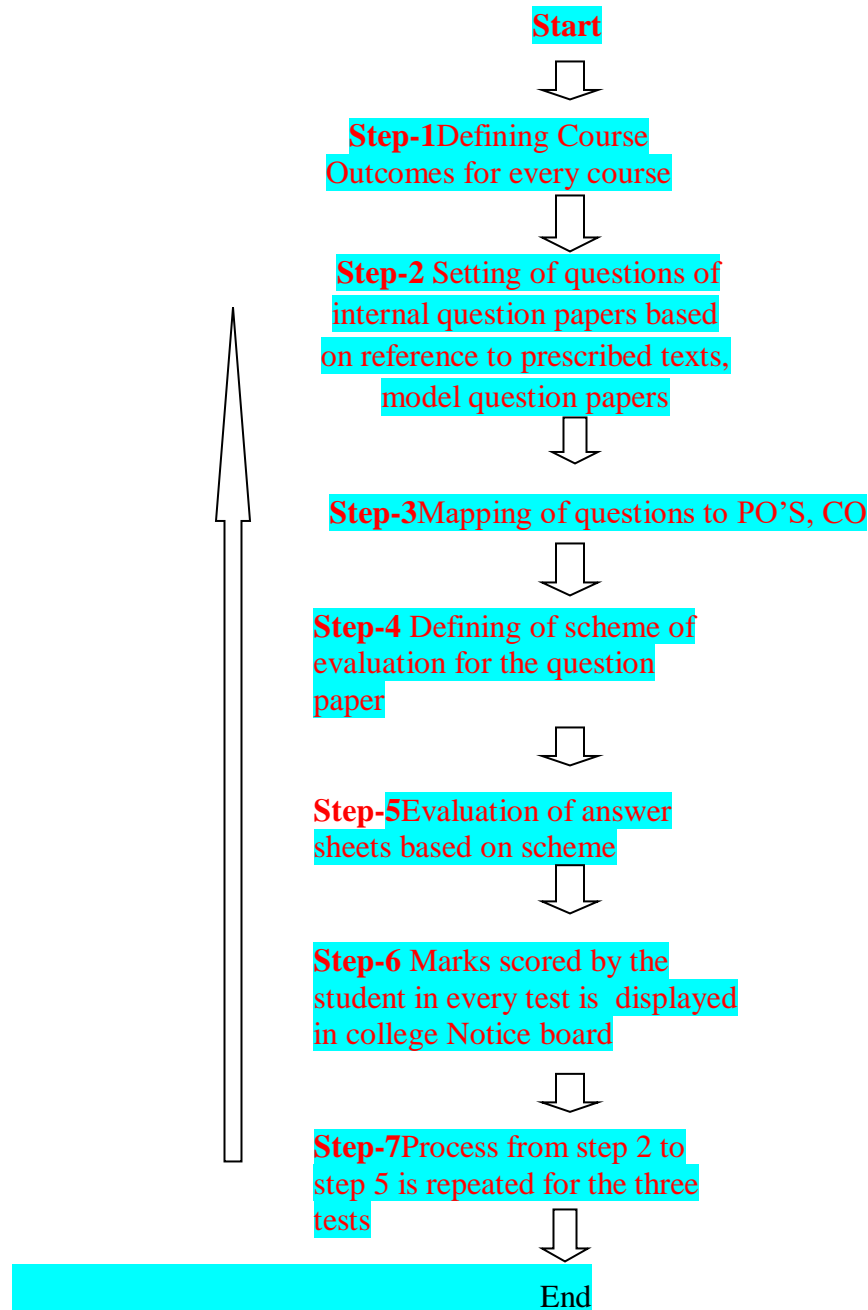
If required training / orientation program are conducted by professional experts to master the skills of the faculty members in the nuances of teaching, thus improving the efficiency of teaching-learning process.

2.2.2 Quality of Internal Semester Question Papers, Assignments and Evaluation

(Mention the initiatives, implementation details and Analysis of Learning levels related to quality of Semester question papers, assignments and evaluation)

A .Process for Internal Semester Question Paper setting and evaluation and effective process implementation:

In a semester, there are three tests. Each of the test consists of descriptive questions as well as quizzes. The average of the best two tests is considered for final internal assessment.



Process of Internal Semester Question Paper setting and evaluation

Blooms Taxonomy is followed while setting the internal exam question papers where the following strategy is applied.

The internal test consists of about 50% of subjective questions in case of Design Papers and about 100% in case of general theory papers.

B. Process to ensure questions from outcomes/learning level perspectives

Each question is mapped with CO's PO's & Blooms taxonomy (BT) levels. Student who answered to particular question is taken into consideration and average of all students marks is taken for CO -PO attainment

C. Evidence of COs Coverage in class test/Mid-term test

Individual student's Answer book is evaluated and question answered by student is mapped with CO's and PO's.

Sample is shown in annexure -1 CO -PO attainment

D. Quality of assignment and its relevance to CO's

After the completion of every unit assignment, questions are given to students, and student has to write it & submit within a week and each question is mapped with CO's. So the students will be able to understand course outcome of particular subject.

2.2.3. Quality of Student Projects

*The student's projects are selected in line with the problems defined either Industry or User from Society or Market, the topic of project are finalized through proper review of Department and guide.

Students are provided with brief idea of various fields for selecting the project ideas.

*The list of previous year projects is displayed at college website, which ensures no repetition of project work and also encourages students to enhance the previous works.

*The faculties encourage the students to carry out in house projects and support will be provided with all necessary requirements.

*The faculties encourage students to participate in project exhibitions. The project exhibition was aimed to provide common platform to exhibit their innovations and their work towards excellence in latest technology.

Evaluation scheme for final year Project

* Project Report submitted by Students group are first evaluated by internal Examiner (Project Guide) and endorsed by the HOD. Subsequently the External Examiner was appointed by University, as per University schedule.

Finally, the project report is submitted in the Department for record purpose. Also, the feedback of the External Examiner was sent to University for their Record. Marks awarded by Internal and External Examiner are entered in the University portal

A. Identification of projects and allocation methodology to Faculty Members. (3)

* Projects are identified to relevant context. The need for the project and the end users of the project are verified for the current context.

* The problem definition with their requirements and constraints are verified.

* The knowledge, methodology, skill set and interest of the students to implement the project are considered to undertake the projects.

* Faculties of higher cadre are allocated as guides to guide the student's project.

* Each project team varies up to seven students.

* Faculty profile should match with the domain of the student's project.

* Students are also given choice to choose their guide that matches their project domain.

B. Types and relevance of the projects and their contribution towards attainment of PO's.

* Current academic projects are mapped to POs and PSOs.

* Each project is evaluated with internal marks, external marks and are graded according to their project quality and with their contribution towards attainment of PO's.

C. Process for monitoring and evaluation.

* Project students should meet their respective guide as per requirement and asked to present progress they have done in their project at regular interval.

* They submit project progress report, weekly to get suggestion and feedback by the respective guide.

*The project guides evaluate the report submitted by the students and help them to go with project work.

*Project guide assess each student in team and make them work in right way.

*All the faculty members act as respective Guides for group of students as per 5th and 6th semester projects of GTU syllabus.

*The GTU guidelines are followed in evaluation of projects.

C. Phase – 1 (PROJECT-I) 5th Semester

Sl.No.	Performance Indicator	Marks(PA)
1	Title & Feasibility(Problem Identification)	(20)
2	Abstract & Depth of Knowledge	(20)
3	Presentation and Viva	(20)
ESE=40 (End Semester Exam marks) (External examination)		PA=60 (Practical marks) (Internal Examination/Guide) Total=100

Phase – 2 (PROJECT-II) 6th Semester

Sl.No.	Performance Indicator	Marks(PA)
1	Implementation /Execution	15
2	Results	10
2	Final report	10
4	Overall presentation	05
ESE=40 (External examiner)		PA=60 (Internal Examiner/Guide) Total=100

D. Process to assess individual and team performance

*Project progress seminars are conducted once in every month by the team of their respective guide and senior faculty members.

*The project seminar talk and PPT are given by all the project team members according to the division of project.

*Each student in the project team is assessed to their skill set to deliver the seminar, explain the concept and way to make project report/model assess team to understand their work.

*Each individual and team performance is purely based on this project seminar presentation and the viva voice and progress work they show to their guide.

E. Quality of completed projects/working prototypes

Final project demo for the working prototype and the report are evaluated by a team of their respective guide, and HOD.

The projects are evaluated and are awarded internal assessment marks and external exam marks are graded according to the project contribution towards attainment of PO's and PSO's.

Best Project Evaluation scheme

- Innovations recognize the need for lifelong learning,
- Contemporary issues, organization of the report,
- Listening to and answering questions,
- Internal and external marks,
- Project exhibition results(2016)

2.2.4. Initiatives related to industry interaction**MOU's with Industries**

MOU's was done with industries to emphasize on

- (a) Knowledge sharing
- (b) Project Workshop for Students
- (c) Industrial Visits
- (d) Students specific Training

Sl.no	Company Name	Date
1.		09/06/2015

	Kitech Industries India Ltd., Rakholi, Dadra & Nagar Haveli-396240	
2.	Raj Petro Specialities Pvt.Ltd, Dadra & Nagar Haveli-396240	15/06/2015

Many invited talks and seminars from industry resource persons are arranged and department invites the participants from various department Experts from Academic Institutions and Industry.

2.2.5 Initiatives related to Industry Internship / summer training

. There is no provision of Internship/ summer Training as per the provision of University curriculum.

A. Industry training/tours for Students

Need based faculty organizes visit to Industries, for demonstration of facilities available at Industries, also for getting know how of Industry culture.

Student Feedback on Initiative

After Each visit we will take student feedback on programme /industrial visit on initiative taken. feedback is considered to do further improvement for the same .

2.2.6. Information access Facilities and student centric learning Initiatives (15)

The e-learning facilities are available at Dr. B.B.A. Govt. Polytechnic for students as well as faculties. The Institution has access to many e- journals .Also Institution of Engineers(I.E.) has given life membership to the Institution. Faculties and students can access to study materials, research papers, etc. of I.E.

2.2.7. New Initiatives for embedding Professional skills (15)

For developing specialized skill development including communication, professional and core employability skills classes on Professional Practices, Development of Life Skills & Entrepreneurship Development are conducted.

Professional Practice is enhanced in several fields-

***Effective communication** is more than just exchanging information with others. It involves teamwork, decision making, and problem solving. It enables the students to communicate even negative or difficult messages without creating conflict or destroying trust.

It is achieved in several ways-

- * Interacting with peers to share thoughts
- * Prepare notes on given topic.
- * Conducting Seminars
- * Conducting Group Discussions
- * Guest lectures on Communication Skills
- * Preparing report on industrial visits, expert lectures

* **Personality development** means enhancing and grooming one's outer and inner self to bring about a positive change to your life. Each individual has a distinct persona that can be developed, polished and refined. This process includes boosting one's confidence, improving

communication and language speaking abilities, widening one's scope of knowledge, developing certain hobbies or skills, learning manners.

***Industrial training:** No specific Industrial Training mandatory for Diploma program offered by Gujarat Technological University.

***Information search**-Everybody can become more effective when it comes to searching of information. Research suggests that met cognitive strategies including planning, monitoring and self-regulating actions could enhance individual search in research database. Students are provided with different topics related to different fields of study.

* **Industrial visits** -Industrial visit has its own importance in a career of a student who is pursuing a professional course. It is considered as a part of college curriculum.

Industrial visits provide students an insight regarding internal working of companies. We know theoretical knowledge is not enough for making a good professional career. With an aim to go beyond academics, industrial visit provides student a practical perspective on the world of work. It provides students with an opportunity to learn practically through interaction, working methods. Civil Engineering students visit to Industries as per course requirement.

***Mentoring** --Mentoring is to support and encourage people to manage their own learning in order that they may maximize their potential, develop their skills, improve their performance and become the person they want to be. Mentoring is a powerful personal development and empowerment tool. It is an effective way of helping people to progress in their careers and is becoming increasingly popular as its potential is realized.

* **Counseling** is about talking to someone who understands what depression is and what can help. Counselors are professionally trained to work with people on their personal and emotional issues, including depression and suicide. Counseling offers an opportunity to talk confidentially

to someone impartial, so students are free to explore their true feelings and be supported without judgment. Counseling is provided by faculties of the Department.

2.2.8. Co-curricular & Extra Curricular Activities (10)

Different programs were organised by students. Competitions like Drawing, Debate etc, held every year for the overall growth of students.

Annual Sports meet held around in the month of February every year during semester break. Annual Day is also celebrated, where prize distribution ceremony event is organised in different fields like sports, Semester Topper of the departments, etc. Navratri is famous festival of the region(Gujarat) which is celebrated during September-October every year in the college premises.

3 COURSE OUTCOMES AND PROGRAM OUTCOMES

3.1. Establish the correlation between the courses and the Program Outcomes (POs) and Program Specific Outcomes (PSOs) (20)

The curriculum for Civil Engineering is set by Gujarat Technological University. The courses in the curriculum are such that they satisfy all the objectives and outcome defined for the program.

