ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MOODBIDRI - 574 225

Affiliated to VTU, Belgaum and Approved by A.I.C.T.E., New Delhi

COURSE BOOK

(ACD - 08, ACD - 09, ACD - 10, ACD - 12, ACD - 13)

Period of the Semester (Odd / Even) : From 05-02-2018 to 26-05-2018

Semester : 6th Semester 'A' Section

Subject with Code : Construction Management and Entrepreneurship

TIME SLOT

Mon :	9:00 - 9:55 AM	Tue :	11:10 - 12:05 PM
Wed :	9:00 - 9:55 AM	Thu :	9:00 - 9:55 AM
Fri. :		Sat :	

Name of the Teacher : RAMESH RAO B

Department : CIVIL ENGINEERING

Alva's Institute of Engineering & Technology
Shobhavana Campus, Mijar, Moodbidri, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

VISION AND MISSION OF INSTITUTE

VISION STATEMENT

"Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

MISSION STATEMENT

- To bestow quality technical education to imbibe knowledge, creativity and ethos to students community.
- To inculcate the best engineering practices through transformative education.
- To develop a knowledgeable individual for a dynamic industrial scenario
- To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society.

Dr. Peter Fernandes
PRINCIPAL
Alva's Institute of Engg. & Technology,
Mijar, MOODBIDRI - 574 225, D.K.

Alva's Institute of Engineering & Technology
Shobhavana Campus, Mijar, Moodbidri, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

DEPARTMENT OF CIVIL ENGINEERING

(DRAFT VERSION)

VISION OF THE DEPARTMENT

To become a leader in the field of Civil Engineering by imparting quality education in developing highly competent manpower and promote research to meet the current and future challenges in Civil Engineering.

MISSION OF THE DEPARTMENT

- To impart knowledge by creating conducive teaching-learning environment.
- To produce civil engineers of high caliber, technical skills and ethical values, to serve the society.
- To promote innovation in the minds of future engineers to face the challenges.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- To provide the students a strong foundation in fundamentals that will enable them to identify and solve real time problems in Civil engineering for Industries and Research activities.
- To develop abilities and talents, leading to creativity and productivity in professional and industrial field beyond the curriculum and thus enhance the employability skill.
- To explore and apply the modern engineering tools for planning, design, execution and maintenance of works those are technically and economically viable, and socially acceptable.

PROGRAM SPECIFIC OUTCOMES

- The graduates will be able to plan, analyze, design and execute cost effective Civil engineering structures without over exploitation of natural resources.
- The graduates will have the ability to take up employment, entrepreneurship, research and development for sustainable civil Society.
- The graduates will be able to pursue opportunities for personal and professional growth, higher studies and engage in lifelong learning in civil engineering profession.

HOD
H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

(A Unit of Alva's Education Foundation)

Shobhavana Campus, Mijar-574225, Moodbidri, D.K

Phone: 08258-262725, Fax: 08258-262726

Affiliated to VTU Belagavi and Approved by AICTE, New Delhi, Recognized by Govt. of Karnataka

CALENDAR OF EVENTS (EVEN SEMESTER 2017-18) BE & MBA

VISION

"Transformative education by pursuing excellence in Engineering and Management through enhancing skills to meet the evolving needs of the community"

MISSION

- To bestow quality technical education to imbibe knowledge, creativity and ethos to students community
- To inculcate the best engineering practices through transformative education
- To develop a knowledgeable individual for a dynamic industrial scenario
- To inculcate research, entrepreneurial skills and human values in order to cater the needs of the society

Week	Month	Days							Activities
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	
1	FEB				1	2	3	4	
2		5	6	7	8	9	10	11	1st : Commencement of Even semester BE 8th – 9th : Project Evaluation – Phase-II
3		12	13	14	15	16	17	18	10th : Commencement of II semester MBA 13th : Maha Shivaratri
4		19	20	21	22	23	24	25	26-28 Technical Talk
5		26	27	28					
6	MAR				1	2	3	4	
7		5	6	7	8	9	10	11	05th, 06th, 07st : I-IA Test for I year BE 25th : Ugadi Festival
8		12	13	14	15	16	17	18	08rd -09th : Project Evaluation – Phase-III 14-17 Technical Talk
9		19	20	21	22	23	24	25	26th, 27th, 28th : I-IA Test for II, III, & IV year BE and II Sem MBA
10		26	27	28	29	30	31		29th : Mahaveer Jayanthi 30th : Good friday 31st : Submission of Review Paper
11	APR							1	5th -6th : Final Project Evaluation
12		2	3	4	5	6	7	8	10th : Last date for Draft copy of project report 11th, 12th, 13th : II-IA Test for I-year BE
13		9	10	11	12	13	14	15	14th : Dr. B.R Ambedkar Jayanthi 16-19: Technical Talk
14		16	17	18	19	20	21	22	20th : Final Year BE Project Exhibition
15		23	24	25	26	27	28	29	26th, 27th, 28th : II-IA Test for II, III, & IV year BE and II Sem MBA
16		30							30th : Final Project Report Submission
17	MAY		1	2	3	4	5	6	1st : May day/ Labour day
18		7	8	9	10	11	12	13	3rd , 4th, 5th : I-IA Test for IV Sem MBA 09-12 Technical Talk
19		14	15	16	17	18	19	20	17th, 18th, 19th : I-IA Test for I, II, III, & IV year BE and II Sem MBA
20		21	22	23	24	25	26	27	23rd : Last Working Day of Even Sem BE 31st : Last Working Day of II Semester MBA
21		28	29	30	31				*-Industrial Visit / Social Activity to be done before
22	JUNE					1	2	3	*- Workshop/Certification course/Conference to be done before June 2nd
23		4	5	6	7	8	9	10	4th , 5th, 6th : II-IA Test for IV Semester MBA
24		11	12	13	14	15	16	17	16th : May day/ Labour day
25		18	19	20	21	22	23	24	*-FDP to be conducted /attended from June to June
26		25	26	27	28	29	30		
27	JULY							1	5th, 6th, 7th : III-IA Test for IV Semester MBA 13th
28		2	3	4	5	6	7	8	13th : Last Working Day of IV Semester MBA
29		9	10	11	12	13			

Approved by IQAC Chairman

DEPARTMENT OF CIVIL ENGINEERING

ACADEMIC CALENDER (2017-18)-EVEN

SL. NO	Department Activities	Dates
1.	Survey Camp	06 to 17 Jan 2018
2.	Certification Course	22 to 27 Jan 2018
3.	Certification Course	16 to 20 Jan 2018
4.	Commencement of even sem	01 Feb 2018
5.	Sports Day	17 Feb 2018
6.	Work Shop	27 Feb 2018
7.	Work Shop	29 Jan to 02 Feb 2018
8.	First-IA	26 to 28 Mar 2018
9.	Industrial Visit	17 and 18 April 2018
10.	Industrial visit	10 and 11 April 2018
11.	Second- IA	26 to 27 April 2018
12.	Third - IA	17 to 19 May 2018
13.	Last Working Day	23 May 2018

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MIJAR, MOODBIDRI - 574 225

ATTENDANCE CUM INTERNAL

Class : 6th Semester 'A' Section

Subject : Construction Management & Entrepreneurship

No. of Classes held :

Sl. No.	U.S.N.	Name	Date / Month	06/01	06/01	07/01	08/01	12/01	12/01	14/01	15/01	19/01	21/01	22/01	28/01	01/02	05/02	08/02
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	4AL14CV013	Annappa P Soni		1	2	3	4	5	6	A	A	7	8	9	10	11	12	13
2	035	Harshith H J		1	2	3	4	5	6	7	A	8	9	10	11	12	13	14
3	045	M.D. Keerthi		A	1	2	3	4	5	A	6	A	7	8	9	10	11	12
4	046	Mallikarjuna		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
5	050	Mohammed Shereef		1	2	3	4	5	A	6	7	8	9	10	11	12	13	14
6	072	Rakesh H		1	2	3	4	A	A	5	6	7	8	9	A	10	11	12
7	086	Shetty Siddesh Jayarama		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
8	111	Varsha B M		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
9	112	Raghavendra G R		1	2	3	4	5	6	A	7	8	9	10	11	12	13	14
10	113	Seema Siddappa Shirahatti		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
11	4AL15CV001	A.N. Yashwanth		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
12	003	Abhilash N M		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
13	004	Adarsha A		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
14	005	Aishwarya B		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
15	007	Akhila E		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	008	Akshatha M Chovan		1	2	3	4	A	5	6	7	8	9	10	11	12	13	14
17	012	Anand P R		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
18	013	Ananya M H		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
19	015	Anusha Sunagad		1	2	3	4	5	6	7	8	9	10	11	12	13	14	A
20	016	Anusree K Pradeep		1	2	3	4	A	5	6	7	8	9	10	11	12	13	14
21	018	Arunkumar A Bodmal		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
22	019	Ashraya Shetty		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
23	020	Ashwathanarayana M K		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
24	021	Athira Surendran		A	1	2	3	4	5	6	7	8	9	10	11	A	12	13
25	023	Basavaraj Kankanadi		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
26	025	Bhargavi B		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
27	026	Bhupathi L		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
28	027	Chaitanya B S		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
29	028	Channabasappa S. Makanur		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
30	030	Damodhar Shenoy P		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Staff Initials																		

11/03	13/03	14/03	15/03	19/03	20/03	21/03	22/03	26/03	T-1A 27/03	02/04	04/04	05/04	09/04	10/04
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
14	15	A	16	17	18	19	20	21	22	23	24	25	26	27
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
16	17	A	18	19	20	21	22	23	24	25	26	A	27	28
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
13	14	A	15	16	17	18	19	20	21	22	23	24	A	25
16	17	18	19	20	21	22	23	24	25	A	A	26	27	28
16	17	18	19	20	21	22	A	23	24	25	26	27	A	28
15	16	17	18	19	A	20	21	22	23	24	25	26	27	28
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
16	17	18	19	20	21	22	23	24	A	25	26	27	28	29
16	17	18	19	20	21	22	23	24	25	26	27	28	29	NCC 30
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
16	17	18	19	20	21	22	23	24	25	A	A	26	27	28
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
16	A	A	17	18	19	20	21	22	23	24	25	26	A	A
15	16	17	18	19	20	21	22	23	A	24	25	26	27	28
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
16	17	18	19	20	21	22	23	24	25	26	27	28	A	A
16	17	18	19	20	21	22	23	24	25	26	27	28	29	A
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
16	17	18	19	20	21	22	23	24	A	A	A	25	26	27
16	17	18	19	20	21	22	23	24	A	25	26	27	28	29
16	A	17	18	A	19	20	21	22	23	24	25	26	27	28
16	17	18	19	A	A	20	21	22	23	24	A	25	26	27
16	17	A	18	19	20	21	A	22	A	A	23	24	25	26
16	17	18	19	20	21	22	23	24	25	26	A	27	28	29

AL

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

MIJAR, MOODBIDRI - 574 225

Class : 6th Semester 'A' Section

Subject : Construction Management & Entrep.

