क्रम संख्या
Serial No. 32430

अनुक्रमांक ..... 2K12/MC/35..
Roll No.

दिल्ली प्रौद्योगिकी विश्वविद्यालय
DELHI TECHNOLOGICAL UNIVERSITY

बैचलर ऑफ़ टेक्नोलॉजी

विश्वविद्यालय की शैक्षणिक परिषद की अनुशंसा पर

मनभर

को मैथमेटिक्स एंड कंप्यूटिंग में बैचलर ऑफ़ टेक्नोलॉजी

की उपाधि द्वितीय श्रेणी में प्रदान की जाती है, जिन्होंने इस उपाधि को प्रदान किए जाने हेतु विश्वविद्यालय के अध्यादेशों के तहत निर्धारित अपेक्षाओं को वर्ष 2016 में सफलतापूर्वक पूर्ण कर लिया है। इन्हें उक्त उपाधि से तृतीय दीक्षान्त समारोह में 8 दिसंबर 2016 को विभूषित किया गया।

BACHELOR OF TECHNOLOGY

Upon the recommendation of the Academic Council of the University

MANBHAR

is awarded the degree of

Bachelor of Technology in Mathematics & Computing

who has successfully completed the requirements prescribed under the ordinances of the University for the award of this degree in Second Class in the year 2016. He/She is admitted to the said degree at the 3rd Convocation held on December 8, 2016.

कुलसचिव
Registrar,

दिल्ली, (भारत) दिनांक
Delhi, (India) dated the *December 8, 2016*

कुलपति
Vice-Chancellor,

दिल्ली प्रौद्योगिकी विश्वविद्यालय
DELHI TECHNOLOGICAL UNIVERSITY
(Formerly Delhi College of Engineering)

DTU
Delhi Technological
UNIVERSITY

F.No. 101/B.Tech./Acad/CGPA/2017/3228 **Dated: - 05.09.2017**

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr./Ms.. Manbhar, (Roll No.2K12/MC/035) was a bonafide student of B.Tech (Mathematics & Communication Engineering) in Delhi Technological University.

DTU declares result in terms of SPI and CPI for semester and consolidated results respectively. SPI/CPI are weighted percentage in terms of Credits earned. DTU does not announce result in SGPA/CGPA terms. However, SPI/CPI can be converted as follows.

$$\text{CGPA/SGPA} = \{(\text{CPI/SPI}) + 0.75\}$$
$$10$$

S.No.	Consolidated	CPI	CGPA
1.	(1st to 8th Semester)	53.65	6.11

Amaan 5/9/17
Prepared & Checked By

RPandey
(Prof. Rajeshwari Pandey)
Associate Dean Academic (UG)

S. No. 182307

DELHI TECHNOLOGICAL UNIVERSITY

(Formerly Delhi College of Engineering)

STATEMENT OF MARKS

Consolidated Report

Bachelor of Technology

Mathematics & Computing

Name: MANBHAR **Roll no: 2K12/MC/35**

Paper Code	Subject Title	C	M
Semester : I SPI 42.03			
AM-101	MATHEMATICS-I	0	17
HU-102	COMMUNICATION SKILLS	3	42
AP-103	APPLIED PHYSICS-I	4	52
AC-104	APPLIED CHEMISTRY	4	46
EE-105	ELECTRICAL SCIENCE	4	40
IT-106	FUNDAMENTALS OF INFORMATION TECHNOLOGY	3	45
AP-107	APPLIED PHYSICS-I LAB	2	48
AC-108	APPLIED CHEMISTRY LAB	2	48
EE-109	ELECTRICAL SCIENCE LAB	2	62
IT-110	FUNDAMENTALS OF INFORMATION TECHNOLOGY LAB	2	66
Semester : III SPI 44.77			
MC-201	MATHEMATICS-III	4	40
MC-202	DIFFERENTIAL EQUATIONS	4	40
MC-203	DISCRETE MATHEMATICS	4	46
MC-204	DATA STRUCTURE	4	50
MC-205	PROBABILITY & STATISTICS	0	30
MC-206	ENGINEERING ECONOMICS	3	40
MC-207	MATHEMATICAL APPLICATIONS LAB	2	87
MC-208	PROBABILITY & STATISTICS LAB	2	61
MC-209	DATA STRUCTURE LAB	2	75
MC-210	SELF STUDY / SEMINAR	1	73
Semester : V SPI 54.33			
MC-301	MODERN ALGEBRA	4	40
MC-302	OPERATIONS RESEARCH	4	43
MC-303	FINANCIAL ENGINEERING	4	40
MC-304	INFORMATION & NETWORK SECURITY	4	53
MC-305	DATABASE MANAGEMENT SYSTEM	4	48
MC-306	DATABASE MANAGEMENT SYSTEM LAB	2	74
MC-307	OPERATIONS RESEARCH LAB	2	80
MC-308	INFORMATION & NETWORK SECURITY LAB	2	61
MC-309	MINOR PROJECT-I	4	152
Semester : VII SPI 59.53			
MC-401	COMPUTER GRAPHICS	4	61
MC-402	APPLIED GRAPH THEORY	4	41
MC-403	FUZZY SET & FUZZY LOGIC	4	40
HU-4041	ECONOMETRICS	4	53
MC-405	APPLIED GRAPH THEORY LAB	2	72
MC-406	COMPUTER GRAPHICS LAB	2	72
MC-407	MAJOR PROJECT-I	6	205
MC-408	INDUSTRIAL TRAINING-II (VIVA-VOCE)	4	77