Correlation between POs PSO's

PO's	PSO1	PSO2
PO-1	3	
PO-2	2	
PO-3	2	
PO-4	2	2
PO-5		2
PO-6		1
PO-7		
PO-8		2
PO-9		2
PO-10		2

3.1.1. Course Outcomes (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses) (05)

Note: Number of outcomes for a course is expected to be around 6.

Course	Name of course	Statement (Course outcomes)
C101	Basics Mathematics (Code: 3300001)	On completion of this course a successful candidate will 1. Apply the concepts and principles of mathematics to solve simple engineering problems 2. Solve simple problems using concepts of Logarithms

		<p>3. Solve simultaneous equations using concepts of Determinants and Matrices</p> <p>4. Solve simple problems using concepts of Trigonometry</p> <p>5. Solve simple problems using concepts of Vectors</p> <p>6. Calculate the surface area and volume of different shapes and bodies.</p>
C102	English(code-3300002)	<p>On completion of this course a successful candidate will</p> <ol style="list-style-type: none"> 1. Use grammatically correct sentence in day to day communication 2. Use correct pronunciations and intonations. 3. Recapitulate orally the facts or ideas presented by the speaker 4. Speak briefly on a given topic fluently and clearly 5. Face oral examinations and interviews 6. Comprehend the given passages and summarize them.
C103	Environment Conservation & Hazard Management (Code: 3300003)	<p>On completion of this course a successful candidate will</p> <ol style="list-style-type: none"> 1. Take care of issues related to environment conservation and disaster management while working as diploma engineer. 2. Enhance knowledge about engineering aspects of Environment 3. State the major causes of air, water and noise pollution 4. Explain the concepts of waste management and methods of Recycling 5. Describe the working of large wind turbines 6. Describe the salient features of solar thermal and PV systems
C104	Engineering Physics (Group-1) (Code: 3300004)	<p>On completion of this course a successful candidate will</p> <ol style="list-style-type: none"> 1. Apply principles and concepts of Physics for solving various Engineering Problems 2. Define inertia, momentum and impulse of force 3. Comprehend the concept of elasticity and Define Stress, Strain and Elastic limit. 4. Comprehend the phenomenon of surface tension and its applications 5. 4.2 Explain modes of Transmission of heat and their Applications 6. Comprehend the concept of wave motion
C105	Basic Engineering Drawing	<p>On completion of this course a successful candidate will</p> <ol style="list-style-type: none"> i. Prepare engineering drawings manually with given

	(Code: 3300007)	<p>geometrical dimensions using prevailing drawing standards and drafting instruments. .</p> <p>ii. Visualize the shape of simple object from orthographic views and vice versa.</p> <p>3. Develop the ability to draw polygons, circles and lines with different geometric conditions</p> <p>4. Able to draw engineering curves with proficiency and speed as per given dimensions</p> <p>5. Draw the projection of points, lines and planes with Different conditions.</p> <p>6. Find out true shape and size of a inclined line or plane</p>
C106	Computer Application & Graphics (Code: 3300012)	<p>On completion of this course a successful candidate will</p> <p>i. Describe computer hardware and software</p> <p>2. Work with graphics/ clipart</p> <p>3. 3.1 Start Computer aided drafting software (AutoCAD).</p> <p>4. Use different arrays in existing 2D drawing.</p> <p>5. Set properties of existing drawing entities as per requirement.</p> <p>6. Use Blocks effectively to create perfect drawings</p>
C201	CONTRIBUTOR PERSONALITY DEVELOPMENT (Code-1990001)	<p>On completion of this course a successful candidate will be able to</p> <p>1. face life challenges with confidence.</p> <p>2. grow as a good human being.</p> <p>3. communicate in a better way .</p> <p>4. Develop personality .</p>
C202	Advanced Mathematics(Group-2) (Code-3320003)	<p>On completion of this course a successful candidate will be able to:</p> <p>1. Find the equation of line using the different forms</p> <p>2. Solve the problem of function using the concept of Limit</p> <p>3. Apply the differentiation to Velocity, Acceleration and Maxima & Minima</p> <p>4. Apply the Integration for finding Area and Volume</p> <p>5. Measure Central Tendency in given data</p> <p>6. Measure Dispersion in given data</p>
C203	Applied Mechanics (Code-3300008)	<p>On completion of this course a successful candidate will be able to:</p> <p>1. Differentiate the systems of Units</p> <p>2. Compute resultant & Equilibrium forces for given coplanar concurrent force system</p> <p>3. Compute resultant & Equilibrium forces for given coplanar concurrent force system</p> <p>4. Compute Centroid & centre of gravity in different shape and lamina</p>

		<p>5. Calculate coefficient of friction for different surfaces</p> <p>6. Compare reversible & irreversible Machines, evaluate the efficiencies of various simple machines</p>
C204	Applied Chemistry(Group-I) (Code-3300009)	<p>On completion of this course a successful candidate will be able to</p> <ol style="list-style-type: none"> 1. Explain the crystal structure of metal and properties reflected by packing of atoms 2. Describe the importance of pH & and Perform its industrial application 3. Describe the different protective measures to prevent the corrosion 4. Explain the different methods for removal hardness in water 5. Explain setting and hardening chemistry of cemen 6. Describe different Ingredients of paints and their function
C205	Building Drawing (Code-3320601)	<p>On completion of this course a successful candidate will be able to:</p> <ol style="list-style-type: none"> 1. Draw various types of Projections 2. Apply the Bye laws and Principles of Planning for residential and other public buildings. 3. Prepare detail drawings for single and two storied residential building and public building 4. provide scope and provisions for building components and services 5. Develop concept plan of buildings 6. Use building drawing Symbols, Conventions and Abbreviations
C206	Basic Mechanical Engineering (Code-3320602)	<p>On completion of this course a successful candidate will</p> <ol style="list-style-type: none"> 1. Identify mechanical related basic components and their uses 2. Describe the type of power transmission being used in electrical engineering 3. Explain different welding and gas cutting operation 4. Explain working of internal combustion engines 5. Describe construction, working and applications of centrifugal and reciprocating pumps 6. Select proper material handling equipment for a given situation
C-207	Civil Engineering Workshop Practice (Code-3320603)	<p>On completion of this course a successful candidate will</p> <ol style="list-style-type: none"> 1. Develop basic technical know-how of construction activities 2. Apply basic techniques for masonry and concreting works 3. Select appropriate tools and equipments involved in

		<p>various activities for specific use</p> <ol style="list-style-type: none"> 4. Install the plumbing and fixtures in buildings 5. Provide and fix the false ceiling , aluminum –glass work 6. Carry out whitewashing and painting
C301	BUILDING MATERIALS (Code: 3330601)	<p>On completion of this course a successful candidate will</p> <ol style="list-style-type: none"> 1. Describe important properties of building materials used in civil engineering construction 2. Identify clay based products for use in building constructions based on its properties. 3. Select appropriate rock / stone products for different uses in building construction 4. Appreciate the uses of lime and Pozzolana products in building construction 5. Select appropriate ingredients of proper quality for cement concrete as per required BIS codes 6. Explain different types of advanced building materials and their uses in construction
C302	Construction Technology (Code-3330602)	<p>On completion of this course a successful candidate will</p> <ol style="list-style-type: none"> 1. Develop concept of various types of components of building 2. Explain the failure of foundation and remedial measures 3. Develop concept of different types of brick and stone masonry 4. Able to know the different types of plumbing and electric fittings and laying procedure 5. Able to introduce different types of construction machinery, its features and Working 6. Describe concept about the maintenance work , know causes, types and its remedial measure
C303	Hydraulics (Code-3330603)	<p>On completion of this course</p> <ol style="list-style-type: none"> 1. Describe different types of pressure and methods of measurement 2. .Compute total Pressure and Centre of pressure 3. Apply Bernoulli's theorem to measure the pressure and Discharge. 4. Calculate discharge through notches and weir 5. Design pipeline network using formula and nomogram 6. Describe Procedure for measuring Velocity of flow
C304	Structural Mechanics (Code-3330604)	<p>On completion of this course a student will be able to</p> <ol style="list-style-type: none"> 1. Calculate Material Properties Under Longitudinal & Lateral Loads 2. Compute Moment of Inertia of Symmetric & asymmetric structural sections 3. Draw Shear Force & Bending Moment Diagram for

		<p>Statically Determinate Beams</p> <ol style="list-style-type: none"> 4. Apply Bending Theory 5. Analyse Statically Determinate Trusses 6. Calculate Load carrying Capacity of Columns & Struts
C305	<p>Surveying (Code-3330605)</p>	<p>On completion of this course a student will be able to</p> <ol style="list-style-type: none"> 1. Explain the basics of surveying. 2. Prepare drawing as per recorded measurements in the field book 3. Prepare drawing as per recorded and corrected measurements of bearings with chain and compass survey 4. Explain procedure for using the instruments and levelling staff and entering level in proper table 5. Find the areas from prepared drawings 6. Appreciate the applications of GPS in civil engineering
C401	<p>STRUCTURAL MECHANICS-II (Code: 3340601)</p>	<p>On completion of this course a student will be able to</p> <ol style="list-style-type: none"> 1. Analyze various types of statically indeterminate beams. 2. Compute slope and deflection in statically determinate beams. 3. Evaluate the structures under direct and eccentric axial loading 4. Draw Shear Force & Bending Moment Diagram for Fixed Beams 5. Draw deflection curve in different types of beams under different loads and support conditions 6. Calculate Direct & Bending Stresses of various structural components
C402	<p>Advanced Surveying (Code-3340602)</p>	<p>On completion of this course a student will be able to</p> <ol style="list-style-type: none"> 1. Use Theodolite for the measurement of horizontal and vertical angle Calculate the height of objects through a trigonometrical levelling. 2. Explain the principles and various methodologies involved in techeometry 3. Retrieving the data and generate the drawings using advanced surveying 4. equipment & application software. 5. Operate theodolite and read horizontal and vertical angle 6. Explain the principles and various methodologies involved in techeometry
C403	<p>BASIC TRANSPORTATION</p>	<p>On completion of this course a student will be able to</p> <ol style="list-style-type: none"> 1. Explain the importance of transportation system and its geometrical aspects

	ENGINEERING (Code: 3340603)	<ol style="list-style-type: none"> 2. Comprehend the concept of construction and maintenance of roads, railways and bridges. 3. Perform the tests on the various materials used in the construction work of roads, railways and bridges. 4. Describe various types of road construction methods 5. Explain importance of drainage and its maintenance 6. . Explain requirement of track Maintenance
C404	Water Resources Management (Code-3340604)	<p>On completion of this course a student will be able to</p> <ol style="list-style-type: none"> 1. Discuss basic concepts of “Water Resources Management”. 2. Estimate the surface runoff from given precipitation data. 3. Describe various types of survey investigations for reservoir planning 4. Design the appropriate rain water harvesting scheme and required structures for given conditions 5. Identify various agencies associated with Water Resource Management 6. Compute runoff using empirical formula.
C405	Soil Mechanics (Code-3340605)	<p>On completion of this course a student will be able to</p> <ol style="list-style-type: none"> 1. Explain various engineering properties / characteristics of soil with respect to construction and engineering applications 2. Conduct different laboratory tests for determining engineering properties / parameters of a soil. 3. Evaluate engineering properties / characteristics of soil for their suitability to construction of engineering structures. 4. Explain essential features and requirements of site investigation with respect to soil 5. State the types of failures due to soil in Civil Engineering structure 6. Describe interrelationship between different index properties
C406	Computer Aided Drawing (Code-3340606)	<p>On completion of this course a student will be able to</p> <ol style="list-style-type: none"> 1. Apply basic CAD command to develop 2D and 3D drawings of residential & commercial building using AutoCAD. 2. Prepare detailed engineering and construction drawings and designs required for civil engineering activities. 3. Use advanced CAD commands for edit/modification of existing drawings as per needs and suggestions and print the same. 4. Prepare a simple building drawing file using basic draw and modify commands