No. of Classes held :

Subject : Construction Management and Entrepreneurship

Sl. No.	U.S.N.	Name	1	2	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
		Date / Month	06/03	06/03	12/04	16/04	17/04	21/04	22/04	23/04	24/04	28/04	25/04	26/04 II IA Test	30/04	30/04	07/05	08/05	[illegible]	[illegible]	14/05	15/05	16/05	17/05	18/05 III IA Test	22/05	23/05	24/05						
1	4AL14CV013	Annappa P Sani	1	2	28	A	29	30	31	32	33	34	35	36	37	38	39	40	[illegible]	A	42	A	43	44	A	45	46	47						
2	035	Harshith H J	1	2	30	A	31	A	A	A	A	A	32	33	34	35	36	37	[illegible]	39	A	A	40	41	A	42	43	44						
3	045	M.D. Keerthi	A	1	28	29	30	A	31	32	33	34	35	36	37	38	39	40	[illegible]	42	43	44	45	46	47	48	49	50						
4	046	Mallikarjuna	1	2	29	30	31	32	33	34	35	36	37	38	39	40	41	42	[illegible]	44	A	45	46	47	48	49	50	51						
5	050	Mohammed Sherief	1	2	30	A	31	32	33	34	35	36	37	38	39	40	41	42	[illegible]	43	44	45	46	47	A	48	49	50						
6	072	Rakesh H	1	2	26	27	28	29	30	A	31	32	33	34	35	36	37	38	[illegible]	40	A	41	42	43	A	44	45	46						
7	086	Shetty Siddesh Jayarama	1	2	29	30	31	32	33	34	35	36	37	38	39	40	41	42	[illegible]	44	45	46	47	48	49	50	51	52						
8	111	Varsha B M	1	2	29	30	31	32	33	34	35	36	37	38	A	A	39	40	[illegible]	A	ML+3 A	A	45	46	A	47	48	49						
9	112	Raghavendra G R	1	2	29	A	30	31	32	33	A	A	34	35	36	37	38	39	[illegible]	41	42	43	44	45	A	46	47	48						
10	113	Seema Siddappa Shirahatti	1	2	31	A	32	33	34	35	36	37	38	39	40	41	42	43	[illegible]	45	46	47	48	49	A	50	51	52						
11	4AL15CV001	A.N. Yashwanth	1	2	30	31	32	33	34	35	36	37	38	39	40	41	42	43	[illegible]	45	46	47	48	49	A	50	51	52						
12	003	Abhilash N M	1	2	31	32	33	34	35	36	37	38	39	40	41	42	43	44	[illegible]	46	47	A	48	49	A	50	51	52						
13	004	Adarsha A	1	2	31	32	33	34	35	36	37	38	39	40	41	42	43	A	[illegible]	A	44	45	46	47	A	48	49	50						
14	005	Aishwarya B	1	2	29	30	31	32	33	34	35	36	37	38	39	40	41	42	[illegible]	43	A	A	A	44	A	45	46	47						
15	007	Akhila E	1	2	31	A	32	33	34	35	36	37	38	39	A	A	40	41	[illegible]	43	44	45	A	46	A	47	48	49						
16	008	Akshatha M Chavan	1	2	TP 30	31	32	33	34	35	36	37	38	39	40	41	42	43	[illegible]	45	46	47	48	49	50	51	52	53						
17	012	Anand P R	1	2	31	32	33	34	35	36	37	38	39	40	41	42	43	44	[illegible]	46	47	48	49	50	A	51	52	53						
18	013	Ananya M H	1	2	27	28	29	30	31	32	33	34	35	36	37	38	A	ML+6 A	[illegible]	A	A	A	45	46	A	47	48	49						
19	015	Anusha Sunagad	1	2	29	30	31	32	33	34	35	36	37	38	39	40	41	42	[illegible]	44	45	46	47	48	A	49	50	51						
20	016	Anusree K Pradeep	1	2	30	A	31	32	33	34	35	36	37	38	A	A	39	40	[illegible]	42	43	44	A	45	A	46	47	48						
21	018	Arunkumar A Bodmal	1	2	31	32	33	34	35	36	37	38	39	40	41	42	43	44	[illegible]	46	A	A	A	47	48	49	50	51						
22	019	Ashraya Shetty	1	2	A	29	30	31	32	33	34	35	36	37	38	39	40	41	[illegible]	43	44	45	46	47	48	49	50	51						
23	020	Ashwathanarayana M K	1	2	A	30	31	32	33	34	35	36	37	38	39	40	A	ML+6 A	[illegible]	A	A	A	47	48	A	49	50	51						
24	021	Athira Surendran	A	1	29	A	30	31	32	33	34	35	36	37	A	A	38	39	[illegible]	A	41	A	42	43	A	44	45	46						
25	023	Basavaraj Kankanadi	1	2	28	29	30	31	32	33	34	35	36	37	38	39	A	ML+5 A	[illegible]	A	A	45	46	47	A	48	49	50						
26	025	Bhargavi B	1	2	TP 30	31	32	33	34	35	36	37	38	39	40	41	42	43	[illegible]	45	A	46	47	48	A	49	50	51						
27	026	Bhupathi L	1	2	29	30	31	32	33	34	35	36	37	38	+3 A	ML A	A	42	43	[illegible]	A	45	46	47	48	49	50	51						
28	027	Chaitanya B S	1	2	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	[illegible]	A	A	44	45	A	46	47	48						
29	028	Channabasappa S. Makanur	1	2	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	[illegible]	A	A	43	44	A	45	46	47						
30	030	Damodhar Shenoy P	1	2	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	[illegible]	46	47	48	49	A	50	51	52						
Staff Initials			[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]						

udents
ttendence
nducted

48	60

Others	Planned	Actual	Remarks :
Special Classes	01	04	
Tutorials	—	—	
Assignments	03 + 02	03	
Seminars	01	01	
IA Tests	03	03	
Portions Covered in the entire Semester	100 -/.		

Course Effectiveness

Students Feedback			
Students Responce			
Result	No. of Students AP	No. of Students Passed	% of Result

Ramesh

Faculty in Charge

7/6/18

HOD's Signature

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

Signature of Principal (& Remarks if any)

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

DEPARTMENT OF CIVIL ENGINEERING

INDIVIDUAL TIMETABLE (EVEN SEMESTER 2017-18)

Name of the Faculty		Mr. Ramesh Rao B. (RRB)					With Effect From: 05/02/2018			
Period	1	2	TEA BREAK	3	4	LUNCH BREAK	5	6	7	No. of Units
Time / Day	09.00 –09.55	09.55 – 10.50		11.10 – 12.05	12.05 – 01.00		02.00 – 03.00	03.00 – 04.00	04.00 - 05.00	
Monday	CME (6A)									2
Tuesday				CME (6A)			EXSY LAB: A1 & B1 BATCH (6 A&B)			5
Wednesday	CME (6A)			GD (8A)			SEMINAR (8B)			4.5
Thursday	CME (6A)			GD (8B)			SEMINAR (8A)			4
Friday									SEMINAR (6A)	.5
Saturday		FM & HM LAB: A1 BATCH (4A)								3
Other Activities: STUDENT SEMINAR/DEBATE/GROUP DISCUSSION, EXTENSIVE SURVEYING CAMP COORDINATION, SURVEYING PRACTICE LABORATORY IN-CHARGE, ALUMNI ASSOCIATION COORDINATION										
									Total Units*	19

* EXCLUDING OTHER ACTIVITIES

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

HOD

PRINCIPAL

Date: 05/02/2018

RRB

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

Shobhavana Campus, Mijar, Moodbidri, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

DEPARTMENT OF CIVIL ENGINEERING

Time Table with effect from 29/01/2018

Academic Year	Scheme	Semester	Section	Room No	Class Coordinator
2017-18	2015	VI	A	505	Mrs. Rashmi H

Time / Day	9.00 To 9.55	9.55 To 10.50	10.50 To 11.10	11.10 To 12.05	12.05 To 1.00	1.00 To 2.00	2.00 To 3.00	3.00 To 4.00	4.00 To 5.00
MON	CME (RRB)	WSTE (SWT)	BREAK	SWM/ABM (SYS/ADT)	HE (SKS)	LUNCH	DSSE (RMH)	WRM (VDS)	Tutorial Class
TUE	WSTE (SWT)	DSSE (RMH)		CME (RRB)	WRM (VDS)		EXSY LAB: A1 BATCH (HMS/RRB) EXSY LAB: A2 BATCH (SKS/SK)		
WED	CME (RRB)	Aptitude(L) (SHK/AKP)		HE (SKS)	SWM/ABM (SYS/ADT)		WRM (VDS)	MINI PROJECT	
THU	CME (RRB)	WSTE (SWT)		DSSE (RMH)	SWM/ABM (SYS/ADT)		SA LAB: A1 BATCH (VDS/ABS) SA LAB: A2 BATCH (ANK/AGS)		
FRI	DSSE (RMH)	SWM/ABM (SYS/ADT)		WRM (VDS)	GATE		HE (SKS)	MINI PROJECT	Seminar
SAT	DSSE (RMH)	Aptitude(T) (AHL)		WSTE (SWT)	HE (SKS)				

Allocation of Subjects

Subjects			Staffs	Staff Code
CME	15CV61	Construction Management and Entrepreneurship	Mr.Ramesh Rao B.	RRB
DSSE	15CV62	Design Of Steel Structural Elements	Mrs.Rashmi H.	RMH
[illegible]	15CV63	Highway Engineering	Mr.Shankargiri K.S	SKS
WSTE	15CV64	Water Supply and Treatment Engineering	Mr.Swathi	SWT
SWM/ ABM	15CV651 15CV653	Solid Waste Management Alternative Building Materials	Mr.Sanjay S Mr.Adithya Tantry	SYS ADT
WRM	15CV661	Water Resources Management	Mrs.Veena D Savanth	VDS
SA LAB	15CVL67	Software Application Lab	Mrs.Veena D Savanth/ Mr.Adithya B Sheony Mrs.Ashwini Nayak/ Mr.Arun Kumar G.S	VDS/ABS ANK/AGS
EXSY LAB	15CVL68	Extensive Survey Project /Camp	Mr.H.M.Swamy/ Mr.Ramesh Rao B Mr. Shankargiri K.S/ Mr.Santhosh K	HMS/RRB SKS/SK
APTITUDE		Ms.Aishwarya Lakshmi/ Ms.Akshatha S.P/ Ms.Shwetha K	APTITUDE(T)- Theory APTITUDE(L)- Lab	AHL/AKP/ SHK
GATE		RRB, SHK, HMS, HT, AGS, SK, ADT, ABS		
SEMINAR		ALL FREE FACULTIES		

H.O.D.
Dept. of Civil Engineering

Course Title: Construction Management and Entrepreneurship As per Choice Based Credit System (CBCS) scheme] SEMESTER:VI			
Subject Code	15CV61	IA Marks	20
Number of Lecture Hours/Week	04	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
CREDITS –04		**Total Marks - 100**	

Course objectives: This course will enable students to

1. Understand the concept of planning, scheduling, cost and quality control, safety during construction, organization and use of project information necessary for construction project.
2. Inculcate Human values to grow as responsible human beings with proper personality.
3. Keep up ethical conduct and discharge professional duties.