Paper Code	Subject Title	C	M
Semester : II SPI 53.07			
AM-111	MATHEMATICS-II	4	51
EN-112	ENVIRONMENTAL SCIENCE	2	53
AP-113	APPLIED PHYSICS-II	4	51
AP-AC 114	ENGINEERING MATERIALS	4	40
ME-115	BASIC MECHANICAL ENGINEERING	4	40
CO-116	PROGRAMMING FUNDAMENTALS	2	48
AP-117	APPLIED PHYSICS LAB-II	2	82
CO-118	PROGRAMMING LAB	2	66
ME-119	ENGINEERING GRAPHICS	3	54
PIE-120	MECHANICAL WORKSHOP	3	68
Semester : IV SPI 49.03			
MC-211	REAL ANALYSIS	4	40
MC-212	LINEAR ALGEBRA	4	40
MC-213	DIGITAL LOGIC DESIGN	4	40
MC-214	OBJECT ORIENTED PROGRAMMING	4	45
MC-215	SCIENTIFIC COMPUTING	4	40
MC-216	COMPUTER ORGANISATION & ARCHITECTURE	3	41
MC-217	SCIENTIFIC COMPUTING LAB	2	72
MC-218	DIGITAL LOGIC DESIGN LAB	2	78
MC-219	OBJECT ORIENTED PROGRAMMING LAB	2	76
MC-220	SELF STUDY / SEMINAR	1	76
Semester : VI SPI 46.13			
MC-311	ALGORITHM DESIGN & ANALYSIS	4	46
MC-312	STOCHASTIC PROCESSES	4	40
MC-313	MATRIX COMPUTATION	4	40
MC-314	THEORY OF COMPUTATION	0	27
MC-315	OPERATING SYSTEM	4	40
MC-316	OPERARING SYSTEM LAB	2	63
MC-317	STOCHASTIC PROCESSES & MATRIX COMPUTATION LAB	2	83
MC-318	MINOR PROJECT-II	4	140
MC-319	INDUSTRIAL TRAINING - I	2	74
Semester : VIII SPI 58.87			
MC-411	MATHEMATICAL MODELING & SIMULATION	4	41
MC-4121	OPTIMIZATION TECHNIQUES	4	40
HU-4131	ECONOMETRICS	4	61
MC-414	MATHEMATICAL MODELING & SIMULATION LAB	3	78
MC-4151	OPTIMIZATION TECHNIQUES LAB	3	50
MC-416	MAJOR PROJECT-II	10	260
MC-417	SEMINAR /REPORT	2	82

CREDITS EARNED/TOTAL CREDITS : 228/240 **DIVISION : SECOND CLASS** **CPI : 53.65**

CPI has been calculated on the basis of best 228 earned credits. The marks (*) have not been taken into account for calculating CPI. "C" indicates subject credit earned. "M" indicates marks secured.

RESULT : PASSED

(Prof. Vipin)

CONTROLLER OF EXAMINATIONS

Dated : Nov 23, 2016

Date of Declaration of Result 16/11/2016

Classification of Results for B.Tech. programs :

(i) The Semester Performance Index (SPI) shall be calculated on the basis of the credits and percentage of marks secured in the subjects of the semester passed by the student as follows:

$$SPI = \frac{\Sigma\ (Subject\ Credits\ X\ \%\ Marks\ Secured)}{(\Sigma\ Credits\ for\ the\ semester)}$$

(ii) Cumulative Performance Index (CPI) for the degree course :- A student having secured the minimum credits as needed for the degree course will be eligible for the award of degree. The final result will be evaluated as follows :

$$CPI = \frac{\Sigma\ (Subject\ Credits\ X\ \%\ Marks\ Secured)}{(\Sigma\ Credits\ for\ the\ course)}$$

(iii) The final result will be classified on the basis of CPI as follows:
- (a) CPI of seventy five percent or more ; First Class with distinction
- (b) CPI of sixty percent or more but less than seventy five percent ; First Class
- (c) CPI of fifty percent or more but less than sixty percent ; Second Class
- (d) CPI of forty percent or more but less than fifty percent ; Pass Class

(iv) A student has to secure 40% marks or more to pass a subject and to earn the credits assigned to the subject.

The B.Tech Degree shall be awarded to a student if he/she has earned a minimum of two hundred twenty eight (228) credits as specified in each degree program subject to break up into compulsory and other credits as mentioned therein.

Classification of Results for M.Tech. and MBA programs :

(i) The Semester Grade Point Average (SGPA) shall be calculated on the basis of the credits and grades awarded for the subjects passed by the student in the semester as given below:

$$SGPA = \frac{\Sigma_i\ (C_i X GP)}{\Sigma_i\ C_i}$$

where C_i - credit for the course, GP - the grade point obtained for the course and $\Sigma_i\ C_i$ - the sum of credits of all the courses taken in that semester.

(ii) Subject Wise Grading System for M.Tech./MBA programs :
Each student shall be awarded a final letter grade at the end of the semester in each subject based on the total marks obtained in mid - semester examination/sessional and end semester examination.

Grades	Marks Scored	Grade Points
A+	90% and above	10
A	<90% - 80%	9
B+	<80% - 70%	8
B	<70% - 60%	7
C+	<60% - 50%	6
C	<50% - 40%	5
F(Fail)	<40%	2

(iii) Cumulative Grade Point Average (CGPA) for the program :- **A candidate who has earned ≥ 40% marks in aggregate and has passed all the courses in all the semesters will be declared to have passed the program and shall be eligible for the award of the degree of Master of Technology/ Master of Business Administration.** Further, the successful candidate shall be awarded Grades for the award of the Degree of Master of Technology/ Master of Business Administration with the cumulative grade point average as given below :

$$CGPA = \frac{\Sigma_i\ (C_i X GP)}{\Sigma_i\ C_i}$$

where C_i - credit for the course, GP - the grade point obtained for the course and $\Sigma_i\ C_i$ - the sum of credits of all the courses taken in the program.

Prepared By :	Checked By : Manish