		<p>5. Apply advanced command for edit /modification of drawing</p> <p>6. perform rendering/shading on 3d drawing</p>
C501	Design of Steel Structure (Code-3350601)	<p>Calculate Dead Load , Live Load and Wind Load on panel points of a Roof Truss as per IS-875- 1984 ii. Design Bolt Connection of Angle Section to Gusset Plate & Welded Connection of Angle Section to Gusset Plate , Lacing System (Single or Double) for Built up Column , Batten System for Built up Column , laterally Restrained Simply Supported beam, Purlin made up Angle Section , Slab Base Foundation under Axially Loaded Column made up of Single H Section iii. Analyze and Design Axially Loaded Tension Member made up of Angle Section , Strut made up of Angle Section , Axially Loaded Column</p> <p>4. Analyze and Design Axially Loaded Tension Member made up of Angle Section</p> <p>5. Solve Numerical on Strut made up of Single Angle, Double Angle same and either side of G.P as per 1.2 & 1.3 Built up Column , Effective Length of Column as per Table 11, IS-800-2007</p> <p>6. Design of Slab Base Foundation under Axially Loaded Column made up of Single H Section</p>
C502	Concrete Technology (Code-3350602)	<p>1. Evaluate physical properties of cement, sand and aggregates. 2. Describe proper method for making and curing of concrete. 3. Measure important properties of fresh and hardened cement concrete including NDT. 4. Explain properties of various types of Admixtures and their utility</p> <p>5. Design Concrete Mix as per IS method vi. Explain various types of special concrete and their use.</p> <p>6. Explain methods to prevent and repair different types of the crack</p> <p>7. Prepare summary of at least one research paper on concrete from any journal of civil engineering</p>
C503	WATER SUPPLY & SANITARY ENGINEERING (COURSE CODE: 3350603)	<p>On completion of this course a student will have</p> <p>1. Select appropriate treatment to raw water useful for domestic as well as construction purpose.</p> <p>2. Maintain the pipe-network for water supply and Sewage disposal effectively.</p> <p>3. Calculate and Estimate the impurities present in water used for domestic as well as construction works.</p> <p>4. Prepare lay out plan and maintain water distribution and sewer-networks.</p> <p>5. Test raw water as per the standard practices</p> <p>6. Plan and implement house plumbing work effectively.</p>

C504	ESTIMATING, COSTING & VALUATION (COURSE CODE: 3350604)	On completion of this course a student will have 1. Explain types of estimate and duties of an Estimator 2. Undertake rate analysis of civil engineering works 3. Determine the rates of various items of civil works 4. Calculate estimated cost of civil construction projects 5. Evaluate the actual value of any property 6. State the methods of calculating earthwork for roads and canals
C505	ADVANCED CONSTRUCTION TECHNOLOGY (COURSE CODE:	On completion of this course a student will have 1. Report the important operations of construction activities they visited where new techniques, machines and equipment are used. 2. Describe important aspects, operations and safety points pertaining to: a. 'Deep Excavations'; b. Pile foundations; c. Cofferdams; d. Caissons; e. Drilling and Blasting 3. Discuss purpose, types, materials, design issues, and erection of temporary structures for construction activities 4. Describe equipment and tackles used, problems encountered and their solutions in erection of steel structures 5. Describe problems faced and solutions adopted in erection of various types of steel structures such as roof truss, bridge girders. 6. Describe cantilever method of Pre-stressed concrete bridge Construction
C506	PROJECT-I (Code-3350609)	On completion of this course a student will have 1. Identify problem definition (Title of Project) 2. Can do IDP (Industry defined Project) 3. Can do UDP (User defined project) 4. Perform market survey for raw materials to be used for project work. 5. Maintain log book of work assignment/performed. 6. Work as a team for a specific goal 7. Develop entrepreneurship and self-employment abilities to start any venture 8. Plan, use, monitor and control resources optimally and economically.
C601	: DESIGN OF REINFORCED CONCRETE STRUCTURES (COURSE CODE: 3360601)	On completion of this course a student will be able to: 1. Develop methods of RCC design using concrete and steel properties 2. Analyse & Design Singly Reinforced Rectangular Section (SRRS) under Flexure 3. Design Stirrups for R.C Rectangular Beam

		<p>4. Apply design conditions of IS 456-2000 for various elements of structures</p> <p>5. Perform analysis for Tee Beam for Flexure, R. C. C. Column and Isolated Footing</p> <p>6. Design & Detail Cantilever Slab , One Way Simply Supported Slab , One Way Continuous Slab & Two Way Simply Supported Slab</p>
C602	<p>CONSTRUCTION QUALITY CONTROL & MONITORING (COURSE CODE: 3360602)</p>	<p>On completion of this course a student will have</p> <ol style="list-style-type: none"> 1. Apply total quality management in civil construction. 2. Check the quality in civil construction works. 3. Identify the variations in quality of civil works. iv. Use various standard codes in civil construction works. 5. Design energy efficient buildings. 6. Explain the main features of ISO9000 and ISO14000 standards.
C603	<p>CONSTRUCTION PROJECT MANAGEMENT (COURSE CODE: 3360603)</p>	<p>On completion of this course a student will have able to:</p> <ol style="list-style-type: none"> 1. Describe construction management functions, various organisation structures and duties of various construction team. 2. Explain tendering and accounting process. 3. Develop the CPM and PERT network of various construction activities. 4. Show leadership skills required to manage various construction resources and achieve targets. 5. Show professional ethics and concern for safety during various construction works. 6. Use management information system.
C604	<p>BUILDING SERVICES (COURSE CODE: 3360604)</p>	<p>On completion of this course a student will have able to:</p> <ol style="list-style-type: none"> 1. Manage building services provisions in big construction sites. 2. Synchronize the construction activities with installation of building services. 3. Select the suitable electrical as well mechanical services for particular requirements of buildings. 4. Ensure green building applications to the new constructions. 5. Plan various types of mechanical services as per requirements of building 6. Plan for Rain Water Harvesting in the new buildings
C605	<p>MAINTENANCE & REHABILITATION OF STRUCTURES (COURSE CODE: 3360605)</p>	<p>On completion of this course</p> <ol style="list-style-type: none"> 1. Assess the health condition of structures. 2. Inspect and evaluate damage structures. 3. Test the assess the condition of properties of existing concrete structures. 4. Implement the techniques for repairing of concrete structures. 5. Dismantle and demolish structures which cannot be

		repaired in an environment friendly, with maximum saving of materials and in a safe way. 6. Explain the Repair work of various component in existing concrete structure
C606	PROJECT - II (COURSE CODE: 3360613)	On completion of this course student will be able to: 1. Know the questions to which he is finding answers through experimental work. Perform the practical work with appropriate accuracy. 2. Reduce the experimental readings to the form of answers required. 3. Understand clearly what the reader will want to know. 4. Give brief but clear answers. 5. Convince the reader that the answers are valid. 6 Present a reasoned discussion of the significance of the answers he offers. 7. Plan, use, monitor and control resources optimally and economically. 8. Identify the problem and apply innovative, creative and logical approach for problem solving.

3.1.2 CO-PO Matrices of courses selected in 3.1.1 (six matrices to be mentioned; one per semester from 1st to 6th semester) (5)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
C101	√	√							√	√
C203	√	√	√		√	√	√	√	√	
C302	√	√	√	√			√	√	√	
C401	√	√	√		√	√	√	√	√	√
C504	√	√		√	√	√	√	√	√	
C606	√	√	√	√	√	√	√	√	√	√

3.1.3. Program level Course-PO matrix of all courses INCLUDING first year courses (10)

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
C101	√	√							√	√
C102					√	√	√	√	√	√
C103	√	√	√	√	√	√	√	√	√	√
C104	√	√				√	√			√
C105	√	√	√	√	√		√	√		√
C106	√	√	√	√	√					√
C201	√	√			√	√	√	√	√	
C202	√	√							√	
C203	√	√	√		√	√	√	√	√	

C204	√	√	√		√	√	√	√	√	√
C205	√	√	√	√				√		√
C206	√	√	√	√	√	√		√	√	
C207	√	√	√	√			√	√	√	√
C301	√	√	√	√			√	√	√	
C302	√	√	√	√			√	√	√	
C303	√	√	√			√	√	√	√	√
C304	√	√	√			√	√	√	√	√
C305	√	√	√		√	√	√	√	√	
C401	√	√	√		√	√	√	√	√	√
C402	√	√	√		√	√	√	√	√	
C403	√	√	√	√	√	√	√	√		
C404	√	√	√	√	√		√	√	√	
C405	√	√	√	√	√		√	√	√	√
C406	√	√		√			√	√		
C501	√	√		√	√			√		
C502	√	√	√	√	√	√	√	√		
C504	√	√		√	√	√	√	√	√	
C505	√	√	√	√	√	√	√	√		
C506	√	√	√	√	√	√	√	√	√	√
C601	√	√	√	√	√	√	√	√		√
C602	√	√	√	√		√	√	√		√
C603	√	√	√	√	√	√	√	√	√	√
C604	√	√	√	√	√	√	√	√	√	√
C605	√	√		√	√	√	√	√	√	√
C606	√	√	√	√	√	√	√	√	√	√

course	PSO1	PSO2
C101	√	√
C102		√
C103	√	√
C104	√	√
C105	√	√
C106	√	√
C201	√	√
C202	√	√
C203	√	√
C204		√
C205	√	√
C206		√
C207	√	√
C208	√	√

C301	√	√
C302	√	√
C303	√	√
C304	√	√
C305		√
C306	√	√
C307	√	√
C401	√	√
C402	√	√
C403	√	√
C404	√	√
C405	√	√
C406		√
C407	√	√
C501	√	√
C502	√	√
C503	√	√
C504		√
C505		√
C506		√
C601	√	√
C602	√	√
C603		√
C604	√	√
C605	√	√
C606	√	√

3.2 Attainment of Course outcomes (40)

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of course outcome is based (10)

Assessment Tools

Direct Assessments

* Semester End Exams(SEE) conducted by GTU and evaluated by GTU

* As the information on performance in SEE on each student in individual COs is not available, the Institution/Department has to take that attainment(%marks/CGPA) for all COs of the course is the same.

*Continuous Internal Evaluation(CIE)

*The proportional weightage of CIE:SEE is 30:70

*The number of assessment instruments used for CIE is decided by the instructor and/or Department and some times by GTU.

*Project/Project Reports

*Lab Records

Indirect Assessments

*Instructor evaluation Reports

*Department performance Reports

*Employers survey

3.2.2 Record the attainment of course outcomes of all courses with respect to set attainment levels (30)

S: Set level A: attainment level

Note: Programs may decide their weightages for **University exams** and Internal assessment with due justification.

Course code	Semester	Course Name	CAY(2018)		CAY(2017)		CAY(2016)	
			S	A	S	A	S	A
C-101 (3300001)	1	Basic Mathematics	60 %	52%	60 %	33.96%	60 %	48.33%
C102 (3300002)	1	English	60 %	12%	60 %	75.47%	60 %	45%
C103 (3300003)	1	ECHM	60 %	68%	60 %	62.26%	60 %	68.33%
C104 (3300004)	1	Engg. Physics	60 %	46%	60 %	37.74%	60 %	46.67%
C105 (3300007)	1	Basic Engg. Drawing	60 %	40%	60 %	54.72%	60 %	48.33%
C106 (3300012)	1	Computer Application & Graphics	60 %	80%	60 %	90.57%	60 %	88.33%
C203 (3300008)	2	Applied Mechanics	60 %	51.28 %	60 %	42.22%	60 %	33.33%
C204 (3300009)	2	Applied Chemistry (Gr-1)	60 %	30.77 %	60 %	26.67%	60 %	21.43%
C202 (3320003)	2	Advanced Mathematics	60 %	28.21 %	60 %	42.22%	60 %	23.81%
C205 (3320601)	2	Building Drawing	60 %	41.03 %	60 %	44.44%	60 %	52.38%
C206 (3320602)	2	Basic Mechanical Engg.	60 %	100%	60 %	100%	60 %	100%
C207 (3320603)	2	Civil Engg. Workshop Practice	60 %	92.31 %	60 %	77.78%	60 %	100%
C201 (3990001)	2	Contributor Personality Development	60 %	87.18 %	60 %	100%	60 %	92.86%
C301 (3330601)	3	Building Materials	60 %	36.84 %	60 %	68.42%	60 %	57.14%
C302	3	Construction	60	18.42	60	78.95%	60	85.71%

(3330602)		Technology	%	%	%		%	
C303 (3330603)	3	Hydraulics	60 %	39.47 %	60 %	55.26%	60 %	28.57%
C304 (3330604)	3	Structural Mechanics	60 %	34.21 %	60 %	60.53%	60 %	19.05%
C305 (3330605)	3	Surveying	60 %	60.53 %	60 %	60.53%	60 %	33.33%
C401 (3340601)	4	Structural Mechanics-II	60 %	44.74 %	60 %	45%	60 %	61.29%
C402 (3340602)	4	Advanced Surveying	60 %	50% %	60 %	50%	60 %	41.94%
C403 (3340603)	4	Basic Transportat ion Engg.	60 %	63.16 %	60 %	45%	60 %	61.29%
C404 (3340604)	4	Water Resource Managemen t	60 %	89.47 %	60 %	60%	60 %	77.42%
C405 (3340605)	4	Soil Mechanics	60 %	42.11 %	60 %	27.5%	60 %	67.74%
C406 (3340606)	4	Computer Aided Drawing	60 %	97.37 %	60 %	97.5%	60 %	93.55%
C501 (3350601)	5	Design of Steel Structures	60 %	57.89 %	60 %	82.76%	60 %	53.85%
C502 (3350602)	5	Concrete Technology	60 %	52.63 %	60 %	44.83%	60 %	61.54%
C503 (3350603)	5	Water Supply & Sanitary Engg.	60 %	50% %	60 %	68.97%	60 %	92.31%
C504 (3350604)	5	Estimating ,Costing & Valuation	60 %	65.79 %	60 %	41.38%	60 %	57.69%
C505 (3350605)	5	Advance Constructio n Technology	60 %	84.21 %	60 %	75.86%	60 %	100%
C506 (3350609)	5	Project-I	60 %	100% %	60 %	100%	60 %	100%
C601 (3360601)	6	Design of Reinforced Concrete Structures	60 %	56% %	60 %	90.91%	60 %	67.65%
C602	6	Constructio	60	96%	60	100%	60	91.18%

(3360602)		n Quality Control & Monitoring	%		%		%	
C603 (3360603)	6	Construction Project Management	60%	92%	60%	95.45%	60%	94.12%
C604 (3360604)	6	Building Services	60%	80%	60%	100%	60%	97.06%
C605 (3360605)	6	Maintenance & Rehabilitation of Structures	60%	92%	60%	100%	60%	85.29%
C606 (3360613)	6	Project-II	60%	100%	60%	100%	60%	100%

3.3 Attainment of Program outcomes & Program Specific outcomes (40)

3.3.1. Describe assessment tools and processes used for assessing the attainment of each POs and PSOs as mentioned in Annexure1 (10)

- *The students expected to be reasonably proficient with each of the program outcomes
- *The achievement of program outcomes are assessed with the help of course outcomes of the relevant courses through different methods.
- *The final grading is based on mid-semester and final-semester and internal assessment.
- *The results are documented and maintained by the G.T.U.(University) for all its affiliated Institutes.
- *The results are displayed on GTU website so that the students and their parents have an easy and all time access to the progress of students.