Modules	Teaching Hours	Revised Bloom's Taxonomy (RBT) Level
Module -1		
Management: Characteristics of management, functions of management, importance and purpose of planning process, types of plans **Construction Project Formulation:** Introduction to construction management, project organization, management functions, management styles **Construction Planning and Scheduling:** Introduction, types of project plans, work breakdown structure, Grant Chart, preparation of network diagram- event and activity based and its critical path-critical path method, concept of activity on arrow and activity on node , introduction to software, project scheduling tools	10 hours	L1,L2,L3
Module -2		
Resource Management Manpower: Basic concepts of resource management, class of labour, wages and statutory requirement, labour production rate or productivity, factors affecting labour output or productivity. **Construction Equipments:** Classification of construction equipment, estimation of productivity for excavator, dozer, compactors, graders, pavers, dumpers, transit mixer and plants, selection of construction equipment and basic concept on matching equipments, methods of calculating depreciation, replacement model, concept of maintenance of plant and machinery **Materials:** Material management functions, inventory management	10 Hours	L1,L2,L3
Module -3		
Construction Quality, Safety and Human Values: Construction quality process, inspection, quality control and quality assurance, cost of quality, ISO standards. Introduction to concept of Total quality management **HSE:** Introduction to concepts of health, safety and environment as applicable to construction, importance of safety in construction, safety measures to be taken during; excavation, drilling and blasting, hot bituminous works, scaffolding, ladder, form work and other equipment, storage of materials. Site tool box, meeting, safety campaign. Basic concept about Risks in Construction management. Morals, values and ethics, integrity, trustworthiness, work ethics, need of engineering ethics, professional duties, professional and individual rights, confidential and proprietary information, conflict of interest confidentiality, gifts and bribes, price fixing, whistle blowing.	10 Hours	L1,L2,L3
Module -4		
Introduction to Engineering Economy: Principles of engineering economics, concept on Micro and macro analysis , problem solving and decision making Interest and time value of money: concept of simple and compound interest, interest formula for: single payment, equal payment and uniform gradient series. Nominal and effective interest rates, deferred annuities, capitalized cost Comparison of alternatives: Present worth, annual equivalent, capitalized and rate of return methods Minimum Cost analysis and break even analysis	10 Hours	L1,L2,L3
Module -5		

Entrepreneurship: Evolution of the concept, functions of an entrepreneur, concepts of entrepreneurship, stages in entrepreneurial process, different sources of finance for entrepreneur, central and state level financial institutions **Micro, Small and Medium Enterprises (MSME):** definition, characteristics, objectives, scope, role of MSME in economic development, advantages of MSME, Introduction to different schemes: TECKSOK, KIADB, KSSIDC, DIC, Single Window Agency: SISI, NSIC, SIDBI, KSFC **Business Planning Process:** Business planning process, marketing plan, financial plan, project report and feasibility study, guidelines for preparation of model project report for starting a new venture. Introduction to international entrepreneurship opportunities, entry in to international business, exporting, direct foreign investment, venture capital	10 Hours	L1,L2,L3

Course outcomes: After studying this course, students will be able to:

1. Understand the construction management process.
2. Understand and solve variety of issues that are encountered by every professional in discharging professional duties.
3. Fulfill the professional obligations effectively with global outlook

Program Objectives:

- Engineering knowledge
- Problem analysis
- Interpretation of data

4. To understand the Engg. economics
5. understand the concepts of Entrepreneurship & construction planning process.

Question paper pattern:

- The question paper will have 5 modules comprising of ten questions. Each full question carrying 16 marks
- There will be two full questions (with a maximum of three subdivisions, if necessary) from each module.
- Each full question shall cover the topics as a module
- The students shall answer five full questions, selecting one full question from each module. If more than one question is answered in modules, best answer will be considered for the award of marks limiting one full question answer in each module.

Text Books:

1. P C Tripathi and P N Reddy, "Principles of Management", Tata McGraw-Hill Education
2. Chitkara, K.K, "Construction Project Management: Planning Scheduling and Control", Tata McGraw-Hill Publishing Company, New Delhi.
3. Poornima M. Charantimath , "Entrepreneurship Development and Small Business Enterprise", Dorling Kinderseley (India) Pvt. Ltd., Licensees of Pearson Education
4. Bureau of Indian standards – IS 7272

Reference Books:

1. Robert L Peurifoy, Clifford J. Schexnayder, Aviad Shapira, Robert Schmitt, "Construction Planning, Equipment, and Methods (Civil Engineering), McGraw-Hill Education
2. Harold Koontz, Heinz Weihrich, "Essentials of Management: An International, Innovation, and Leadership perspective", T.M.H. Edition, New Delhi
3. Frank Harris, Ronald McCaffer with Francis Edum-Fotwe, " Modern Construction Management", Wiley-Blackwell
4. Mike Martin, Roland Schinzinger, "Ethics in Engineering", McGraw-Hill Education
5. Chris Hendrickson and Tung Au, "Project Management for Construction - Fundamentals Concepts for Owners, Engineers, Architects and Builders", Prentice Hall, Pitsburgh
6. James L.Riggs , David D. Bedworth , Sabah U. Randhawa " Engineerng Economics" Tata Mc Graw hill

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

List of Course Outcomes

Sub: Construction Management & Entrepreneurship

Sub Code: 15CV61

Semester/ Section: 6 A

CO Number	CO Details
1	Understand the construction management process
2	Understand and solve variety of issues that are encountered by every professional in discharging professional duties
3	Fulfill the professional obligations effectively with global outlook
4	Understand the Engineering Economics.
5	Understand the concepts of Entrepreneurship and Construction planning process.

HOD

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodabidri - 574 225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

List of Program Outcomes

Sub: Construction Management & Entrepreneurship

Sub Code: 15CV61

Semester/ Section: 6 A

PO Number	Title
PO 1	Engineering knowledge
PO 2	Problem analysis
PO 3	Design/development of solutions
PO 4	Conduct investigations of complex problems
PO 5	Modern tool usage
PO 6	The engineer and society
PO 7	Environment and sustainability
PO 8	Ethics
PO 9	Individual and team work
PO 10	Communication
PO 11	Project management and finance
PO 12	Life-long learning

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

CO-PO Mapping Matrix

Sub: Construction Management & Entrepreneurship

Sub Code: 15CV61

Semester/ Section: 6 A

CO-PO

PO

Status : TODO

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO 1	MODERATE	MODERATE	NO MAPPING	NO MAPPING	MODERATE	SLIGHT	NO MAPPING	NO MAPPING	SLIGHT	MODERATE	HIGH	SLIGHT
CO 2	MODERATE	NO MAPPING	NO MAPPING	NO MAPPING	NO MAPPING	MODERATE	MODERATE	HIGH	MODERATE	MODERATE	MODERATE	SLIGHT
CO 3	MODERATE	MODERATE	MODERATE	MODERATE	NO MAPPING	MODERATE	NO MAPPING	SLIGHT	SLIGHT	SLIGHT	HIGH	SLIGHT
CO 4	MODERATE	NO MAPPING	NO MAPPING	MODERATE	NO MAPPING	MODERATE	SLIGHT	NO MAPPING	MODERATE	MODERATE	HIGH	SLIGHT
CO 5	NO MAPPING	NO MAPPING	NO MAPPING	NO MAPPING	NO MAPPING	NO MAPPING	NO MAPPING	NO MAPPING	NO MAPPING	NO MAPPING	NO MAPPING	NO MAPPING

HOD

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodabidri - 574 225

AIET	Lesson Plan & Execution	Format No.	ACD 08
		Issue No.	01
		Rev. No.	00

Name of the faculty	RAMESH RAO B
Semester and Section	6th Semester - 'A' section
Date of Commencement	05- 02- 2018
Last Working Day of the Semester	26- 05- 2018
Source Materials List	
1. Chitkara K K, Dr. U.K Srivastava	Construction Project Management Construction Planning & Mang
2. P.C. Tripathi & P.N. Reddy	Principles of Management
3. Robert L Peurifoy	Construction Planning & Equipments
4. S.K. Sharma	Construction Equipments & Methods
5. Poornima M.C	Entrepreneurship Development & S.B.E
Subject Name	Construction Management & Entrepreneurship

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
01	05/02/18	Management - Introduction characteristics of management & functions of management L2, L3 1	1,2,	Management - Intro. characteristics & management functions of management	05/02/18	1,2
02	06/02/18	Importance and purpose of planning process L2, 2	1,2	Importance & purpose of planning process	06/02/18	1,2
03	07/02/18	Types of plans and project formulation L1, L2, 1, 2	2,1	Types of plans & construction management	07/02/18	1,2
04	08/02/18	Introduction to Construction management L3, 2	1,2	Project organization and management functions & Management Styles	08/02/18	1,2

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
05	12/02/18	Project organization Management functions	1, 2,	Introduction to construction Planning	12/02/18	1, 2
06	14/02/18	Management Styles & Introduction to constn. Planning	1, 2	Types of project plans & work breakdown structure	12/02/18	1
07	15/02/18	Types of project plans, W.B.S & Ghannt Chart	1, 2	work breakdown structure	14/02/18	1, 2
08	19/02/18	Preperation of network diagram - event & activity based & CPM	1, 2, 3	Ghantt chart Preperation of network diagram	15/02/18	1, 2
09	20/02/18	Activity arrows & activity on node	1, 2	Preperation of network diagram and Bar chart	19/02/2018	1
10	21/02/18	Introduction to software & project Scheduling tools	1, 2	preperation of network diagram Event & activity based	21/02/18	1, 2,
11	22/02/18	Resource Management Manpower- Basic concepts & class of labour	1, 2, 3	Preperation of network diagram Event & activity based	26/02/18	1, 2
12	26/02/18	Wage & Statutory requirements, labour Production & productivity	1, 2, 3, 4	Critical path method	28/02/18	1, 2
13	27/02/18	Factors affecting labour output or Productivity	1, 2, 3, 4	Critical path Method related numerically	01/03/18	1, 2
14	28/02/18	Construction equipments & classification & estimation of productivity	1, 2, 3	Resource Management Manpower- Basic concepts	05/03/18	1, 2
15	01/03/18	Estimation of productivity for excavator dozer, & compactors	1, 2, 3	Class of labour wages & Statutory requirements Labour productivity	06/03/18	1, 2
16	05/03/18	Grader, pavey, dumpy, tmoyit mixer & plants	2, 3	Factors affecting labour output or productivity	07/03/18	1, 2
17	06/03/18	Selection of construction equipments & basic concept on matching eqn	2, 3, 4	Construction equipments & classification.	13/03/18	1, 4

