

TEACHING MATHEMATICAL MODELING AS TEACHING PEDAGOGY  
69<sup>th</sup> - 10<sup>th</sup> February, 2018

Sponsored by  
UNITED BOARD

Organized by  
DEPARTMENT OF MATHEMATICS  
ST. ALOYSIUS' COLLEGE (AUTONOMOUS), JABALPUR

Accredited "A" Grade by MAAC (CGPA - 1.68/4.00)  
Potential for UGC & DST/NET Support



**ST. ALOYSIUS COLLEGE**  
**(AUTONOMOUS)**  
**JABALPUR**



National Training Programme On

"THE ART OF MATHEMATICAL MODELING AS"  
09<sup>th</sup> - 10<sup>th</sup> February, 20



Sponsored by  
**UNITED BOARD**  
FOR CHRISTIAN HIGHER EDUCATION IN A

Organized by

**DEPARTMENT OF MATHEMATICS**  
**ST. ALOYSIUS COLLEGE CA...**

+ Grade by NA  
Exce





ST. ALVINA COLLEGE  
JALAPUR

NAME	ROLL NO.	MARKS	PERCENTAGE
ABHIRAM	101	85	85
ADARSH	102	78	78
ADITHYAN	103	92	92
ADITHYAN	104	88	88
ADITHYAN	105	75	75
ADITHYAN	106	80	80
ADITHYAN	107	82	82
ADITHYAN	108	79	79
ADITHYAN	109	81	81
ADITHYAN	110	77	77
ADITHYAN	111	83	83
ADITHYAN	112	76	76
ADITHYAN	113	84	84
ADITHYAN	114	74	74
ADITHYAN	115	86	86
ADITHYAN	116	73	73
ADITHYAN	117	87	87
ADITHYAN	118	72	72
ADITHYAN	119	89	89
ADITHYAN	120	71	71
ADITHYAN	121	90	90
ADITHYAN	122	70	70
ADITHYAN	123	91	91
ADITHYAN	124	69	69
ADITHYAN	125	93	93
ADITHYAN	126	68	68
ADITHYAN	127	94	94
ADITHYAN	128	67	67
ADITHYAN	129	95	95
ADITHYAN	130	66	66
ADITHYAN	131	96	96
ADITHYAN	132	65	65
ADITHYAN	133	97	97
ADITHYAN	134	64	64
ADITHYAN	135	98	98
ADITHYAN	136	63	63
ADITHYAN	137	99	99
ADITHYAN	138	62	62
ADITHYAN	139	100	100
ADITHYAN	140	61	61
ADITHYAN	141	101	101
ADITHYAN	142	60	60
ADITHYAN	143	102	102
ADITHYAN	144	59	59
ADITHYAN	145	103	103
ADITHYAN	146	58	58
ADITHYAN	147	104	104
ADITHYAN	148	57	57
ADITHYAN	149	105	105
ADITHYAN	150	56	56
ADITHYAN	151	106	106
ADITHYAN	152	55	55
ADITHYAN	153	107	107
ADITHYAN	154	54	54
ADITHYAN	155	108	108
ADITHYAN	156	53	53
ADITHYAN	157	109	109
ADITHYAN	158	52	52
ADITHYAN	159	110	110
ADITHYAN	160	51	51
ADITHYAN	161	111	111
ADITHYAN	162	50	50
ADITHYAN	163	112	112
ADITHYAN	164	49	49
ADITHYAN	165	113	113
ADITHYAN	166	48	48
ADITHYAN	167	114	114
ADITHYAN	168	47	47
ADITHYAN	169	115	115
ADITHYAN	170	46	46
ADITHYAN	171	116	116
ADITHYAN	172	45	45
ADITHYAN	173	117	117
ADITHYAN	174	44	44
ADITHYAN	175	118	118
ADITHYAN	176	43	43
ADITHYAN	177	119	119
ADITHYAN	178	42	42
ADITHYAN	179	120	120
ADITHYAN	180	41	41
ADITHYAN	181	121	121
ADITHYAN	182	40	40
ADITHYAN	183	122	122
ADITHYAN	184	39	39
ADITHYAN	185	123	123
ADITHYAN	186	38	38
ADITHYAN	187	124	124
ADITHYAN	188	37	37
ADITHYAN	189	125	125
ADITHYAN	190	36	36
ADITHYAN	191	126	126
ADITHYAN	192	35	35
ADITHYAN	193	127	127
ADITHYAN	194	34	34
ADITHYAN	195	128	128
ADITHYAN	196	33	33
ADITHYAN	197	129	129
ADITHYAN	198	32	32
ADITHYAN	199	130	130
ADITHYAN	200	31	31
ADITHYAN	201	131	131
ADITHYAN	202	30	30
ADITHYAN	203	132	132
ADITHYAN	204	29	29
ADITHYAN	205	133	133
ADITHYAN	206	28	28
ADITHYAN	207	134	134
ADITHYAN	208	27	27
ADITHYAN	209	135	135
ADITHYAN	210	26	26
ADITHYAN	211	136	136
ADITHYAN	212	25	25
ADITHYAN	213	137	137
ADITHYAN	214	24	24
ADITHYAN	215	138	138
ADITHYAN	216	23	23
ADITHYAN	217	139	139
ADITHYAN	218	22	22
ADITHYAN	219	140	140
ADITHYAN	220	21	21
ADITHYAN	221	141	141
ADITHYAN	222	20	20
ADITHYAN	223	142	142
ADITHYAN	224	19	19
ADITHYAN	225	143	143
ADITHYAN	226	18	18
ADITHYAN	227	144	144
ADITHYAN	228	17	17
ADITHYAN	229	145	145
ADITHYAN	230	16	16
ADITHYAN	231	146	146
ADITHYAN	232	15	15
ADITHYAN	233	147	147
ADITHYAN	234	14	14
ADITHYAN	235	148	148
ADITHYAN	236	13	13
ADITHYAN	237	149	149
ADITHYAN	238	12	12
ADITHYAN	239	150	150
ADITHYAN	240	11	11
ADITHYAN	241	151	151
ADITHYAN	242	10	10
ADITHYAN	243	152	152
ADITHYAN	244	9	9
ADITHYAN	245	153	153
ADITHYAN	246	8	8
ADITHYAN	247	154	154
ADITHYAN	248	7	7
ADITHYAN	249	155	155
ADITHYAN	250	6	6
ADITHYAN	251	156	156
ADITHYAN	252	5	5
ADITHYAN	253	157	157
ADITHYAN	254	4	4
ADITHYAN	255	158	158
ADITHYAN	256	3	3
ADITHYAN	257	159	159
ADITHYAN	258	2	2
ADITHYAN	259	160	160
ADITHYAN	260	1	1
ADITHYAN	261	0	0