Assessment	
Direct Assessment	Indirect Assessment

Theory	Term work	Parents	Recent pass out students, Alumnies
Oral	Practical	industry	Current students
SEMESTER END	SEMESTER MID, SEMESTER END	ONCE IN A YEAR(Need based)	

3.3.2. Provide results of evaluation of each POs & PSOs(30)

Sem	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PSO1	PSO2
Ist	C101	3	2									2	2
	C102					2	2	2	2	3	2		

IInd	C103	2	2	2	2	3	3	3	2	3	2	2	2	
	C104	3	2				1	1			1	1	1	
	C105	3	2	3	3	2		2	1		1	2	2	
	C106	1	2	3	3	2					2	2	3	
	C201	1	2		1	2	2	3	3	3	3	3	2	2
	C202	3	2		2					2			2	
IIIrd	C203	3	2	2		2	2	3	3	2		2	2	
	C204	2	2	1	2	2	2	2	2	2			2	
	C205	3	2	2	2				2		2	2		
	C206	3	2	2	2	2	2		2	1		1	2	
	C207	2	2	2			1	2	2	2	2	2	3	
	C301	2	3	3	3			2	2	2		2	3	
IV th	C302	2	3	3	3			1	1	2		2	2	
	C303	2	3	3			3	2	2	2	2	2	3	
	C304	2	3	3			2	1	2	2	2	2	3	
	C305	2	2	3		2	2	2	1	2	2		2	
	C401	2	3	3		2	2	2	3	2	2	3	3	
Vth	C402	2	3	3		2	2	1	2	2		3	2	
	C403	2	3	2	2	2	1	2	1			2	2	
	C404	2	3	3	3	2		1	1	2	2	3	2	
	C405	2	3	3	2	2	2	2	3	2		2	2	
	C406	2	3		2	2			3			2	2	
	C501	3	3		3			1	2				2	
VIth	C502	2	3	3	3	1	1	1	1			2	2	
	C503	2	3	3	3	2	2	2	3	2	2	2	3	
	C504	2	3		2	2	2	2	3	1			3	
	C505	2		1	2	2	2	3	1	3	3	2	2	
	C506	2	2	2	2	2	2	3	3	3	3	3	3	
	C601	2	3	3	3	2	2	2	2	2	2	2	2	
Direct attainment	C602	2	3	3	3		1	2	1		2	2	2	
	C603	2	2	2	2	2	3	3	3	3	3	2	2	
	C604	2	2	2	2	2	1	3	3	2	2	3	3	
	C605	2	2		2	2	2	2	1	2	2	3	3	
	C606	3	3	3	3	3	3	3	3	3	3	3	3	
Direct attainment		77/35=2.2	85/34=2.5	68/27=2.51	52/26=2.0	51/25=2.04	52/26=2.0	61/30=2.033	66/32=2.06	57/27=2.11	48/23=2.086	67/31=2.161	77/33=2.33	
Indirect Attainment		2	2	2	2	2	2	2	2	2	2	2	2	
Total Attainment score= 80% of		2.16	2.4	2.408	2.0	2.032	2.0	2.026	2.048	2.088	2.068	2.128	2.264	



Direct attainment + 20% of Indirect Attainment												
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Criterion 4	Students performance	200
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Intake Information

Item	CAY(2018-19)	CAYm1(2017-18)	CAYm2(2016-17)	CAYm3(2015-16)	CAYm4(2014-15)
Sanctioned intake strength of the program(N)	60	60	60	60	60
Total number of students ,admitted through state level counselling	---	---	---	---	---
Number of students ,admitted through Institute level quota(N2)	56	53	56	57	50
Number of students ,admitted through lateral entry(N3)	---	---	---	---	---
Total number of students admitted in the program (N1+N2+N3)	56	53	56	57	50

Year of Entry	N1+N2+N3 (As defined)	Number of students who have successfully passed without backlogs in any year of study
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	above)			
GTU Summer exam	Ist Year (2nd Sem)	Ist Year (2nd Sem) (passed/appeared)	IInd Year(4th Sem) (passed/appeared)	IIIrd Year(6th sem) (passed/appeared)
CAY(2018)	56	09/(39)	13/(38)	14/(25)
CAYm1(2017)	53	12/(45)	11/(40)	19/(22)
CAYm2(2016)	56	06/(42)	10/(31)	23/(34)
CAY m3(2015)	57	02/(45)	18/(31)	14/(24)
CAYm4(2014)	50	17/(53)	11/(30)	08/(18)

Year of Entry	N1+N2+N3 (As defined above)	Number of students who have successfully passed (Students having backlogs in stipulated period of study)		
GTU Summer exam		Ist Year (passed with backlog/appeared)	IInd Year (passed with backlog/appeared)	IIIrdYear (passed with backlog/appeared)
CAY(2018)	56	30/39	25/38	11/25
CAYm1(2017)	53	33/45	29/40	03/22
CAYm2(2016)	56	36/42	21/31	11/34
CAY m3(2015)	57	43/45	13/31	10/24
CAYm42014)	50	36/53	19/30	10/18

4.1 Enrolment Ratio

Enrolment ratio = $\frac{N_1 + N_2}{N}$

Sl.No.	2018-19	2017-18	2016-17	2015-16	2014-15
Enrolment Ratio	$\frac{56}{60} = 0.933 = 93\%$	$0.883 = 83\%$	$0.933 = 93\%$	$0.95 = 95\%$	$0.833 = 83\%$

Item	Marks
Students enrolled at the first	

year level on average basis during the period of assessment	
>=90% students	20
>=80% students	18
>=70% of students	16
>=60% of students	12
>=50% students	08
<50% students	0

4.2 Success rate in stipulated period of the program

4.2.1 success rate without backlogs in any year of study(40)

SI=(Number of students who have passed from the program without backlog)/(Number of students admitted in the first year of that batch and admitted in 2nd year of lateral entry)

Average SI=Mean of success Index (SI) for past three batches

Success rate without backlogs in any year of study =40xAverage SI

Item	Latest passed batch (2018-19) admitted in 2015	passed batch (2017-18) admitted in 2014	passed batch (2016-17) admitted in 2013
Total number of students (admitted through state level counseling +admitted through Institute level quota+ admitted through lateral entry) N1+N2+N3	48	50	58
Number of students who have passed(Diploma Engg.) without backlogs in the stipulated period	14/(25)	19/(22)	23/(34)
Success Index(SI)	14/48= 0.291	19/50= 0.38	23/58 =0.3965
Average SI	0.3558		

Success rate = $40 \times 0.0.3558 = 14.232$

4.2.2 Success rate with backlog in stipulated period of study (20)

SI = (Number of students who have passed from the program with backlog) / (Number of students admitted in the first year of that batch and admitted in 2nd year of lateral entry)

Average SI = Mean of success Index (SI) for past three batches

Success rate = $20 \times$ Average SI

Item	Latest passed batch (2018) admitted in 2015	Latest passed batch (2017) admitted in 2014	Latest passed batch (2016) admitted in 2013
Total number of students (admitted through state level counselling + admitted through Institute level quota + admitted through lateral entry) $N_1 + N_2 + N_3$	48	50	58
Number of students who have passed in the stipulated period with backlog (final year)	11	03	11
Success Index (SI)	$11/48 = 0.229$	$03/50 = 0.06$	$11/58 = 0.189$
Average SI	0.1593		

Success rate = $20 \times$ Average SI

= $20 \times 0.1593 = 3.186$

Note: If 100% students clear without any backlog then also total marks scored will be 60 as both 4.2.1 and 4.2.2. will be applicable simultaneously.

4.3 Academic Performance in final year (15)

Academic performance level = $1.5 \times$ Average API (academic performance index)

API = (Mean of final year Grade point average of all successful students on a 10 point scale)

\times (successful students / number of students appeared in the examination)

successful students are those **who passed in all the final year courses**

Academic performance	CAY(2018) (2018-19)	CAYm1(2017) (2017-18)	CAYm2(2016) (2016-17)
Mean of CGPA or Mean percentage of all successful students	7.2066	7.300	7.1443
Total number of successful students	14	19	23
Total number of students appeared in the examination	25	22	34
API= $x*(y/z)$	AP1=7.2066 $x(14/25)$)=4.0356	AP2=7.3x(19/22)=6.304	AP3= 7.144X(23/34) =4.832
Average API=(AP1+AP2+AP3) /3	5.0572		

Academic performance level=1.5xAverage API (academic performance index)
=1.5 x5.0572=**7.5858**

4.4 Academic performance in second year(20)

Academic performance level=2.0*Average API

API=(Mean of second year Grade point average of all successful students in second year /10)x(successful students /number of students appeared in the examination)

Successful students are those who are permitted to proceed to the final year

(*As per GTU(University) academic norms the student having total 04 backlogs after 4th sem. exam(2nd year) will be promoted to 5th semester(3rd year). Therefore total successful students are mentioned as those with total=04 backlogs after 4th semster(2nd year) exam.)

Academic performance	CAY(2018) IVth Sem	CAYm1(2017) IVth Sem	CAYm2(2016) IVth Sem
Mean of CGPA or Mean percentage of all successful	7.0	7.0	7.0

students(x)			
Total number of successful students(y)	38	29	26
Total number of students appeared in the examination(z)	38	40	31
API=x*(y/z)	API=7.0x (38 /38)=7.0	API=7x(29/40) =5.075	AP1= 7 x 26/31=5.87
Average API=(AP1+AP2+AP3) /3	5.98		

Academic Performance level= 2.0 x(Average API)=2 X 5.98=11.96

***As CGPA data of students other than pass outs in final semester(year) are not provided by GTU as a consolidated list, approximately 7.0 CGPA is considered for calculation for 2nd year from the average CGPA of data of final year pass out students of last 05 years,i.e.,2018,2017,2016,2015,2014*

4.5 Academic performance in First year

academic performance level=2.0*Average API

API=(Mean of 1st year Grade point average of all successful students on a10 point scale)x(successful students /number of students appeared in the examination)

Successful students are those who are permitted to proceed to the second year

*(*As per GTU(University) academic norms the student having total 04 backlogs after 2nd sem. exam(1st year) will be promoted to 3rd semester(2nd year). Therefore total successful students are mentioned as those with total(04 backlogs) after 2nd semester(1st year) exam.)*

Academic performance	CAY(2018-19) IInd Sem	CAY(2017-18) IInd Sem	CAY(2016-17) IInd Sem
Mean of CGPA or Mean percentage of all successful students(x)	7.0	7.0	7.0
Total number of successful students(y)	38	38	42
Total number of students appeared in the examination(z)	39	45	42
API=x*(y/z)	API=7x(38/39)= 6.8205	AP2=7x(38/45) =5.911	AP3= 7 x (42 /42)=7.0
Average API=(AP1+AP2+AP3) /3	6.5771		

Academic Performance level= $2.0 \times (\text{Average API}) = 2 \times 6.5771 = 13.1542$

***As CGPA data of students other than pass outs are not provided by GTU as a consolidated list, approximately 7.0 CGPA is considered for calculation for 1st year from the average CGPA of data of final year pass out students of last 05 years, i.e., 2018, 2017, 2016, 2015, 2014*

4.6 Placement and Higher Studies(40)

Assessment points = $40X(1.25X + Y)/N$ where, X=Number of students placed in companies or Government sector through on/off campus recruitment

Y=Number of students admitted to higher studies

N= Number of final year students

Item	Latest passed batch 2018-19 (May 2018 onwards)	Latest passed batch 2017-18 (May 2017 onwards)	Latest passed batch 2016 (May 2016 onwards)	Latest passed batch 2015 (May 2015 onwards)
Total no. of final year students	14	19	27	14
No. of students placed in companies or Govt. Sector(X)	05	03	15	Data not available
No. of students admitted to higher studies(Y)	08	11	12	Data not available
1.25X + Y	13	14.75	30.75	----
Placement index(1.25X + Y)/N	13/14=0.928	14.75/19=0.776	30.75/27=1.138	----
T=Average of (1.25X + Y)/N	0.9473			
Assessment=40x T(To be limited to 40)	37.892			

* The pass out students data for placement and higher studies for 2016-17 and onwards is collected from Training Placement Cell of the Institution, where students mentioned their preference along with their receipt on Counterfoil of Diploma passing Certificate.