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
18	07/03/18	Method of calculating depreciation, replacement model concept $L_3.3$	2,3,4	Selection of construction equipments	14/03/18	1, 4
19	08/03/18	Maintenance of plant and machinery $L_2,3$	2,3,4	Basic concept of Matching Equipments	15/03/18	1, 4
20	12/03/18	Material management function, & inventory management. $L_3,2$	2,3,4	Maintenance of plant & Machinery	19/3/18	1, 4
21	13/03/18	Construction quality process, Inspection & Quality control L_2,L_3	1,2,3,4	Material management and Inventory Management	20/3/18	1, 4
22	14/03/18	Quality assurance, Cost of quality & ISO Standards $L_2,3$	1,2,4	Construction quality process & Inspection	21/03/18	1, 2
23	15/03/18	Introduction to Total quality management $L_2, L_3,2$	2,3,4	Quality control & Quality assurance	22/03/18	1
24	19/03/18	Introduction to Concepts of health & Safety $L_2,L_3,4$	2,3,4	costs of quality & ISO Standards Introduction to Total Quality Mangt.	02/04/18	1, 3
25	20/03/18	Environment as applicable to construction, importance of safety $L_3.3$	1,2,4	Introduction to concepts of health & Safety	03/04/18	1, 2
26	21/03/18	Safety measures to be taken during excavation $L_3.2$	1,2,3,4	Env. as applicable to Construction, Safety measures to be taken during Construction	04/04/18	1
27	22/03/18	Drilling & blasting Safety campaign $L_3.4$ Risks in C.M	1,2,3,5	Drilling & blasting Safety campaign	05/04/18	1
28	02/04/18	Morals, Value & ethics, integrity work ethics L_3	1,2,3	Morals, Value & ethics in Engg.	09/04/18	1
29	03/04/18	Professional duties & Individual rights conflicts $L_1,L_2.3$	1,2,3	Ethical Principles & Professional Ethics	10/04/18	1
30	04/04/18	Gifts & bribe, price fixing, whistle blowing L_2,L_2	1,2,4	Professional Ethics, Gifts, Bribe, Price fixing whistle Blowing	11/04/18	1, 2

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
31	05/04/18	Introduction to Engg Economy principles Micro-Macro Analysis	1,2,3,4	Gifts, Bribery & whistle Blowing	12/04/18	1
32	09/04/18	Problem solving & decision making	1,2,	M.C.Q Test-I conducted	16/04/18	1,2,3, 4,5
33	10/04/18	Interest & time value of money	2,3,	Introduction to Engg Economy Principly Micro-Macro Analysis.	17/04/18	1,3
34	11/04/18	concept of simple & compound interest & Interest rate	2,3,4	Problem solvings Decision Making	23/04/18	1,4
35	12/04/18	Single & equal payment uniform gradient series	1,2,3	Interest & time Value of Money	23/04/18	3,4
36	16/04/18	Nominal & effective interest rate deferred annuity	1,2,4	concept of simple & compound interest & interest rate	23/04/18	1,3
37	17/04/18	Capitalized cost & comparision	1,4	Single equivalent payment, method of uniform gradient	24/04/18	1,2,3
38	18/04/18	present worth, annual equivalent	1,2,3	Nominal & effective interest rate deferred Annuity	24/04/18	1,4
39	19/04/18	capitalized and rate of return methods	1,3,5	capitalized cost comparision.	25/04/18	2,4
40	23/04/18	Minimum cost analysis & break even analysis	1,2,3,5	II-IA Test	26/04/18	1,2, 3,4,5 Q.Papy.
41	24/04/18	Entrepreneurship - evolution of the concept functions	1,2,3,5	present worth & annual equivalent	30/04/18	4
42	25/04/18	Concepts of Entrepreneurship Stages, sources of finance	1,5	Capitalized cost of return methods.	3/05/18	3,4
43	30/04/18	Central & State level financial institutions	2,5	Rate of Return Methods	07/05/18	1,2,4

Period	Plan			Execution		
	Date	Topics to be covered	Source Material needed	Topics Covered	Date	Source Material Referred
44	02/05/18	Micro, Small & Medium Ent. definition, characteristics, Objectives L3.3	1,5	Minimum cost Analysis + Problems	08/05/18	1,3,4
45	03/05/18	Scope & role of MSME & Introduction to different Schemes L3.3	1,5	Break Even Analysis.	09/05/18	1,3,4
46	07/05/18	Introduction to different Schemes L2, L3.3	1,5	Entrepreneurship, concepts & source of finance	10/05/18	1,5
47	08/05/18	Buying planning L3,L4.2 process marketing plan, financial plan	5,4	Central & State level financial Institutions MSME	14/05/18	1,5
48	09/05/18	Project report & feasibility study Guideline L3.4	4,5	Scope & role of MSME & Introduction to different Schemes	15/05/18	1,4,5
49	10/05/18	Introduction to Int. entn. opportunity, entry in to International Buying L3.3	3,4,5	Introduction to different Schemes	16/05/18	1,5
50	14/05/18	Exporting, direct foreign Investment, venture capital L2, L3.3	1,2,5	Buying Planning process Marketing plan	17/05/18	1,2
51				I.A Test conducted	18/05/18	1,2,5
52				Project report feasibility study	22/05/18	1,2,3
53				Int. Internation entr. opportunity	23/05/18	4,5
54				Exporting, Direct, Invst venture capital	24/05/18	4,5

Others	Planned	Actual	Remarks :
Special Classes	01	04	
Tutorials	—	—	
Assignments	03+02	03	
Seminars	01	01	
IA Tests	03	03	
Portions Covered in the entire Semester	100 %		

Course Effectiveness

Students Feedback			
Students Responce			
Result	No. of Students AP	No. of Students Passed	% of Result

Faculty in Charge

HOD's Signature

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

Signature of Principal (& Remarks if any)

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING

VI SEMESTER "A" – SECTION STUDENTS LIST

SL.NO.	USN	NAME OF THE STUDENTS
1	4AL14CV013	ANNAPPA P SANI
2	4AL14CV035	HARSHITH.H.J
3	4AL14CV045	M D KEERTHI
4	4AL14CV046	MALLIKARJUNA
5	4AL14CV050	MOHAMMED SHERIEF
6	4AL14CV072	RAKESH H
7	4AL14CV086	SHETTY SIDDESH JAYARAMA
8	4AL14CV111	VARSHA B M
9	4AL14CV112	RAGHAVENDRA G R
10	4AL14CV113	SEEMA SIDDAPPA SHIRAHATTI
11	4AL15CV001	A N YASHWANTH
12	4AL15CV003	ABHILASH N M
13	4AL15CV004	ADARSHA A
14	4AL15CV005	AISHWARYA D
15	4AL15CV007	AKHILA E
16	4AL15CV008	AKSHATHA M CHAVAN
17	4AL15CV012	ANAND P R
18	4AL15CV013	ANANYA M H
19	4AL15CV015	ANUSHA SUNAGAD
20	4AL15CV016	ANUSREE K PRADEEP
21	4AL15CV018	ARUNKUMAR A BADMAL
22	4AL15CV019	ASHRAYA SHETTY
23	4AL15CV020	ASHWATHA NARAYANA M K
24	4AL15CV021	ATHIRA SURENDRAN
25	4AL15CV023	BASAVARAJ KANKANODI
26	4AL15CV025	BHARGAVI B
27	4AL15CV026	BHUPATHI L
28	4AL15CV027	CHAITANYA B S
29	4AL15CV028	CHANNANASAPPA S MAKANUR
30	4AL15CV030	DAMODHAR SHENOY P
31	4AL15CV032	GOVIND RAJ H R
32	4AL15CV033	GURU PRASAD M
33	4AL15CV034	HANUMANTH Y MADAR
34	4AL15CV035	HARSHITA RYAGI
35	4AL15CV037	JAGADEESH KRISHNA JOGI

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

DEPARTMENT OF CIVIL ENGINEERING

SL.NO.	USN	NAME OF THE STUDENTS
36	4AL15CV038	JAGADEESHA
37	4AL15CV039	JYOTHI S
38	4AL15CV041	KARIGOWDA
39	4AL15CV042	KARTHIK N S
40	4AL15CV046	LEISHEMBA SOIBAM
41	4AL15CV047	MADHU BHAJANTRI
42	4AL15CV048	MAHAMMED JAKEER K
43	4AL15CV049	MAHAMMADRASOOL AWATI
44	4AL15CV050	MAHESH K N
45	4AL15CV053	MANJULA PARAPPA KURBET
46	4AL15CV054	MANJUNATH M
47	4AL15CV055	MANJUNATHA K S
48	4AL15CV056	MANOJ KUMAR H M
49	4AL15CV057	MANU P
50	4AL15CV058	MEGHANA C G
51	4AL15CV060	MOHANKUMAR SHIVAPPA PUJAR

HOD

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY, MOODBIDRI

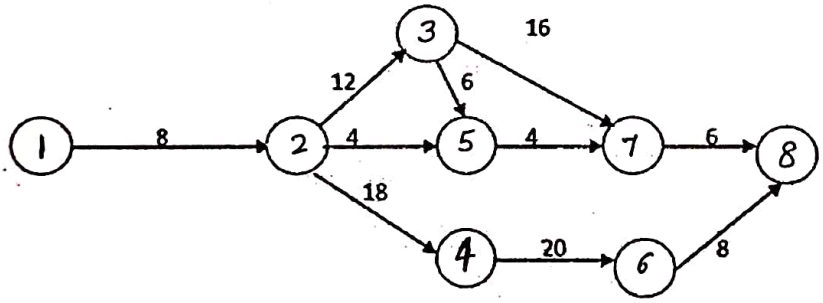
DEPARTMENT OF CIVIL ENGINEERING

I - INTERNAL ASSESSMENT

Semester: 6
Subject: CONSTRUCTION MANAGEMENT AND ENTREPRENEURSHIP(15CV61) Date: 26 Mar 2018
Max Marks: 30
Faculty: Mr Sooraj Kumar / Mr. Ramesh Rao B Time: 09:30 AM - 11:00 AM

Instructions to students :
Answer any 2 full questions

Question#	Question	Marks	CO	BT/CL
1 a	Explain management? and different functions of management	6	CO1	L2
1 b	Discuss different management styles and with a neat diagram explain Work breakdown structure.	9	CO1	L2
	OR			
2 a	A network of a project is given below, number the events and calculate the total project duration, EST,EFT,LST,LFT, and also calculate total float and identify the critical path.	10	CO1	L4



2 b	What are the different types of plans and explain objectives, strategy and policy	5	CO1	L2
3 a	Explain labour productivity and write different factors affecting labour productivity.	8	CO2	L2
3 b	Discuss material management? explain its importance in construction	7	CO2	L2
	OR			
4 a	Write a short nnote on class of labour, wages & Statutory requirements	6	CO2	L2
4 b	a) Explain in detail the classification of construction equipments. b) Explain Owning cost & Operaing cost .	9	CO2	L2

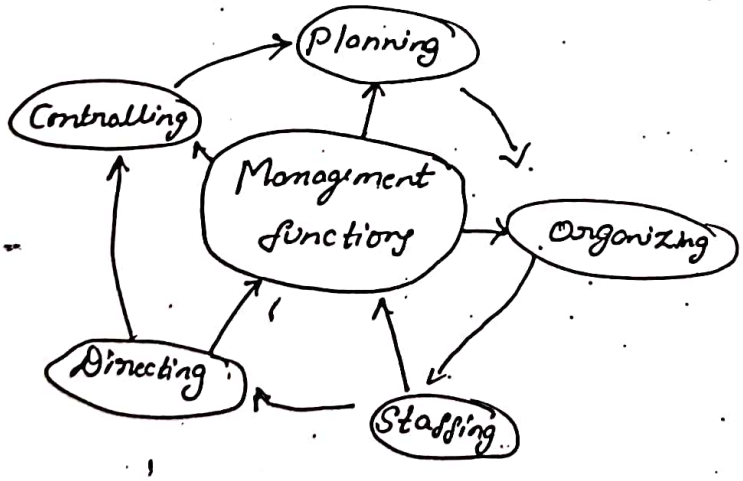
HOD H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY: MIJAR, MOODBIDRI

DEPARTMENT OF CIVIL ENGINEERING

SCHEME OF EVALUATION

Subject Title: Construction Management & Entrepreneurship Subject code: 15CV61

Q.NO	Description of Answers	Marks
1 (a)	Management is the process of dealing with or controlling things or people. Management includy the activitiy of setting the strategy of an organization & coordinating the efforts of its employes to accomplish its objective through the application of available resource, such as financial, natural, technological & human resource. Functions of Management:  Planning:- Setting up of goals & objective Organizing:- Brings resource together to achieve the goals established. Staffing:- Allotment of staff, workers & labours. Directing:- Telling staff know what need to be done Controlling:- refers to all the process that leader create to monitor success	01 M 01 X 05 = 05 M Total 6 Marks

Q.No.	Answer/Solution	Marks
(1) (6)	**Different types of management Styles**	

Autocratic
Consultative
Persuasive
Democratic

Chaotic
Laissez-faire

Management by walking around
constant feed back from employee.
participatory
Team work

Autocratic:- A Manager takes complete control of responsibility for a situation.