## Fuzzy Sets

Zadeh (1965) proposed completely new, elegant approach to vagueness called *fuzzy set theory* [1]. In his approach an element can belong to a set with a degree  $\mu$  ( $0 \leq \mu \leq 1$ ), in contrast to classical set theory where an element must definitely belong or not to a set.

**Definition 1:** Let  $X = \{x_1, x_2, \dots, x_n\}$  be a discrete universe of discourse. A *fuzzy set*  $A$  in  $X$  is characterized by a membership function  $\mu_A : X \rightarrow [0,1]$ . The value  $\mu_A(x)$  for  $x \in X$  stands for the degree of membership of  $x \in X$  in  $A$ .

We can observe that the definition of fuzzy set involves more advanced mathematical concepts, real numbers and functions, whereas in classical set theory the notion of set is used as a fundamental notion of whole mathematics and is used to derive other mathematical concepts, e.g., numbers and functions. Consequently fuzzy set theory cannot replace classical set theory, because, in fact, the theory is needed to define fuzzy sets.















**MATHEMATICAL MODELING**  
09<sup>th</sup> - 10<sup>th</sup> February  
Sponsored by  
**UNITED BOARD**  
FOR CHRISTIAN HIGHER EDUCATION  
Organized by  
**DEPARTMENT OF MATHEMATICS**  
**ST. ALOYSIUS' COLLEGE (AUTONOMOUS)**  
Reaccredited 'A+' Grade by NAAC (CG)  
College with Potential for Excellence by UGC

**ALYSIUS**







National  
Program

“THE ART OF MATHEMATICAL MO  
09<sup>th</sup> - 10<sup>th</sup> Feb

Spons  
UNITE  
FOR CHRISTIAN H

Organ  
DEPARTMENT OF  
ALOYSIUS' COLLEGE CA  
Reaccreditation A+ Grade  
College Excellence









ST. ALOYSIUS COLLEGE  
JABALPUR

SCIENCE	CLASS - VIII		CLASS - IX		CLASS - X	
	1ST SEMESTER	2ND SEMESTER	1ST SEMESTER	2ND SEMESTER	1ST SEMESTER	2ND SEMESTER
SCIENCE	100	100	100	100	100	100
MATHS	100	100	100	100	100	100
ENGLISH	100	100	100	100	100	100
HISTORY	100	100	100	100	100	100
GEOGRAPHY	100	100	100	100	100	100
PHYSICS	100	100	100	100	100	100
CHEMISTRY	100	100	100	100	100	100
BIOLOGY	100	100	100	100	100	100
INFORMATION TECHNOLOGY	100	100	100	100	100	100
ARTS	100	100	100	100	100	100
SPORTS	100	100	100	100	100	100
COMPUTER	100	100	100	100	100	100
PSYCHOLOGY	100	100	100	100	100	100
P.T.	100	100	100	100	100	100
TOTAL	1000	1000	1000	1000	1000	1000

National Training Programme On  
"THE ART OF MATHEMATICAL MODEL AS TEACHING PEDAGOGY"  
08<sup>th</sup> - 18<sup>th</sup> February, 2015



00034feedback&  
Principal & others.m