4.7 Professional activities (20)

4.7.1 Professional societies/student chapters and organizing technical events(15)

The institution has become Life member of Institution of Engineers(India) on 26/04/2016. The institute organizes Project Melas from 2016 ,where Civil Engineering final year projects have been displayed for the public and Industry.

4.7.2 Publication of technical magazines, Newsletters, etc.(05)

No such activity done yet at the Institution.

CRITERION 5	Faculty Information and Contributions	150
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Faculty Information: **CAY 2018-19**

Name of the Faculty Member	Qualification, Board and year of Graduation	Designation of Teaching & joining the Institution	Distribution of Teaching load(%)			Academic Research		Years of Experience
			I year	II Year	III year	Research paper publications	Faculty receiving M.Tech/Ph.D. during the assessment year	
Shri D.L.Sahu	M.E.(Civil Structure)-1998,B.E.(Civil Engg.)-1986	Lecturer in Civil Engg. D.O.J.:30/09/2000	20	40	40	----	-----	31 years (Teaching)
Dr.B.Jha	Ph.D.(Engg.)-2013IIT,Bombay,M.E.(Civil Engg.)-1991-R.E.C.Kurukshetra B.E.(Civil Engg.)-1989-R.E.C.Kurukshetra	Lecturer in Civil Engg. D.O.J.:23/10/2000	20	40	40	01	----	25 years (Teaching)
Shri K.B.patel	B.E.(Civil Engg.)-1991-S.P.University,VV Nagar,Gujarat	Lecturer in Civil Engg. D.O.J.:07/08/2000	20	40	40	----	-----	20 years (Teaching)
Shri R.N.D.Sarma	M.Tech.(Water Resources)-	Lecturer in Civil Engg. D.O.J.:05/0	20	40	40	---	M.Tech(Civil Engg.)-2014	26 years (Teaching),03

	NIT, Surat, B.E.(Civil.Engg.)	4/2002						years-Higher studies
Shri Mitesh Billiwalla	B.E.(Civil Engg.)- 2011- S.P. University, VV Nagar, Gujarat	Lecturer in Civil Engg. D.O.J.:16/01/2012	20	40	40	-----	-----	5 years (Teaching)
Dr.J.B.Rana	Ph.D(Chemistry)-South Gujarat University-1993	Lecturer in Chemistry D.O.J.:01/03/2000	30%	---	----		---	24years(Teaching)
Shri D.N.Shinde	M.Sc.(Maths)-Pune University-1989	Lecturer in Mathematics D.O.J.:08/05/2001	18%	--	---	---	----	28 years(Teaching)
Shri A.D.Desai	M.Sc.(Physics)-Gujarat University-1993	Lecturer in Physics D.O.J.:08/05/1996	18%	---	---	---	---	23 years(Teaching)
Shri S.C.Chohan	M.A.(English)-Pune University-2011	Lecturer in English D.O.J.:26/02/2015	18%	--	--	--	---	06 years(Teaching)
Shri V.Dhoke	B.E.(Mech.Engg.)- Sant. Gadge Baba Amrabai University-),-2008- MBA-Jaipur National University	Lecturer in Mech.Engg. D.O.J.:16/01/2012	--	20	--	--	---	06 years(Teaching)
Shri J.K.Rohit	B.E.(Elect.Engg.)- Gujarat Univ.-2004	Lecturer in Elect.Engg. D.O.J.:03/09/2007	--	20	--	---	----	10years(Teaching) 03 years(In dustry)

Faculty Information: CAY 2017-18

Name of the Faculty Member	Qualification, Board and year of Graduation	Designation of Teaching & joining the Institution	Distribution of Teaching load(%)			Academic Research		Years of Experience
			I year	II Year	III year	Research paper publications	Faculty receiving M.Tech/Ph.D .during the assesment year	
Shri D.L.Sahu	M.E.(Civil Strcuture)-1998, B.E.(Civil Engg.)-1986	Lecturer in Civil Engg. D.O.J.:30/09/2000	20	40	40	----	-----	30 years (Teaching)
Dr.B.Jha	Ph.D.(Engg.)-2013 IIT, Bombay, M.E.(Civil Engg.)-1991- R.E.C.Kurukshetra B.E.(Civil Engg.)-1989- R.E.C.Kurukshetra	Lecturer in Civil Engg. D.O.J.:23/10/2000	20	40	40	01	----	24 years (Teaching)
Shri K.B.patel	B.E.(Civil Engg.)-1991- S.P.University, VV Nagar, Gujarat	Lecturer in Civil Engg. D.O.J.:07/08/2000	20	40	40	----	-----	19 years (Teaching)
Shri R.N.D.Sarma	M.Tech.(Water Resources)-NIT, Surat, B.E.(Civil.Engg.)	Lecturer in Civil Engg. D.O.J.:05/04/2002	20	40	40	---	M.Tech(Civil Engg.)-2014	25 years 07 months (Teaching), 03 years- Higher studies
Shri Mitesh Billiwala	B.E.(Civil Engg.)-2011- S.P. University,	Lecturer in Civil Engg. D.O.J.:16/01/2012	20	40	40	-----	-----	4 years (Teaching)

	VV Nagar, Gujarat							
Dr.J.B.Rana	Ph.D.(Chemistry)-South Gujarat University-1993	Lecturer in Chemistry D.O.J.:01/03/2000	30%	---	----	04	---	23 years(Teaching)
Shri D.N.Shinde	M.Sc.(Maths)-Pune University-1989	Lecturer in Mathematics D.O.J.:08/05/2001	18%	--	---	---	----	27 years(Teaching)
Shri A.D.Desai	M.Sc.(Physics)-Gujarat University-1993	Lecturer in Physics D.O.J.:08/05/1996	18%	---	---	---	---	22 years(Teaching)
Shri S.C.Chohan	M.A.(English)-Pune University-2011	Lecturer in English D.O.J.:26/02/2015	18%	--	--	--	---	05 years(Teaching)
Shri V.Dhoke	B.E.(Mech.Engg.)- Sant. Gadge Baba Amrabai University-),-2008- MBA-Jaipur National University	Lecturer in Mech.Engg. D.O.J.:16/01/2012	--	20	--	--	---	05 years(Teaching)
Shri J.K.Rohit	B.E.(Elect.Engg.)- Gujarat Univ.-2004	Lecturer in Elect.Engg. D.O.J.:03/09/2007	--	20	--	---	----	09 years(Teaching) 03 years(Industry)

Faculty Information: CAY m2 2016-17

Name of the Faculty Member	Qualification, Board and year of Graduation	Designation of Teaching load(%) joining the Institution	Distribution of Teaching load(%)			Academic Research		Years of Experience
			I ye ar	II ye ar	III ye ar	Research paper publications	Faculty receiving M.Tech/Ph.D.d uring the assesment year	
Shri D.L.Sah	M.E.(Civil Strcture)-	Lecturer in Civil Engg.	20	40	40	---	----	29 years (Teachi

u	1998, B.E. (Civil Engg.)-1986	D.O.J.:30/09/2000						ng)
Dr.B.Jha	Ph.D.(Engg.)-2013 IIT, Bombay, M.E.(Civil Engg.)-1991- R.E.C.Kurukshetra B.E.(Civil Engg.)-1989- R.E.C.Kurukshetra	Lecturer in Civil Engg. D.O.J.:23/10/2000	20	40	40	0201 Book [Flash Zeolites. Innovations, Applications and Directions (Springer)]		23 years (Teaching)
Shri K.B.patel	B.E.(Civil Engg.)-1991- S.P.University, VV Nagar, Gujarat	Lecturer in Civil Engg. D.O.J.:07/08/2000	20	40	40	---	----	18 years (Teaching)
Shri R.N.D.Sharma	M.Tech.(Water Resources)-NIT, Surat, B.E.(Civil Engg.)	Lecturer in Civil Engg. D.O.J.:05/04/2002	20	40	40	----	----	24 years 07 months (Teaching), 03 years- Higher studies
Shri Mitesh Billiwala	B.E.(Civil Engg.)-2011- S.P.University, VV Nagar, Gujarat	Lecturer in Civil Engg. D.O.J.:16/01/2012	20	40	40	----	----	03 years (Teaching)
Dr.J.B.Rana	Ph.D.(Chemistry)-South Gujarat University-1993	Lecturer in Chemistry D.O.J.:01/03/2000	30	---	----	--	----	22 years (Teaching)
Shri D.N.Shi	M.Sc.(Maths)-Pune	Lecturer in Mathematics	18	--	---	---	---	26 years (Teaching)

nde	University-1989	cs D.O.J.:08/05/2001						aching)
Shri A.D.Desai	M.Sc.(Physics)-Gujarat University-1993	Lecturer in Physics D.O.J.:08/05/1996	18	---	---	---	----	21 years(Teaching)
Shri S.M.Chohan	M.A.(English)-Pune University-2011	Lecturer in English D.O.J.:08/05/2014	18	--	--	--	----	04 years(Teaching)
Shri V.Dhoke	B.E.(Mech.Engg.)- Sant. Gadge Baba Amrabai University-2008- MBA-Jaipur National University	Lecturer in Mech.Engg. D.O.J.:08/05/2012	--	20	--	--	----	04 years(Teaching)
Shri J.K.Rohit	B.E.(Elect.Engg.)-Gujarat Univ.-2004	Lecturer in Elect.Engg. D.O.J.:08/05/2001	--	20	--	---	----	08 years(Teaching) 03 years(Industry)

5.1 Student faculty ratio(SFR)(15)+ Availability of HoD(5); (20)

S.F.Ratio=N/F;F=No. of Faculty=(a+b-c) for every assessment year

a=Total no. of fulltime regular faculty serving fully to all years of his program

b=Total no. of full-time equivalent regular faculty (considering fractional load) serving this program from other programs

c=Total no. of fulltime equivalent regular faculty(considering fractional load) of this program serving other programs

Year	N	F=(a+b-c)	SFR=N/F
CAY(2018-19)	60+2x60=180	05+06-02=09	20
CAY(2017-18)	60+2x60=180	05+06-02=09	20
CAY(2016-17)	60+2x60=180	05+06-02=09	20

Average SFR	20
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a=05,b=06(01=physics,01=maths,01=English,01=Mech.Engg.,01=Elect.Engg.,01=Chemistry)
c=02(01=Mech.Engg.,01=Elect. Engg.)

Marks to be given proportionately from a maximum of 15 to minimum of 10 for average SFR of 20:1 to 25:1, and zero for average SFR higher than 25:1

HOD is to be over and above 1;20 ratio as per AICTE guidelines for all the assessment years ,otherwise 0 marks.

HOD (SFR)=180:1

5.2.Faculty Qualifications (20)

$FQ=2*(10X + 7Y)/F$ where x is no of faculty with M.Tech and y is no. of Faculty with B.Tech..

F is no. of faculty required to comply 1:20 faculty student Ratio

$x=03+01=04,y=02+03=05,F=09,FQ= 2x(10x04+ 07x 05)/09$

FQ=16.66

Year	Y (B.Tech) or equivalent	X (M. Tech) or Ph.D(Humanity subjects)	F (180/20) SFR 20:1	FQ = 2* (10X+7Y)/F (For SFR 20:1)	F (180:25) (SFR 25:1)	FQ = 2* (10X+7Y)/F (For SFR 25:1)
2018-19	05	04	9	16.666	7.2	20.833
2017-18	05	04	9	16.666	7.2	20.833
2016-17	05	04	9	16.666	7.2	20.833

5.3 Faculty Retention (20)

>=90% faculties retained during the period of assessment (2016-17)keeping CAYm2(2014-15) as base year

Total faculties in 2016-17=05+04=09

Total faculties in 2017-18=05+04=09

Total faculties in 2018-19=05+04=09

5.4 Faculty as participants in faculty development/training activities (30)

Name of Faculty			
	CAY(2016)	CAY(2017)	CAY(2018)

Shri D.L.Sahu	---	---	---
Dr.B.Jha	02(Principal-TPO meet of BOAT,NITI AYOG Meeting)	01(Industry-Institute meet)	---
Shri K.B.Patel	-----	-----	-----
Shri R.N.D.Sharma	-----	-----	-----
Shri M.S.Billiwalla	-----	-----	-----
SUM	02	01	00
RF=Number of faculty required to comply with 25:1 student -faculty ratio as per 5.1	7.2	7.2	7.2
Assessment= $6 \times \text{sum} / 0.5 \text{RF}$ (marks limited to 30)	$6 \times 02 / 0.5 \times 7.2 = 3.33$	$6 \times 01 / 0.5 \times 7.2 = 1.66$	0
Average	1.663		

5.5 Product development, consultancy ,manufacturing contracts, Testing contracts(20)

Not Applicable

5.6 Faculty performance appraisal and development system(FPADS) (30)

Annual Confidential Report (ACR) form is being filled up by every faculty as per Govt.Norms. The ACR is reviewed by Director of Technical Education, Dadra & Nagar Haveli and gradation is remarked. The ACR is used during CAS promotion and yearly increment given to faculties.