Consultative:- Decisions are autocratic, but the decision is made by keeping in mind the interest of its employee, developing feedback from Subordinate

Persuasive:- The manager controls the whole decision making process in a different way.

Democratic:- Getting everyone's consensus on decision.

Chaotic :- It believe in giving the workers full freedom to work. They can develop their own idea & strategy to enhance their performance & Success of an organization.

01 × 05 = 5 Marks

Laissez-faire:- Encouraging the subordinate to develop their own creative idea & strategy to prosper in their respective fields.

(*) **work breakdown structure:-**

A WBS is a key project deliverable that organize the team's work into manageable ~~action~~ sections.

01 Mark

" Deliverable oriented hierarchical decomposition of the work to be executed by the project team

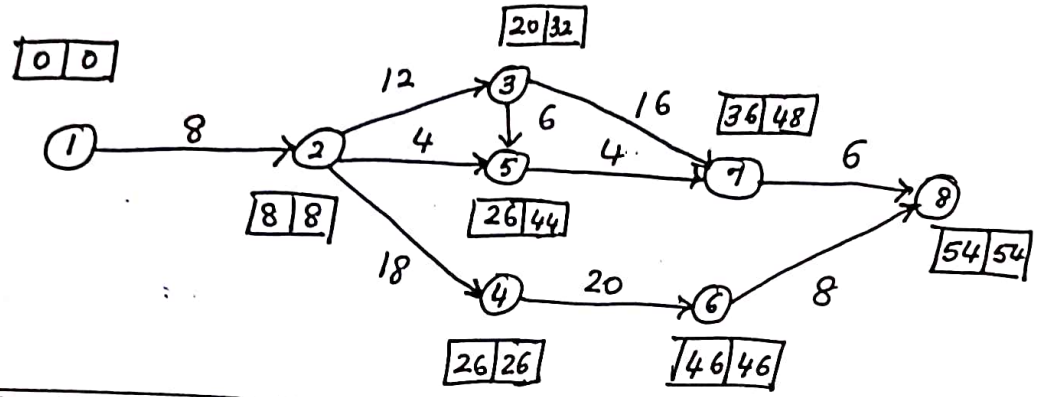
(*) Neat block diagram

03 Marks

04 Marks

Total :- 9 Marks

Q.	Answer/Solution	Marks
(c)	EST, EFT, LST, LFT & Total float.	



01 Mark

Activity	Duration	EST	EFT	LST	LFT	Total Float	Remarks
1-2	8	0	8	0	8	0	Critical
2-3	12	8	20	20	32	12	
2-4	18	8	26	8	26	0	Critical
2-5	4	8	12	40	44	32	
3-5	6	20	26	38	44	18	
3-7	16	20	36	32	48	12	
4-6	20	26	46	26	46	0	Critical
5-7	4	26	30	44	48	18	
6-8	8	46	54	46	54	0	Critical
7-8	6	36	42	48	54	12	

01 Each

06 Marks

Critical Path: 1 - 2 - 4 - 6 - 8

Total 10 Marks

Q.No.	Answer/Solution	Marks
(b)	Types of plans:. Standing plans :- ongoing plans that provide guidance for activities performed repeatedly (procedures / policies / methods / rules) Single use plans :- A one-time plan specifically designed to meet need of a unique situation. (To achieve specific objective. (Programmes / Budgets / strategies / projects) etc.. objectives:. Objectives or goals of the organization are the ends which every activity of the organization aimed it. objectives → a prerequisite for planning.. Strategy. The term strategy was used in order to elaborate the plans that were made by keeping in view the probable moves of the adversary.. policy: can be described as the general statements or understandings that provides guidance to the managers in decision making. policies are standing plans that guide the management that is engaged in managerial function.	01X05 = 05 Marks
5)	Labour productivity:.. Is a measure of economic growth within a country, measuring the amount of goods & services produced by one hour of labour.	01 Mark

No.	Answer/Solution	Marks
3) @	**Factory affecting labour productivity:-** Overtime Morale & Attitude Fatigue Stacking of Trade Joint Occupancy Beneficial occupancy Hazardous work area Weather & Seasons changes Tool & Eqpt Shortage Concurrent Operation Absenteeism & turnover Mobilize / Demobilize Errors / Ommission Start / Stop Reassignment of manpower Dilution of Supervision Shift work Alternating, Staggered or Rotating Work Schedule etc. + Explanation	Any 10 points. Of Marks
)	**Material Management:-** Material management deals with controlling & regulating the flow of material in relation to changes in variables like demand, price, availability, quality, delivery Schedule etc..	01 Mark
	Importance of materials management:- ① The material cost content of the total cost is kept at a reasonable level. ② The cost of indirect materials is kept under check. ③ The eqpt is properly utilized because there are no break downs due to late supply of materials.	

No.	Answer/Solution	Marks
3) @	**Factory affecting labour productivity:-** Overtime — Concurrent Operation Morale & Attitude — Absenteeism & turnover Fatigue — Mobilize / Demobilize Stacking of Trade — Error / Omission + Explanation Joint Occupancy — Start / Stop Beneficial occupancy — Reassignment of manpower Hazardous work area — Dilution of Supervision Weather & Season change — Shift work Tool & Eqpt Shortage — Alternating, Staggered or Rotating Work Schedule etc..	Any 10 points. Of Marks
)	**Material Management:-** Material management deals with controlling & regulating the flow of material in relation to change in variable like demand, price, availability, quality, delivery Schedule etc..	01 Mark
	Importance of materials management:- ① The material cost content of the total cost is kept at a reasonable level. ② The cost of indirect materials is kept under check. ③ The eqpt is properly utilized because there are no break down due to late supply of materials.	

Q.No.	Answer/Solution	Ma.
	④ The loss of direct labour is avoided. ⑤ The wastage of materials at the stage of storage as well as their movement is kept under control. ⑥ The supply of material is prompt & late delivery instances are only few. ⑦ The investments on materials are kept under control & under & over stocking is avoided. ⑧ congestion in the store & at different stages of manufacturing is avoided.	01X06 = 06 Marks
④@	(i) Class of labour:- Class of labour are the people employed for wages, specially in manual-labour occupations & industrial works. (ii) wage:- A wage is monetary compensation (remuneration) paid by an employer to employee in exchange for work done. → Fixed rate - Monthly salary. → piece rate. (iii) Statutory requirements:- Statutory refers to laws passed by a state / central govt, while regulatory refers to a rule issued by a regulatory body appointed by a state / central govt. "Statutory requirements are those requirements which are applicable by virtue of law enacted by the govt".	02X03 = 06 Marks

No.	Answer/Solution	Marks
9(b)	(i) Classification of construction equipments:-	
	(1) Excavation & Loading (2) Compaction & Grading (3) Drilling & Blasting (4) Lifting & Erecting (5) Mixing & paving	(1) Earth moving eqpt (2) Hauling eqpt (3) Hoisting eqpt (4) Conveying eqpt (5) Aggregate & concrete production eqpt (6) Pile driving eqpt (7) Tunneling & rock blasting / drilling eqpt (8) Pumping & dewatering eqpts
	+ Explanation →	07 Marks
6	(ii) owning cost: cost of ownership. Purchase price Finance / Interest cost Insurance Resale price / residual value	01 x 02 = 02 marks
	operating cost:- cost of fuel cost of lubricants cost of spare parts Repair cost Operators wages etc..	9 Marks

31/8/18

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY, MOODBIDRI

DEPARTMENT OF CIVIL ENGINEERING

II - INTERNAL ASSESSMENT

Semester: 6

Subject: CONSTRUCTION MANAGEMENT AND ENTREPRENEURSHIP(15CV61) Date: 26 Apr 2018

Max Marks: 30

Faculty: Mr Ramesh Rao B / Mr. Sooty Kumar Time: 09:30 AM - 11:00 AM

Instructions to students :

Answer any 2 full question(s)

Question#	Question	Marks	CO	BT/CL
1 a	Explain briefly the purpose of inspection and different stages of inspection.	7	CO3	L2
1 b	Explain briefly a) Quality Control, b) ISO standard , c)Total quality management & d) Quality Assurance.	8	CO3	L2
	OR			
2 a	Explain in detail a) Morals, b) Values , c)Ethics, d) Integrity & e)Trustworthiness.	8	CO3	L2
2 b	Explain in detail the following a) Gifts & Bribes b) Price fixing c) Whistle blowing & its types	7	CO3	L2
3 a	Explain in detail the safety measures to be taken during a) Earthwork excavation b) Drilling & Blasting c) Hot bituminous work.	9	CO3	L2
3 b	Write a detailed note on a)importance of safety in construction, b)Personal Protective Equipments and its maintanence in construction site c) Safety through Legislation .	6	CO3	L2
	OR			
4 a	Define and Explain a) Engineering Economics b) Micro Economics c) Macro Economics d) Time value of Money e) Cash flow concepts	5	CO4	L2
4 b	An Industry has taken a loan of Rs 50,000 with an interest rate of 15% for a period of 6 months. Determine the future amount at the end of loan period by using Ordinary simple interest & Exact simple interest method.	4	CO4	L3
4 c	Determine the effective interest rate for a nominal annual interest of 10.5%, that is compounded. a) Daily b) Monthly c) Quarterly	6	CO4	L3

HOD

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING

SCHEME OF VALUATION

IA TEST NO: 02 SEMESTER: 6th SUBJECT WITH CODE: Construction Management 15CV61. Entp

Q. No.	DESCRIPTION	MARKS
1 (a)	**Purpose of Inspection:**	
	To distinguish good lots from bad lots.	
	To distinguish good piecy from bad piecy.	
	To determine if the procyy is changing.	
	To determine if the procyy is approaching the specification limits.	
	To rate quality of products.	
	To rate accuracy of inspectory.	
	To meyure the precision of the meyuring instruments.	
	To Secure products - dyign information.	04 M
	To meyure procyy capability etc..	
	Stagy of Inpection	
	① Inpection of incoming matewaly	
	② Inpection of production procyy. + explanation	03 M
	③ Inpection of finished goody.	
		07 Marks
1 (b) (i)	**Quality control:**	
	Product of uniform acceptable quality is manyactured	
	To decide about the standard of quality of a product	
	that is eagily acceptable by the cystomes.	
	→ To check the variation during manyacturing.	
	→ To prevent the poor quality products reaching the cystomey.	2 Marks

Q. No.	DESCRIPTION	MARKS

(ii) Iso standards:-

Iso 9000 deals with the fundamentals of quality managment systems, including the eight principles on which the family of standard is based.