5.7 Implementation of Career Advancement Scheme(CAS) (10)

The CAS has been implemented at Dr. B.B.A. Govt. Polytechnic from 01.01.1996.

(i)The AICTE 5th pay CAS and AICTE 6th pay CAS has been implemented and faculties got promotion to Lecturer (Sr.Scale), Lecturer (Sel.Grade) in 5th pay AICTE.

(ii) Lecturers got promotions as per 6th pay AICTE CAS and got promotion upto PB-4 with AGP=9000.

CRITERION 6	Facilities and Technical Support	100
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6.1 Availability of adequate, well equipped classrooms to meet the curriculum requirements (10)

Sl.No.	Class Room	Carpet Area	Seating Capacity	Availability of OHP	Other Smart facilities	Weakly utilisation
1	Room No-13	30ft x 20ft	90	01	White board with marker pen, black board	Yes, 06 days /week
2	Room No.14	30ft x 20ft	90	01	White board with marker pen, black board	Yes, 06 days /week
3	Room No-15	30ft x 20 ft	90	01	White board with marker pen, black board	Yes, 06 days /week

6.2. Availability of adequate, well equipped Workshops to meet the curriculum requirements (10)

Sl.No	Name of the Workshop	No. of students/batch	Name of the Power tools/machine tools	Weekly utilisation	Areas in which students expected to have enhanced learning	Relevance to PO/PSO
1	Fitting Section	30	Bench vice, hammer	06 days /week	Project Room (old projects), Reading room (adjacent to library)	yes
2	Tin Smithy Section	30	Anvil, hammer, furnace	06 days /week	Project Room (old projects), Reading room (adjacent to library)	yes
3	Welding section	30	Arc welding machine,	06 days /week	Project Room (old	yes

			welding rod, oxyacetylene welding machine		projects), Reading room (adjacent to library)	
4	Machine shop	16	Single point cutting tool, milling cutter, grinder, (lathe machine) turning tools	06 days /week	Project Room (old projects), Reading room (adjacent to library)	yes

6.3 Adequate and well equipped laboratories and technical man power (30)

Sr.No	Name of the laboratory	No. of students per setup	Name of the important equipment	Weekly utilisation status (all the courses for which lab is utilized)	Technical man power support		
					Name of the technical staff	Designation	Qualification
1	Building Material Lab.	30	1. Sieve shaker M/c 2. Mould Vibrator	02 hrs	---	----	----
2	Concrete Technology Lab.	30	U.T.M, C.T.M	02 hrs	----	-----	-----
3	Transportation Engineering lab	30	Los Angel Abrasion Testing m/c	02hrs	----	-----	-----
4	Soil Engineering Lab.	30	Triaxial shear testing m/c, Direct	02hrs	----	-----	-----

			shear testing m/c				
5	Surveying / Public Engineering Lab.	30	Total station Theodolite , PH meter, BOD Incubator	02hrs	-----	-----	-----
6	Applied Mechanics Lab.	30	Gear Trains, simple machines, Crab winch	02 hrs	-----	-----	-----

6.4 Additional facilities created for improving the quality of learning experience in laboratories(20)

Sr.No.	Facility name	Details	Reasons for creating facility	Utilisation	Areas in which students are expected to have enhanced learning	Relevance to POs /PSOs
1	Models and charts	All the models of Civil Engg. equipments, machineries kept in the lab	To give better understanding of the equipments, machineries	In subjects like Transportation Engg., Surveying, Water Resource Management	In all the courses of Civil Engg. from sem-1 to sem-6	Yes
2	Old Projects of Civil Engg.	Better old projects of Civil Engg. kept for further studies	innovation of the existing Projects and learning experience for project-I and Project-II	Used by present batches for innovation in the related Projects	Innovative Project work	Yes

			subjects			
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6.5 Laboratories: Maintenance and overall ambiance (10)

Regular maintenance is done by lecturers and lab attendant of all the laboratories of Civil Engineering and Workshop. Whenever any financial assistance for repair and maintenance of lab machinery is required, the Principal provide the same.

6.6 Availability of computing facility in the Department

No. of Computer Terminals	Students computer ratio	Details of legal software	Details of Networking	Details of Printers,scanners etc
02	180/02=90	----	Nil	02

6.7 Language Lab (10)

Not Available

CRITERION 7	Continuous Improvement	75
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7.1 Actions based on the results of evaluation of each of the POs & PSOs (25)

(Identify the areas of weaknesses in the program based on the analysis of evaluation of POs & PSOs attainment levels. Measures identified and implemented to improve POs & PSOs attainment levels for the assessment years. Actions to be written as per table in 3.3.2.)

Examples of Analysis and proposed action

sample-1- As per the rules framed for admission to Diploma courses in Dadra & Nagar Haveli to give first preference to local Domicile category candidates (Merit list separately prepared for DO category). Therefore students with poor marks in Mathematics Science and English get into Diploma courses, due to which it is difficult to get 100% results in exam.

Action taken: Special care is being taken by lecturers, for those poor students (having less % in 10th exam) so that they cope up with other students in the classroom as well as in practicals.

Sample-2- In a course that had group projects it was determined that the expectations from this course about PO3 (like: to meet the specifications with consideration for the public health and safety and the cultural, societal and environmental considerations) were not realized as there were no discussions about these aspects while planning and execution of the project.

Action taken-Project planning, monitoring and evaluation included in set of instructions related to these aspects.

POs & PSOs Attainment levels and Actions for improvement-CAY

PO/PSO	Target Level	Attainment Level	Observations	Actions taken
Basic Knowledge	2.2	2.16	0.04	Lecturers asked to take extra classes in related subjects
Discipline Knowledge	2.50	2.40	0.10	Lecturers asked to take extra classes in related subjects
Experiments & Practices	2.51	2.408	0.102	Lecturers & lab Technicians were directed to take extra

				classees in related practicals
Engineering Tools	2.0	2.0	0.0	Purchase of required Items are placed before the higher authority
The Engineer & Society	2.04	2.032	0.008	Students were motivated to participate in Social service activities through Engineering
Environment and sustainability	2.0	2.0	0.0	Students are involved in plantation and swachh Bharat Abhiyan
Ethics	2.033	2.026	0.007	Students advised to follow morality, Nationalism.
Individual and Team work	2.06	2.048	0.012	Students are motivated through Project work to work as a team for better results
Communication	2.11	2.088	0.022	Guest lectures had been organised by Institution
Lifelong learning	2.086	2.068	0.018	Motivation in classrooms were given
PSO-1	2.161	2.128	0.033	Students encouraged to do better
PSO-2	2.33	2.264	0.066	Students encouraged to better

7.2 Improvement in success Index of students without the backlog(10)

SI=(Number of students who have passed from the program in the stipulated period of course duration)/(Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry) Assessment shall be based on improvement trends in success indices. Marks are awarded accordingly

Item	LPB(2018)	LPB(2017)	LPB(2016)
Success Index(from criteria 4.2.1)	0.291	0.38	0.3965

7.3 Improvement in placement and Higher studies (10)

Assessment is based on improvement in: Placement number, quality placement, core industry, pay packages etc. Higher studies: admissions in premier institutions

Item	LPB(2018)	LPB(2017)	LPB(2016)
Placement index(from criteria 4.6)	0.928	0.776	1.138

7.4 Improvement in Academic performance in Final year(10)

Item	LPB(2018)	LPB(2017)	LPB(2016)
Academic performance Index(From criteria 4.3)	4.0356	6.304	4.832

7.5 New facility created in the program(20)

Item	CAY(2018)	CAY(2017)	CAY(2016)
Internet (wi fi)	W i Fi(BSNL)	W i Fi(BSNL)	W i Fi(BSNL)
Guest lectures from Industry	Lecture arranged related to soft skills, Technical skills.	Lecture arranged related to soft skills, Technical skills.	Lecture arranged related to soft skills, Technical skills
Expert talk in various subjects of Engineering(from IITs, NITs) approved	EXPERT TALKS Arranged by Jai Corp Industry, DNH.	EXPERT TALKS for civil Engg, from SVNIT, surat	To be started from September-oct. 2017
Apprenticeship training through National Apprenticeship Training Scheme of MHRD(in coordination with Board of Apprenticeship Training(BOAT), WR, Mumbai)	-----	Procedure is followed in Apprenticeship training to be provided to students	Institute registered in NATS in 2016

Institute Level Criteria

Criteria 8	Student Support System	50
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8.1 Mentoring System to help at individual level (10)

Professional guidance is given by inviting career counselors who have a vast experience in Industry as well as in counseling .

Communication skill workshops are being organized by inviting professionals.

lecture talks are arranged and Industry persons are invited for improvement of skills of Students.

Students also go to industry visit to get industry experience.

The Institution also has registered with NATS, Ministry of HRD, Govt. of India and communicating with BOAT,(WR),Mumbai for apprenticeship training to the pass out students in nearby industry.

8.2 Feedback analysis and reward /corrective measures taken, if any(10)

Seminars organised in the Civil Engineering Department in final year Project ,to build confidence in the technical aspect of the course. This is done after getting feedback of the students that they used to fail in the viva-voce exam of Gujarat Technological University.

Also this practice to talk on the dias in front of audience give them confidence to face interviews after passing out Diploma.

Reward giving system has been developed in the Institution for bright topper of every Department. Also Prize is awarded to best projects every year in every department. For participating in the Project Mela a cash prize of Rs,.2000/ is provided to every project group of Civil Engineering Department.

8.3 Feedback Facilities (5)

There are committees formed in the Institution for taking care of every aspect of different facilities provided to students. The committees work continuously for the benefit of students by getting feedbacks from them..

8.4 Career Guidance, Training , Placement(20)

A committee has been formed to work on training and placement of Students.

The Faculty incharge and lecturers involved for Civil Deptt are:

Name of Faculty	Responsibility
Dr.B.Jha	TPO ,Civil & Overall
Shri K.B.Patel	Civil Engg.
Shri R.N.D.Sharma	Civil Engg.

*A total of 15 students of Civil Engineering Department have been placed in different Industries and 12 students got admission in Higher studies after passing out in 2016.

*A total of 03 students of Civil Engineering Department have been placed in different Industries and 11 students got admission in Higher studies after passing out in 2017.

*A total of 05 students of Civil Engineering Department have been placed in different Industries and 08 students got admission in Higher studies after passing out in 2017.

*Apprenticeship training to the students by NATs through BOAT,WR,Mumbai is being in a negotiation stage.

*In this connection two Directors from NILERD,NITI Aayog visited Dr.B.B.A.Govt.Polytechnic on 01/04/2017.They interacted with the Faculties in the matter of Apprenticeship training and placement of the students.

The Directors are:

1.Dr.Yogesh Kumar,Joint Director,NILERD,NITI Aayog,Govt.of IndiaFellow Institute of Town planners ,India

2.Marshal Birua, Assistant Director, NILERD,NITI Aayog,Govt.of India

*The feedback in the official format was taken by those Directors for further progress in the matter of better training and placement to the students.

8.5 Entrepreneurship cell/Technology Business Incubator(5)

Not available

CRITERION 9	Governance, Institutional Support and financial Resources	75
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9.1 Organisation , Governance and Transparency

9.1.1.State the Vision and Mission of The Institute (5)

The Vision of the Dr.B.BA.Govt.Polytechnic :

The establishment of Dr. B.B.A. Govt. Polytechnic, at Dadra and Nagar Haveli will help the UT Administration to meet its man power needs and also in development of tribal regions. Moreover, the Territory must have a Polytechnic of its own to meet the aspirations of the local people, by transforming the students to be technically skilled managers, innovative leaders and environmentally receptive citizens.

The Mission of Dr.B.BA.Govt.Polytechnic is:

To produce skilled Technical manpower meeting Global Engineering Environment and International standards.

To Ensure Optimal utilization of available resources and manpower.

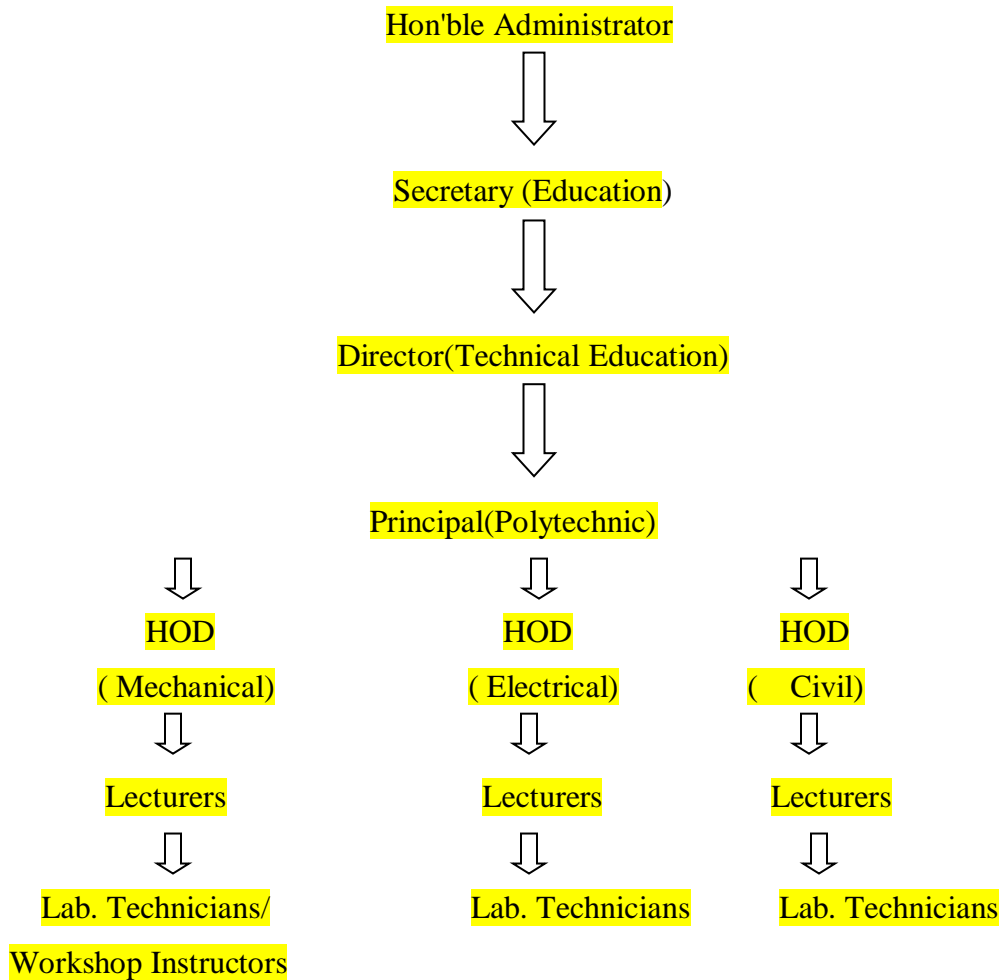
To develop students with knowledge, attitude and skill of employability and professionally ethical citizens.

9.1.2Governing body , administrative setup ,functions of various bodies, define rules procedures ,recruitment and promotional policies (5)

Dr. B.B.A. Govt. Polytechnic was setup in the year 1994 after getting permission from Ministry of HRD and AICTE in 1988.

The institute was under the Administration of Dadra & Nagar Haveli and Hon'ble Administrator, Dadra & Nagar Haveli, Daman & Diu is the appointing authority and Employer.

The Administrative set up is as under:



The functions of various Bodies presently working in Dr. B.B.A. Govt. Polytechnic are from 2018-2020

Sr. No.	Responsibility & Department	Name & Designation of the main Responsible Lecturer	Name of the Committee members/Assisting Staff	Role
1	I/C HOD in Civil Engg.	Shri R.N.D.Sharma		
2	I/C HOD in Mechanical	Shri C.S.Rao		

	Engg. Department			
3	I/C HOD in Electrical Department	Shri S.Mishra		Department level administration, laboratory development/upgradation, academic weekly review as per GTU requirements and documentation of all activities
4	I/C HOD in Computer & .I.T. Department	Shri S.Chennappa		
5	I/C HOD in Electronics & Communication Department	Smt.M.G.Desai		
6	I/C Humanities & Science Subjects	Shri D.N.Shinde		
7	I/C HOD in Textile Manufacturing Technology	Dr.B.K.Dandapat		
7	GTU coordinator	Shri K.B.Patel, Shri A.A.Patil, Shri S.S.Mecwan	Shri Sanjay Solanki (Lect.) Shri Bhavin Doshi (Lect.)	Enrollments, Exams work, assesment, all GTU matters
8	I/C Student section & Academic Committee	Smt.C.N.Desai, Dr.B.Jha,	Ms.Nisha Singda, Shri Ajay Patel, Shri Akshay Solanki, Shri Santosh Gangoda, Shri Vikram Mali	GTU Certificates & marksheets, Admission data & documents, safe keeping & distribution, bonafide certificates etc, all students record maintainance Filling up GTU Exam forms, Rechecking forms, & reassessment forms
			All HODs Shri D.L.Sahu, Shri P.V.Gadge	Academic Planning, Inspection-documentation, quality aspects, students attendance and detention issue
9	Affiliation Committee	Dr.J.B.Rana, Shri S.Chennappa Dr.B.K.Dandapat	Smt.M.G.Desai Shri K.B.Patel, Shri Sanjay Solanki	Affiliation documentation for extension of Approval (EOA) AICTE & GTU Affiliation

11	I/C Student CoCurricular Activity	Shri P.V.Gadge, Shri Dipan Patel	Shri J.K.Rohit(Sports) Shri A.D.Desai & Smt.Urvi Patel(Cultural), Shri Sachin Chouhan(Literary) ,Smt.H.H.Parmar & Shri Suraj Mahala(Technical events & exhibitions)	Advance planning of all activities,students management and monitoring,students appreciation & aead distribution
12	GTU Innovation club & Open Source Technology club	Shri B.Moharana, Shri Sanjay Solanki, Shri Vishal Dhoke	Shri Mitesh Billiwala Smt. K.R.Jadeja Smt.Alka Patel Shri Bhaven Doshi Shri Sanjay Solanki	Innovations in projects , as per GTU guidelines & open software workshops
13	Training & Placement Section	Dr.B.Jha	Shri Vishal Dhoke Shri Dipan Patel Shri J.K.Rohit Shri A.A.Patil Shri Sohit Mecwan, Smt.Alka Patel,Smt.K.R.Jad eja	Training,campus placements,educational & Industrial visits/Tours,Expert talk,Workshops/seminars
14	Workshop Superintendent	Shri P.V.Gadge	Shri S.C.Patel,Shri B.S.Korda, M.B.Rohit, Shri Dolu Nadge	All Workshop work upgradation etc.
15	Master Time table Section	Shri D.L.Sahu Shri S.Chennappa Shri D.N.Shinde	ShriSohit Mecwan Shri A.D.Desai	Preparation & compiling maser time table
16	Library Committee	Mrs..M.S.Desai, Shri Baven Doshi, Shri B.H.Chouhan	Shri Dipen Patel Smt. K.R.Jadeja	All issues of books,journals etc in library,reading section for students and staffs
17	Discipline Committee	Smt.M.G.Desai,Dr.J.B. Rana& all HODs	Shri S.C.Patel,	Disciplinary issues

			M.B.Rohit, Smt.H.H..Parmar Shri Suraj Mahala	
18	Institute Magazine Committee	Shri P.V.Gadge, Shri S.Chennappa	All HODs-Chief Contributors,Shri Sachin Chouhan-Language Editor	To invite records of events from department and compile them
19	Rector, Boys Hostel	Shri D.L.Sahu	Shri Sachin Chouhan	Hostel issue safe keeping of college key in the campus
20	Equipment Utility Evaluation Committee	All HODs,Sr.Store Keeper & Office Superintendent	-----	To verify the cases of old equipment for write off etc.
21	Institute Website monitoring & Upgradation Committee I/C Computer Programmer	Shri S.Chennappa Shri S.Mecwan	Shri Sanjay Solanki, Shri A.A.Patil	Monitoring & upgradation of website Develop need based computer programs for effective working & public viewing

The functions of various Bodies presently working in Dr.B.B.A.Govt.Polytechnic during 2016-18 are:

Sr.No.	Responsibility & Department	Name & Designation of the main Responsible Lecturer	Name of the Committee members/Assisting Staff	Role
1	I/C HOD in Civil Engg.	Shri K.B.Patel		Department level administration, laboratory development/upgradation, academic weekly review as per GTU requirements and documentation of all
2	I/C HOD in Mechanical Engg. Department	Dr.B.K.Dandapat		
3	I/C HOD in Electrical Department	Shri A.K.Swain		
4	I/C HOD in Computer & .I.T.Department	Shri S.Chennappa		

	nt			activities
5	I/C HOD in Electronics & Communication Department	Smt.M.G.Desai		
6	I/C Humanities & Science Subjects	Dr.J.B.Rana		
7	GTU coordinator	Dr.J.B.Rana,/Dr.B.Jha & Shri S.Chennappa	Shri Sanjay Solanki(Lect.) Shri Bhaven Doshi(Lect.)	Enrollments, Exams work, assesment,, all GTU matters
8	I/C Student section	Dr.B.Jha, Shri B.Moharana	Shri Mitesh Billiwala Shri Bhaven Doshi Shri Subhash Patel Shri Bhagwan Korda MS.Nisha Shingda Shri Ritesh Vad	GTU Certificates & marksheets, Admission data & documents, safe keeping & distribution, bonafide certificates etc, all students record maintainance
9	Academic Committee	Shri K.B.Patel(Convener)	All HODs, Shri D.L.Sahu, Dr.B.Jha, Shri P.V.Gadge	Academic planning, inspection- documentation, quality aspects, students attendance & detention issue
10	Affiliation Committee	Shri S.Chennappa, Shri S.S.Shrawge & Office Supdt.	Dr.J.B.Rana Shri K.B.Patel Shri Sanjay Solanki	Affiliation documentation for extension of Approval(EOA) AICTE & GTU Affiliation
11	I/C Student CoCurricular Activity	Shi R.N.D Sarma(Coordinator)	Shri Dipen Patel(Sports) Smt.Urvi Patel & Sohil Khalan(Cultural) & Sachin Chouhan(Literary) Smt Hemangini Parmar & Suraj Mahala(Technical Events & Exhibitions)	Advance planning of all activities, students management and monitoring, students appreciation & aeadr distribution
12	GTU Innovation club & Open	Shri R.N.D.Sharma(GIC) Dr.B.Jha(OSTC)	Shri Mitesh Billiwala Shri Vishal Dhoke	Innovations in projects , as per GTU guidelines & open software workshops

	Source Technology club		Smt. K.R.Jadeja Smt. Alka Patel Shri Bhaven Doshi Shri D Sanjay Solanki	
13	Training & Placement Section	Dr. B. Jha Dr. B. K. Dandapat	Shri P. V. Gadge Shri B. moharana Shri Sohil Khalani Shri A. A. Patil Sohit Mecwan, Smt. Alka Patel, Smt. K. R. Jadeja & Shri P. N. Parmar (O.S.)	Training, campus placements, educational & Industrial visits/Tours, Expert talk, Workshops/seminars
14	Workshop Superintendent	Shri P. V. Gadge	Shri Sohil Khalani Shri M. B. Rohit, Shri Dolu Ndge	All Workshop work upgradation etc.
15	Master Time table Section	Shri D. L. Sahu Shri C. S. Rao	Shri D. N. Shinde Sohit Mecwan Shri A. D. Desai	Preparation & compiling maser time table
16	Library Committee	Mrs. M. S. Desai, Asst. Librarian- Convener Shri S. Mishra & Mrs. C. N. Desai-members	Shri Dipen Patel Smt. K. R. Jadeja	All issues of books, journals etc in library, reading section for students and staffs
17	Discipline Committee	Shri C. S. Rao- Convener & all HODs	Dr. J. B. Rana Shri A. A. Patil Smt. H. H. Parmar Shri Prakash Bij	Disciplinary issues
18	Institute Magazine Committee	Dr. B. Jha, Shri S., chennappa	All HODs-Chief Contributors, Shri Sachin Chouhan-Language Editor	TO invite records of events from department and compile them
19	Rector, Boys Hostel	Shri R. N. D. Sarma	Shri Sachin Chouhan	Hostel issue safe keeping of college key in the campus
20	Equipment Utility Evaluation Committee	All HODs, Sr. Store Keeper & Office Superintendent	-----	To verify the cases of old equipment for write off etc.
21	Institute Website monitoring & Upgradation	All HODs Dr. B. Jha & Dr. J. B. Rana	Shri S. Chennappa Shri S. Mecwan	Monitoring & upgradation of website

	Committee			
22	I/C Computer Programmer	Shri S.Chennappa Shri S.Mecwan	Shri Sanjay Solanki Shri A.A.Patil	Develop need based computer programs for effective working & public viewing

Define Rules and Procedures

The Institute is under Govt. of India. Therefore all the Service rules are as per DOP & T guidelines. The Meetings are conducted by Principal(Polytechnic) and accordingly orders are delivered for all the Employees of the Institution. The AICTE pay scales has been implemented in the Institution effective from 01.01.1996.

The Biometric attendance has been used for the last 05 years..

The promotional policies are as per CAS of AICTE. The Direct recruitment is through U.P.S.C., New Delhi. The RR of the Institution has been published in April 2015 with some errors. The rectification of errors is now under process.