Iso 9000 is an International standard intended to provide the generic core of a quality system standard applicable to a broad range of industries & economic sectors.. 2M

Customer focus → Leadership — Involvement of people

Process approach — System approach to Mgmt — Continual improvement

Factual approach to decision making — Mutually beneficial supplier relationships

(iii) Total quality Managment:-

It is a structured system for satisfying internal & external customers & supplied by integrating the business environment, continuous improvement & break-throughs with development, improvement & maintenance

→ customer satisfaction.
→ cost effectiveness
→ defect free quality work. 02M

The basic principles of TQM are satisfaction of customer & cost effectiveness & ~~custom~~ continuous improvement

Q.No.	Answer/Solution	Marks
16	(iv) Quality Assurance: Quality Assurance is the means by which construction practice / PWD ensure the completed project, complies with the quality established by contract Document. → Say what you do → Do what you say → Record what you do.	02M 3Marks
17	(a) Morals: Morals are guiding Principles that every citizen should hold. It is the foundational concepts aligned at both at individual & societal level. Morals are the knowledge of differena between the right & wrong.. - Personal behaviour	02 M
	(b) Value: Worth, merit & usefulness or importance of a thing.. Values are comprised of personal concepts of responsibility, entitlement & respect...	02M
	(c) Ethics: Study of the characteristics of morals.. Ethics is defined as " a system of moral principles by which human actions and proposals may be judged Professional behaviour. good or bad , or right or wrong..	02 M

Q.No.	Answer/Solution	Marks
	(d) Integrity: This principle embody a sentiment expressed earlier in the paper in recognizing the overall objective of construction being the production of safe, reliable, useable & affordable construction...	01 M
	(e) Trustworthiness: It is a human quality of virtue.. Enobly others to believe in us & to rely on us without reservation of fear.. Trust that relate to the Personal attributes..	01 M 8M
(2) (b) (i)	Gifts & bribe Something offered or given to someone in a position of trust to induce him/her to act dishonestly.. + explanation..	02 M
	(ii) Price fixing: A practice where by rival company come to an illict agreement not to sell goods or service below a certain price. controlling supply & demand...	02 M

Q.No.	Answer/Solution	Marks
	© Whistle blowing & types Whistle blowing is an act of conveying information about a illegal ~~control~~ practices. significant moral problem by a present or former employee, outside approved channels or to some one in a position to take action on the problem. External whistle blowing → paying info outside the organization Internal W.B → within the organization. open whistle blowing → openly revealing their identity. Anonymous → Individual conveying the information conceals his/ her identity	3M 7M
3(a)	Safety measures to be taken during	
	(a) Earthwork excavation	03M
	(b) Drilling & Blasting + Explonation	03M
	(c) Hot bituminous work	03M
		3x3 = 9 Marks
3(b)	(a) Importance of Safety in conservation	02M
	(b) P.P.E & its maintenance	02M
	(c) Safety through legislation + Explonation	02M
		2x3 = 6 Marks

Q.No.	Answer/Solution	Marks
4@	(i) Engg. Economig:.	
	Engg. Economig deals with the methods that enable one to take economic decisions towards minimizing costs and/or maximizing benefits to buyings organization.	01 M
	(ii) Micro economig:	
	It is the study of markets, & segments of the economy (Individual economy related to particular Sector)	01 M
	(iii) Macro economig:	
	It is the study of the whole economy. It looks at aggregate variables such as aggregate demand nation output & inflation..	01 M
	(iv) Time value of Money:.	
	Inflation Risk Cost of money..	
	Time value of money is defined as the time-dependent value of money stemming both from changes in the Purchasing Power of money & from the real Changing Potential of alternative investments over time..	01 M
	(v) Cash-flow Concepts:	
	Cash flow is the stream of monetary (Rupees) values - costs (inputs) & benefits (outputs) - resulting from a project investment	01 M
		5 Marks

Q.No.	Answer/Solution	Marks
4(b)	Given data:- P = Rs 50000/- i = Interest rate = 15%. n = 6 months = $6/12 = 1/2$ year Ordinary simple Interest:- $F = P + PiN$ The total amount repaid after 6 months is $F = 50000 + 50000 \times 0.15 \left[\frac{6}{12}\right]$ $= 50000 + 3750$ ₹ = 53750.00 $\therefore F =$ ₹ 53750.00 A Using Exact Simple Interest:- The future value is $F = P + PiN$ $F = 50000 + 50000 \times 0.15 \left[\frac{31+28+31+30+31+30}{365}\right]$ $F =$ ₹ 53719.178 $\therefore$ Future value $F =$ ₹ 53719.178 B	02 M 02 M 04 Marks

Q.No.	Answer/Solution	Marks
4⑥	Given data:- P = Rs 50000/- i = Interest rate = 15%. n = 6 months = $6/12_2$ = $1/2$ year Ordinary simple Interest:- $F = P + PiN$ The total amount repaid after 6 months is $F = 50000 + 50000 \times 0.15 \left[\frac{6}{12}\right]$ $= 50000 + 3750$ $₹ = 53750.00$ $\therefore F = ₹\ 53750.00$ ½	02 M
	Using Exact Simple Interest:- The future value is $F = P + PiN$ $F = 50000 + 50000 \times 0.15 \left[\frac{31+28+31+30+31+30}{365}\right]$ $F = ₹ 53719.178$ $\therefore$ Future value $F = ₹\ 53719.178$ ®	02 M
		04 Marks

Q.No.	Answer/Solution	Marks
④ (c)	Effective interest rate:-	

① Daily ② Monthly ③ Quarterly.

Given data $r = 10.5\ \%$.

Formula $i_{eff} = \left(1 + \frac{r}{m}\right)^m - 1$

① Daily $i_{eff} = (1 + r/m)^m - 1$

$m = 365$ days

$$i_{eff} = \left[1 + \frac{0.105}{365}\right]^{365} - 1$$

$$= 11.07\ \%$$ — 02 M

② Monthly: $m = 12$ monthly

$$i_{eff} = \left[1 + \frac{0.105}{12}\right]^{12} - 1$$

$$= 11.02\ \%$$ — 02M

③ Quarterly

$m = 4$

$$i_{eff} = \left[1 + \frac{r}{m}\right]^m - 1$$

$$= \left[1 + \frac{0.105}{4}\right]^4 - 1 = 10.92\ \%$$ — 02M

06 Marks

HOD

Q.No.	Answer/Solution	Marks

(4) (c) Effective interest rate:

① Daily ② Monthly ③ Quarterly.

Given data $r = 10.5\ \%$

Formula $i_{eff} = \left(1 + \frac{r}{m}\right)^m - 1$

① Daily $i_{eff} = (1 + r/m)^m - 1$

$m = 365$ days

$$i_{eff} = \left[1 + \frac{0.105}{365}\right]^{365} - 1$$

$= 11.07\ \%$ — 02 M

② Monthly: $m = 12$ monthly

$$i_{eff} = \left[1 + \frac{0.105}{12}\right]^{12} - 1$$

$= 11.02\ \%$ — 02 M

③ Quarterly

$m = 4$

$$i_{eff} = \left[1 + r/m\right]^m - 1$$

$$= \left[1 + \frac{0.105}{4}\right]^4 - 1 = 10.92\ \%$$ — 02 M

06 Marks

HOD

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY, MOODBIDRI

DEPARTMENT OF CIVIL ENGINEERING

III - INTERNAL ASSESSMENT

Semester: 6

Subject: CONSTRUCTION MANAGEMENT AND ENTREPRENEURSHIP(15CV61) Date: 18 May 2018

Max Marks: 30

Faculty: Mr Sooraj Kumar / Mr. Ramesh Rao B Time: 09:30 AM - 11:00 AM

Instructions to students :

Answer any 2 full question(s)

ANSWER ONE FULL QUESTION FROM EACH PART

DRAW SUITABLE FIGURES WHEREVER NECESSARY

ASSUME ANY MISSING DATA SUITABLY

Question#	Question	Marks	CO	BT/CL
1 a	A person is planning for his retired life. He has 10 more years of service. He would like to deposit 1/5th of his salary, which is Rs. 5500, at the end of the first year, and thereafter he wishes to deposit the amount with an annual increase of Rs. 1500 for the next 9 years with an interest rate of 15%. Find the total amount at the end of the 10th year of the above series	6	CO4	L3
1 b	A bank gives a loan to a company to purchase an equipment worth Rs.800000 at an interest rate of 12% compounded annually. This amount should be repaid in 15 yearly equal installments. Find the installment amount that the company has to pay to the bank.	6	CO4	L3
1 c	Explain break even analysis and its importance	3	CO4	L2
	OR			
2 a	The cash flows of two project proposals are as given below. Each of the project has an expected life of 10 years. Select the best project based on present worth method of comparison using an interest rate of 18%, compounded annually.	7	CO4	L3

Projects	Initial outlay(Rs)	Annual equivalent revenue(Rs)	Salvage value after 10 years(Rs)
Project 1	750000	200000	50000
Project 2	950000	225000	100000

2 b	A company is planning to expand its present business activity. It has two alternatives for the expansion programme and the corresponding cash flows are given in the following table. Each alternative has a life of five years and a negligible salvage value. The minimum attractive rate of return for the company is 15%. Suggest the best alternative to the company.	8	CO4	L3

Alternatives	Initial investment (Rs)	Yearly revenue(Rs)
Alternative 1	450000	150000
Alternative2	750000	250000

3 a	Enplain entrepreneurship and functions of entrepreneurship	5	CO5	L2
3 b	What are the characteristics of small scale industries	5	CO5	L2
3 c	Explain briefly the barriers to entrepreneurship	5	CO5	L2

P.T.O

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY, MOODBIDRI
DEPARTMENT OF CIVIL ENGINEERING
III - INTERNAL ASSESSMENT

Semester: 6
Subject: CONSTRUCTION MANAGEMENT AND ENTREPRENEURSHIP(15CV61) Date: 18 May 2018
Max Marks: 30
Faculty: Mr Sooraj Kumar / Mr. Ramesh Rao B Time: 09:30 AM - 11:00 AM

Instructions to students :
Answer any 2 full question(s)
ANSWER ONE FULL QUESTION FROM EACH PART
DRAW SUITABLE FIGURES WHEREVER NECESSARY
ASSUME ANY MISSING DATA SUITABLY

Question#	Question	Marks	CO	BT/CL
1 a	A person is planning for his retired life. He has 10 more years of service. He would like to deposit 1/5th of his salary, which is Rs. 5500, at the end of the first year, and thereafter he wishes to deposit the amount with an annual increase of Rs. 1500 for the next 9 years with an interest rate of 15%. Find the total amount at the end of the 10th year of the above series	6	CO4	L3
1 b	A bank gives a loan to a company to purchase an equipment worth Rs.800000 at an interest rate of 12% compounded annually. This amount should be repaid in 15 yearly equal installments. Find the installment amount that the company has to pay to the bank.	6	CO4	L3
1 c	Explain break even analysis and its importance	3	CO4	L2
	OR			
2 a	The cash flows of two project proposals are as given below. Each of the project has an expected life of 10 years. Select the best project based on present worth method of comparison using an interest rate of 18%, compounded annually.	7	CO4	L3