9.1.3. Decentralization in working and Grievance redressal mechanism(5)

The Order for different responsibilities are as mentioned in 9.1

9.1.4 Delegation of Financial Powers(5)

The Principal is also DDO of the Institution. The Office Superintendent (O.S.) of Dr.B.B.A. Govt. Polytechnic has been authorized to handle the DDO charge from 2018.

The HOD responsibility was given on rotation basis (two years tenure) from the existing Department faculties.

No Financial power given to any HOD or Faculty. Principal & DDO is having all the financial power

9.1.5 Transparency and availability of correct /unambiguous information in public domain(5)

Principal (Polytechnic) is the Authority for any information related to Dr. B.B.A. Govt. Polytechnic, U.T. of Dadra & Nagar Haveli.

9.2 Budget Allocation, utilization and Public Accounting at Institute level (10)

(Summary of current financial year's budget and actual expenditure incurred (for the institution exclusively) in the three previous financial years

Total income at Institute level

A. CFY (2018)

Total income in CFY (2018-19)			Actual expenses in CFY (Till, 28th January 2019)			Total no. of students in CFY
Fee (Rupees in thousands)	Govt. Grants (Rupees in thousands)	Any other sources (Rupees in thousands)	Recurring including salaries (Rupees in thousands)	Non - recurring	Special projects/ Any other, specify	Expenses per students
3rd & 5th semester fees = 1134.600, 1st sem fees = Data Not Available	Major Head (38900+420+500+430+2500+2127+3873=48300.00)	--	38646.891	-----	----	Total No.=746, Expenses per students = Rs.51,805.4839

Total income in CFY m1 (2017-18)			Actual expenses in CFY (Till January 2018)			Total no. of students in CFY
Fee (Rupees in thousands)	Govt. Grants (Rupees in thousands)	Any other sources (Rupees in thousands)	Recurring including salaries (Rupees in thousands)	Non - recurring	Special projects/ Any other, specify	Expenses per students
(i) 1st sem. SP&OS = 756.700, (ii) 1st, 3rd, 5th Sem	Major Head (41000+420+500+430+3603+3000+3181+200+200+100+100=51884)	--	42354.228	-----	----	Total No.=742, Expenses per students = Rs.57,081.116

DO=12 21.575, (iii)4th ,6th Sem DO=30 8.200, Total=22 86.475						
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Total income in CFYm2(2016-17)			Actual expenses in CFY(Till March 2017)			Total no. of students in CFY
Fee (Ruppes in thousands)	Govt. Grants (Ruppes in thousands)	Any other sources (Ruppes in thousands)	Recurring including salaries (Ruppes in thousands)	Non - recurring	Special projects/ Any other ,specify	Expenses per students
2511	Major Head(39737+434+2921+2959+349+1832)=48232	--	47997	-----	----	Total No.=749, Expenses per students= Rs.64,081.44

B.CFYm3(2015-16)

Total income in CFY(2015-16)			Actual expenses in CFY(Till)			Total no.of students in CFYm1
Fee (Ruppes in thousands)	Govt. Grants	Any other sources	Recurring including salaries	Non - recurring	Special projects/Any other ,specify	Expenses per students
4192	60700	--	44538	-----	---	Total No.=698, Expenses per students=Rs.63808.02

C.CFYm42014-15

Total income in CFY(2014-15)			Actual expenses in CFY(Till)			Total no.of students in CFYm2
Fee (Rs. in thousand)	Govt. Grants (Rs. in	Any other sources	Recurring including salaries	Non - recurring (Rs. in	Special projects/Any other	Expenses per students (Rs. in thousand)

	thousand)		(Rs. in thousand)	thousand)	,specify (Rs. in thousand)	
1434	94400	---	51419	---	----	No.=720, Expenses per students=Rs.71,415.27

D.CFYm5(2013)

Total income in CFY			Actual expenses in CFY(Till			Total no.of students in CFY
Fee	Govt. Grants	Any other sources	Recurring including salaries	Non recurring	Special projects/Any other ,specify	Expenses per students
--	---	----	----	----	-----	---

Table-Consolidated budget received -Expenditure in CFY,CFYm1, CFYm2,CFYm3

Item	Budget in CFY 2016-17 (Rs. in thousands)	Actual expense in CFY2016-17(till March 2017) (Rs. in thousands)	Budget in CFYm1(Til l)2015-16 (Rs. in thousands)	Actual expense in CFYm1(till)2015-16 (Rs. in thousands)	Budget in CFYm1(Til l)2014-15 (Rs. in thousands)	Actual expense in CFY(till)2014-15(Rs. in thousands)
Infrastrcture built up	---	---	--	---	---	---
Library	---	---	--	---	---	---
Laboratory Equipment	---	---	---	---	---	---
Teaching &Non Teaching staff salary	39737 +349	39516 +348	40000 +420	35368 +355	63000 +390	44279 +360
Maintenance and spares	2921	2921	5000	5276	5000	3237
R&D	---	---	--	--	-----	----
Training and travel	434	434	150	123	150	196
Miscellaneous expenditures	1832	1819	2000+130	805 +0	2500	1119 +45
Others/Specifi fy	2959	2959	3000 +5000 +5000	2611 +0 +0	3000 +10000 +10000	2183 +0 +0
Total	48232	47997	60700	44538	94400	51419

Item	Budget in CFYm 1 2017-18 (Rs. in thousands)	Actual expense in CFY 2017-18 (till jan 25/2018) (Rs. in thousands)	Budget in CFY 2018-19 (Rs. in thousands)	Actual expense in CFY 2018-19 (till jan 25/2018) (Rs. in thousands)
Infrastrcture built up	---	---	---	---
Library	---	---	---	--
Laboratory Equipment	---	---	---	--
Teaching & Non Teaching staff salary	41000+420	35376+294	38900+420	32851.388+262.628
Maintenance and spares	3000	1824.931	2127	505.546
R&D	---	---	---	---
Training and travel	430	59.029	430	391.47
Miscellaneous expenditures	2500+1103=3603 (office expenses)	2676.346	2500+50	2314.54+0
Others/Specifiy	2000+1181+500	2122.85	3873	2673.639
Total	51884	42354	48300	38646.891

9.2.1 Adequacy of budget allocation (4)

In the F.Y.2017-18,2016-17, 2015-16, 2014-15 the budget is always allotted more than actual expenditures

9.2.2 Utilization of allocated funds (4)

Maximum fund is utilized in the financial years 2018-19,2017-18,2016-17,2015-16 properly.

9.2.3 Availability of the audited statements on the Institute's website(2)

The information on audited statement is available at the office of Dr. B.B.A. Govt. Polytechnic.

9.3 Program specific Budget Allocation , Utilization (15)

Budget is allotted for all the Departments like Mechanical Engg., Electrical Engg., Civil Engg., etc. The split in Budget program specific document is not available.

Total Budget in CFY(2018-19):		Actual expenses in CFY(2018-19)(Till)		Total No.of students in CFY(2018-19):
Non Recurring	Recurring	Non Recurring	Recurring	Expenses per student
--	----	----	----	----
---	---	---	---	---

Total Budget in CFYm1:(2017-18)		Actual expenses in CFYm1(2017-18)		Total No.of students in CFYm1(2017-18):
Non Recurring	Recurring	Non Recurring	Recurring	Expenses per student
--	----	----	----	----
----	----	----	----	----

Total Budget in CFYm2:(2016-17)		Actual expenses in CFYm2(2016-17)		Total No. of students in CFY:(2016-17)
Non Recurring	Recurring	Non Recurring	Recurring	Expenses per student
---	-----	----	-----	----
----	----	-----	----	----
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9.2.3 Availability of the audited statements on the Institute's website (2)

The information on audited statement is available at the Institution office for public.

9.3 Program specific Budget Allocation, Utilization (15)

9.3.1. Adequacy of Budget Allocation (07)

In the F.Y.2016-17, 2015-16,2014-15 the budget is always more than actual expenditures

9.3.2 Utilization of allocated funds (8)

Though total Budget is prepared combined for all the Departments, maximum funds are utilized in the financial years 2016-17,2015-16,2014-15 properly. After the actual expenditure every year, the funds are surplus, which can be realised from the table at 9.2.

9.4. Library and Internet (20)

(It is assumed that zero deficiency report was received by the Institution, Effective availability and utilization to be demonstrated)

Library Facilities & Internet

Sl.No	Type	available
1	Volumes(Total)	20742
2	Titles(All)	2829
3	Journals	06
4	Library managemet Software	01
5	Multimedia PC(Shared with Computer Department)	10

Wifi facility is available to students and staffs provided through BSNL.

9.4.1. Quality of learning resources(hard/soft) (10)

1. The Dr. B.B.A. Govt. Polytechnic is well equipped with a library.
2. The Text Books, Reference Books of Mechanical Engineering are available in both English and Gujarati Language. The students have an option to write Examination in English or Gujarati as per GTU(University) guidelines.
3. The Science journals(Hard copy),Magazines, Newspapers(National & Local) in English, Hindi, Marathi, Gujarati are available for students and faculties.
4. There is a reading room attached to the library with a capacity of around 80 persons. It is open during college Hours.
5. The e-journals of Institutions of Engineers(soft copy) are subscribed for the Students and faculties. Even Internet can be accessed through wifi (BSNL) in the Institution premises. The study material and competitive exam papers are available for students.

9.4.2. Internet (10)

- i. Name of the internet provider- BSNL lease line, BSNL(Qfi), & Dongle of Idea Network(Backup)
- ii. Available Band width : BSNL –(i)BSNL leaseline-10MBPS (ii)BSNL Qfi-2MBPS(Free wifi by U.T. of DNH)
Idea Net setter- (3G)
- iii. Wi fi availability: yes, BSNL

iv. Internet access in labs, classrooms, library

and offices of all Departments: Yes through wi fi networks of BSNL and Dongles of Idea Network (Recharge done every month) as backup.

v. Security arrangements: The security within the campus was provided by " NEWGEN SECURITY SERVICES". The security is available for 24 hours in 03 shifts. 04 security Guards and one Security supervisor is on duty for 24 hours. A total of 12 security personnel deployed by the security Agency.

9.5 Institutional Contribution to the Community Development (5)

1. The students and staff of Dr. B.B.A. Govt. Polytechnic performs swachhta abhiyan every year by cleaning the main road between Rakholi (4 roads chowk) and Dr. B.B.A. Govt. Polytechnic Campus(02 kms) as a part of Swachh Bharat Abhiyan.

2. The students of Civil Engineering have done projects related to rain water harvesting, waste water treatment, etc. as part of their contribution to Society. It is a continuous process towards commitment for society.



Administration of Dadra & Nagar Haveli
(Department of Technical Education)
Dr. B.B.A. Govt. Polytechnic, Karad (D.P.),
Madhuban Dam Road-Silvassa-396240

No. EST/GPK/NBA/SAR/2017/1423

Dated: 10/10/2017

Declaration

The Head of the Institution needs to make a declaration as per the format given below:

I undertake that, the Institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines in force as on date and the Institute shall fully abide by them.

It is submitted that information provided in this Self Assessment Report is factually correct. I understand and agree that an appropriate disciplinary action against the Institute will be initiated by the NBA in case any false statement/ information is observed during pre-visit, visit, post visit, and subsequent to grant of accreditation.

Date: 10/10/2017

Place: Karad (D.P.)


Signature

Name: PRIYANKA KUMARI

Designation of the Head of the
Institution with seal
Principal
Dr. B.B.A. Government Polytechnic College
Karad (D.P.) Silvassa
Dadra & Nagar Haveli

Annexure – 1

(A) PROGRAM OUTCOMES (POs)

The students are expected to possess the attributes listed below

PO1	An ability to apply knowledge of basic mathematics, science and engineering to solve the broadly defined Civil engineering problems.(Basic knowledge)
PO2	An ability to apply discipline - specific knowledge to solve broadly defined Civil Engineering problems.(Discipline knowledge)
PO3	An ability to conduct standard tests and measurements, and to conduct, analyze, and interpret experiments (Experiments and practice)
PO4	An ability to apply the knowledge, techniques, skills, and modern tools of Civil Engineering to narrowly-defined engineering technology activities.(Engineering Tools)
PO5	Demonstrate knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering practice(The engineer and society)
PO6	Understand the impact of the engineering solutions in societal and environmental contexts, and demonstrate the knowledge and need for sustainable development.(Environment and sustainability)
PO7	Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. (Ethics)
PO8	Function effectively as an individual, and as a member or leader in diverse/multidisciplinary teams.(Individual and team work)
PO9	An ability to apply written, oral, and graphical communication in both technical and nontechnical environments and the ability to use appropriate technical literature (Communication)
PO10	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the context of technological changes (Life-long learning)

List of PSO's

PSO1: The program should demonstrate that diploma Engineer can apply specific program principles to Drawing, test, estimate, planning, construction or documentation of basic Civil Engineering.

PSO2: The program should make diploma Engineer Draw, test, estimate, planning and construction of society needed products and engage in construction, repair & maintenance of such quality products with utmost environment safety and commitment and provide good service to the society.