Projects	Initial outlay(Rs)	Annual equivalent revenue(Rs)	Salvage value after 10 years(Rs)
Project 1	750000	200000	50000
Project 2	950000	225000	100000

2 b	A company is planning to expand its present business activity. It has two alternatives for the expansion programme and the corresponding cash flows are given in the following table. Each alternative has a life of five years and a negligible salvage value. The minimum attractive rate of return for the company is 15%. Suggest the best alternative to the company.	8	CO4	L3

Alternatives	Initial investment (Rs)	Yearly revenue(Rs)
Alternative 1	450000	150000
Alternative2	750000	250000

3 a	Enplain entrepreneurship and functions of entrepreneurship	5	CO5	L2
3 b	What are the characteristics of small scale industries	5	CO5	L2
3 c	Explain briefly the barriers to entrepreneurship	5	CO5	L2

P.T.O

Question#	Question	Marks	CO	BT/CL
	OR			
4 a	What are the different stages of entrepreneurship and explain in detail	7	CO5	L2
4 b	Explain in deatil the business planning process	8	CO5	L2

HOD/CV

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING

SCHEME OF VALUATION

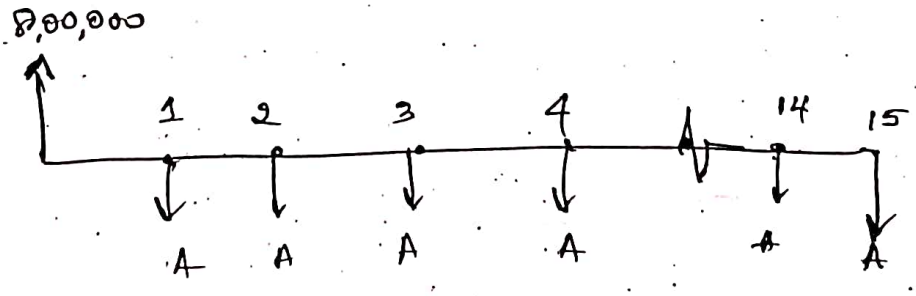
IA TEST NO: 3 SEMESTER: 6th SUBJECT WITH CODE: CME (15CV61)

Q. No.	DESCRIPTION	MARKS
1a)	$A_1 = 5500$ $G = 1500$ $n = 10$ $i = 15\%$ $\therefore A = A_1 + G\left[\frac{1}{i} - \frac{n}{(1+i)^n - 1}\right]$ $= 2\overline{10,555}$	2
	$F = A\left(\frac{(1+i)^n - 1}{i}\right)$ $= 2,14,707.5$	2
	F = 2,14,705 1 2 3 9 10 A+1G A+2G A+8G A+9G	2
		6

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING

SCHEME OF VALUATION

IA TEST NO: SEMESTER: SUBJECT WITH CODE:

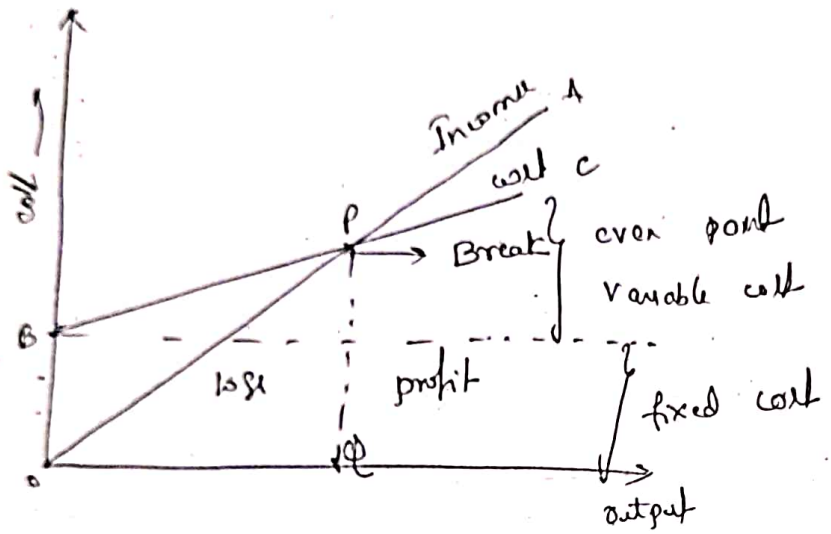
Q. No.	DESCRIPTION	MAR
10)	$P = 8,00,000$ $i = 12\%$ $n = 15$ $A = ?$ $A = \frac{P \times i (1+i)^n}{(1+i)^n - 1}$ $= \frac{8,00,000 \times 0.12 (1+0.12)^{15}}{(1+0.12)^{15} - 1}$ $= 2117459.39$  	1 2 3 6 marks

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K - 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING

SCHEME OF VALUATION

IA TEST NO: SEMESTER: SUBJECT WITH CODE:

Q. No.	DESCRIPTION	MARKS
1(c)	**Break-even analysis**	



— 2 —

Graphical representation of costs at various levels of activity. Shown on the same chart as the variation of income (or sales, revenue) with the same variation in activity.

— 1 —

→ Categorising production costs between those which are 'variable' and 'fixed' costs.

3 marks

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING

SCHEME OF VALUATION

IA TEST NO: SEMESTER: SUBJECT WITH CODE:

Q. No.	DESCRIPTION	MARKS

29)

$n = 10$

$i = 18\%$

(1) Project 1

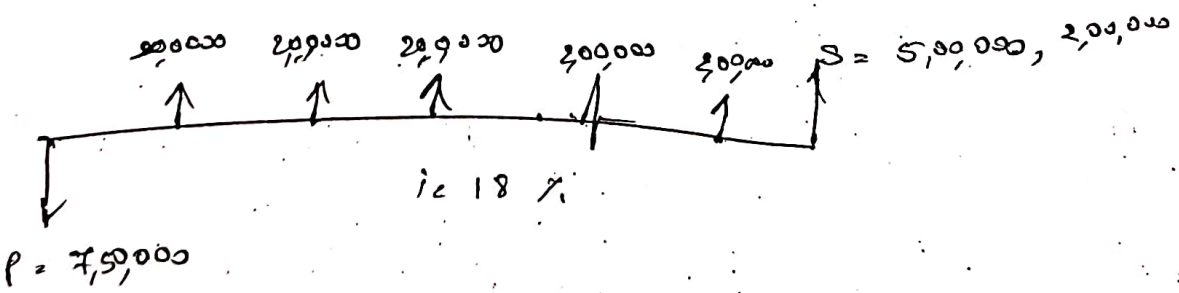
$P = ₹ 7,50,000$

$A = 2,00,000$

$S = 5000$

$$PW(18\%) = -7,50,000 + 2,00,000 \left[\frac{(1+0.18)^{10}-1}{0.18(1+0.18)^{10}}\right] + 50000$$

$$= ₹ 198817.28$$



(2) Project 2

$P = 9,50,000$

$A = 2,25,000$

$S = 1,00,000$

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

DEPARTMENT OF CIVIL ENGINEERING

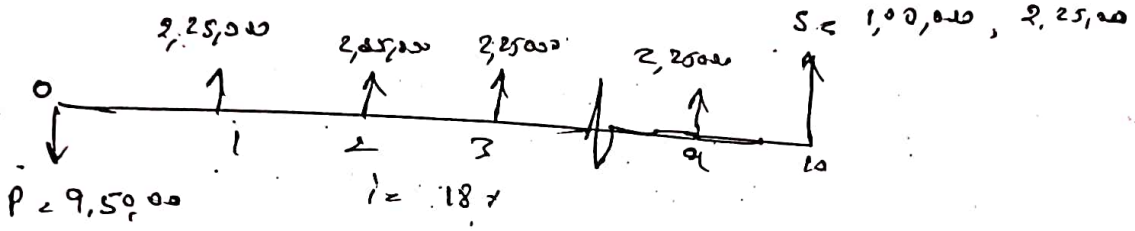
SCHEME OF VALUATION

IA TEST NO: **SEMESTER:** **SUBJECT WITH CODE:**

Q. No.	DESCRIPTION	MARKS

$$PW(18) = -9,50,000 + 2,25,000\left[\frac{(1+0.18)^{10}-1}{0.18(1+0.18)^{10}}\right] + 1,00,000$$

$$= ₹1,61,169.41$$



Best alternative → Project 1

(5b)

$n = 5$

$i = 15\%$

Alternative 1

$PW(15\%) = 52,823.32$ at $i = 15\%$

$PW(20\%) = -21409.17$

Formula $PW(i\%) = -P + A(P/A, i, n)$

Interpolate

at $PW = 0$ $i = 19.87\%$

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING

SCHEME OF VALUATION

IA TEST NO: SEMESTER: SUBJECT WITH CODE:

Q. No.	DESCRIPTION	MARKS

Alternative-2

P = 7,50,000

A = 2,50,000

n = 5

$$PW(15\%) = -7,50,000 + 2,50,000\left[\frac{(1+0.15)^5 - 1}{0.15(1+0.15)^5}\right]$$

$$= ₹\ 88038.7$$

$$PW(20\%) = -P + A(P/A, 20\%, 5)$$

$$= ₹\ -2346.96$$

Interpolate

When $PW = 0$, where $i = 19.87\%$

∴ Both are same Hence both alternatives will yield best rate of return.

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING

SCHEME OF VALUATION

IA TEST NO: SEMESTER: SUBJECT WITH CODE:

Q. No.	DESCRIPTION	MARKS

Alternative-2

P = 7,50,000

A = 2,50,000

n = 5

$$PW(15\%) = -7,50,000 + 2,50,000 \left[\frac{1+(0.15)^5 - 1}{0.15(1+0.15)^5}\right]$$

$$= ₹\ 88038.7$$

$$PW(20\%) = -P + A(P/A, 20\%, 5)$$

$$= ₹\ -2346.96$$

Interpolate

When $PW = 0$, then $i = 19.87\%$

∴ Both are same Hence both alternatives will yield best rate of return.

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING

SCHEME OF VALUATION

IA TEST NO: **SEMESTER:** **SUBJECT WITH CODE:**

Q. No.	DESCRIPTION	MARKS
3a)	Explanation ; definition, importance Functions of entrepreneur. 1) Idea generation 2) Determination of the bussiness objective 3) Product analysis and market research. 4) Determination of form of ownership / organization. 5) Completion of promotional formalities. 6) Rising necessary funds 7) Procuring machine and materials 8) Recruitment of men	2 3 5 marks
3b)	1) A small scale unit is generally one Non Show. Even in the small units which are run by partnership firm or company, the activities are mainly carried out by one of the partners or directors 2) Lesser developmental period 3) Localised to the local and general demands. 4) Use indigenous resources 5) It requires very little capital	5

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

DEPARTMENT OF CIVIL ENGINEERING

SCHEME OF VALUATION

IA TEST NO: SEMESTER: SUBJECT WITH CODE:

Q. No.	DESCRIPTION	MARKS
3c)	Barrier to entrepreneurship 1) Salary 2) Benefit 3) Work schedule 4) Administration 5) Incompetent staff	5
4a)	Stages of entrepreneurial process (1) Identification of opportunity 2) Evaluation of opportunity (3) Preparation of ~~busine~~ business plan 4) Determination and organizing the resources. (5) Management of enterprise	2×3+1 7
4b)	Business plan process (1) Idea generation (2) Environmental ~~Scanning~~ Scanning (3) Feasibility analysis 4) Project report preparation (5) Evaluation, control and review	2×4 =8 mks

HOD

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

DEPARTMENT OF CIVIL ENGINEERING

IA	Date	Subject with Subject Code	No. of Students Present	No. of Students Absent	0 – 8 Marks	9– 12 Marks	13– 15 Marks
I	26/03/18	CM&E-15CV61	49	02	2	26	21
II	26/04/18	CM&E-15CV61	51	00	0	20	31
III	18/05/18	CM&E-15CV61	10	41	3	7	0

6-A

Roll. No.	USN	NAME	I IA	II IA	III IA	ASSIGNMENT	AVG IA	RESULT
1	4AL14CV013	ANNAPPA P SANI	09	13	AB	01	12	
2	4AL14CV035	HARSHITH.H.J	12	11	AB	02	14	
3	4AL14CV045	M D KEERTHI	10	10	06	03	13	
4	4AL14CV046	MALLIKARJUNA	09	09	09	03	12	
5	4AL14CV050	MOHAMMED SHERIEF	13	13	AB	03	16	
6	4AL14CV072	RAKESH H	09	15	AB	02	14	
7	4AL14CV086	SHETTY SIDDESH JAYARAMA	07	13	09	04	15	
8	4AL14CV111	VARSHA B M	15	15	AB	04	19	
9	4AL14CV112	RAGHAVENDRA G R	09	10	AB	03	13	
10	4AL14CV113	SEEMA SIDDAPPA SHIRAHATTI	09	12	AB	03	14	
11	4AL15CV001	A N YASHWANTH	14	13	AB	04	18	
12	4AL15CV003	ABHILASH N M	10	13	AB	03	16	
13	4AL15CV004	ADARSHA A	14	14	AB	04	18	
14	4AL15CV005	AISHWARYA D	14	14	AB	03	17	
15	4AL15CV007	AKHILA E	10	13	AB	03	15	
16	4AL15CV008	AKSHATHA M CHAVAN	12	11	12	04	16	
17	4AL15CV012	ANAND P R	11	14	AB	04	17	
18	4AL15CV013	ANANYA M H	12	13	AB	04	17	
19	4AL15CV015	ANUSHA SUNAGAD	13	14	AB	04	18	
20	4AL15CV016	ANUSREE K PRADEEP	13	13	AB	03	16	
21	4AL15CV018	ARUNKUMAR A BADMAL	09	10	09	03	13	
22	4AL15CV019	ASHRAYA SHETTY	10	13	08	03	15	
23	4AL15CV020	ASHWATHA NARAYANA M K	13	15	AB	03	17	
24	4AL15CV021	ATHIRA SURENDRAN	13	13	AB	03	16	
25	4AL15CV023	BASAVARAJ KANKANODI	11	12	AB	03	15	
26	4AL15CV025	BHARGAVI B	15	14	AB	04	19	
27	4AL15CV026	BHUPATHI L	07	11	08	03	13	

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

DEPARTMENT OF CIVIL ENGINEERING

Roll. No.	USN	NAME	I IA	II IA	III IA	ASSIGN MENT	AVG IA	RESULT
28	4AL15CV027	CHAITANYA B S	14	12	AB	04	17	
29	4AL15CV028	CHANNANASAPPA S MAKANUR	12	12	AB	03	15	
30	4AL15CV030	DAMODHAR SHENOY P	15	15	AB	05	20	
31	4AL15CV032	GOVIND RAJ H R	AB	14	10	03	15	
32	4AL15CV033	GURU PRASAD M	10	10	AB	03	13	
33	4AL15CV034	HANUMANTH Y MADAR	11	14	AB	03	16	
34	4AL15CV035	HARSHITA RYAGI	11	11	AB	01	12	
35	4AL15CV037	JAGADEESH KRISHNA JOGI	14	14	AB	03	17	
36	4AL15CV038	JAGADEESHA	15	15	AB	05	20	
37	4AL15CV039	JYOTHI S	14	13	AB	04	18	
38	4AL15CV041	KARIGOWDA	12	14	AB	03	16	
39	4AL15CV042	KARTHIK N S	13	15	AB	04	18	
40	4AL15CV046	LEISHEMBA SOIBAM	13	14	AB	03	17	
41	4AL15CV047	MADHU BHAJANTRI	13	13	AB	04	17	
42	4AL15CV048	MAHAMMED JAKEER K	10	09	10	02	12	
43	4AL15CV049	MAHAMMADRASOOL AWATI	09	14	AB	03	15	
44	4AL15CV050	MAHESH K N	11	12	AB	03	15	
45	4AL15CV053	MANJULA PARAPPA KURBET	15	15	AB	04	19	
46	4AL15CV054	MANJUNATH M	09	11	AB	02	12	
47	4AL15CV055	MANJUNATHA K S	11	11	AB	04	15	
48	4AL15CV056	MANOJ KUMAR H M	10	12	AB	04	15	
49	4AL15CV057	MANU P	13	12	AB	05	18	
50	4AL15CV058	MEGHANA C G	14	15	AB	04	19	
51	4AL15CV060	MOHANKUMAR SHIVAPPA PUJAR	AB	10	09	02	12	

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Tech
Mijar, Moodbidri - 574 22

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726
DEPARTMENT OF CIVIL ENGINEERING

Assignment Questions

Subject: Construction Management & Entrepreneurship

Subject Code: 15CV61

Assignment 01

1. Define Management. Write the different characteristics of Management.
2. Write the difference between Ghantt chart & Work Breakdown Structures.
3. Explain in detail the different types of plan & different levels of management.
4. What is construction management & explain in brief.

Assignment 02

1. What is labor productivity? List various factors affecting it.
2. Explain in detail the classification of construction equipments.
3. Write a short note on different methods of calculating depreciation.

Assignment 03

1. Write a short note on the following.

a) Quality Assurance
b) Quality Control
c) Importance of safety in construction
d) Ethics & Ethical principles
e) Gifts & Bribes
f) Price Fixing
g) Whistle Blowing

Assignment 04

Multiple choice Question Test

MCQ quiz was conducted to verify the knowledge and to check the understanding of the subject in particular related to the various different topics.

Assignment 05

Asked to prepare the chart by collecting various different articles related to construction, business & engineering economics, entrepreneurship and write a brief report on those articles which they have collected.

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

4/18 Assignment - 01.

1. Define Management. Write the different characteristics of management.

→ According to Laurence Appley - "Management is the accomplishment of results through the efforts of other people".

The different characteristics of management are :

- Management is goal oriented.
- Management is a unifying force.
- Management is a distinct process comprising the functions such as planning, organising, directing and controlling etc.
- Management is universal in character.
- Management is a multi-disciplinary subject.
- Management represents a system of authority - a hierarchy of command and control.
- It is dynamic, not static : Management adopts itself to the social changes and also introduces in methodology.
- Management provides good training to personnel for attaining high skill in all fields.

2. Write the difference between Ghantt chart and work breakdown structure.

→ A WBS is a hierarchical structure showing a logical structure of how the work in the project is organized. It has no time element. It is simply a logical way of viewing how the work is organized. It will typically use the principle of functional decomposition to

functionality or tasks that are required to support it.

A Ghantt chart shows a sequential view of how the work is planned to be completed over a period of time including showing dependencies among items that must be completed in sequence. The items in the Ghantt chart might be organized the same way that the WBS is structured. The importance of a Ghantt chart is to show a timeline and the planned sequence of activities.

---

3. Explain in detail the different types of plan and different levels of management.

→ The different types of plans are;

1) Standing plans
2) Single use plans

- Standing plans:-

Standing plans are those plans which are put to use again and again, for routine and repetitive matters. Once established, standing plans continue to be applied until they are modified.
eg:- Planning for machine breakdown, planning for employee absence.

- Single use plans:-

These plans are non-recurring in nature and deal with problems that probably will not be repeated in the same form in future.

Developed to carry out a course of action that is not likely to be repeated in the future.

The different levels of management are;

⇒ Top level management :-

(CEO's, Board of directors, Managing directors, General managers)

- Determines objectives & policies.
- Designs the basic operating and financial structure of an organization.
- Provides guidance & direction.
- Lays down standards of performance.

⇒ Middle level management :-

(Marketing manager, personnal manager, production manager, project manager)

- Interprets and explains the policies framed by the top management.
- Issues detailed infrastructure.
- Trains other managers.

⇒ Lower level management :-

(supervisor, section head, foreman)

- Plans day to day operations.
- Assigns jobs to workers.
- Provides supervision & control over work.
- Arranges materials, tools & equipments.
- Maintain discipline.

4. What is construction management ? Explain in brief

→ Construction management is a professional service that uses specialized, project management technique to oversee the planning, design and construction of a project, from its beginning to its end.

The purpose of construction management is to control a projects time, cost and quality. Construction management is compatible with all project delivery systems including design-bid-build, design-build, CM at risk and public-private partnerships.

CM specifies project objectives and plans including delineation of scope, budgeting, scheduling, setting of performance requirements and selecting project participants.

16/11/2018

4. What is construction management ? Explain in brief

→ Construction management is a professional service that uses specialized project management technique to oversee the planning, design and construction of a project, from its beginning to its end.

The purpose of construction management is to control a projects time, cost and quality. Construction management is compatible with all project delivery systems including design-bid-build, design-build, CM at risk and public-private partnerships.

CM specifies project objectives and plans including delineation of scope, budgeting, scheduling, setting of performance requirements and selecting project participants.

16/11/2018

4/18 Assignment - 02

1. What is labour productivity ? List various factors affecting it.

→ Labour productivity is a measure of economic growth of a country. It measures the amount of goods & services produced by a labour in one hour. Specifically labour productivity measures the amount of real gross domestic products produced by a labour in a hour.

The factors affecting labour productivity are :-

- Job location / work site.
- Nature of the work.
- Temperature and climatic conditions.
- Time and work hours.
- Availability of resources.
- Shortage of tools and equipments.
- Crews size inefficiency.
- Work area practices.
- Contract agreements.

---

2. Explain in detail the classification of Construction equipments.

→ a] Intermittent type :-

Have intermittent cycles of work. Operated on series of work cycles, each cycle completes in itself.

eg: Power shovel, drag lines, scrappers, concrete mixer..

b] Continuous flow type :-

Have continuous flow of work turned out.

eg: Belt conveyors, pipelines, air compressors.

c] Mixed flow type :-

Combination of both intermittent & continuous flow type. They are completely operated over a definite surface area.

1) Earthwork equipments :

- Earthwork and lifting equipments.

eg: Backhoe, face shovel, Dragline, clamshell.

- Earthwork cutting and moving equipments;

eg: Bulldozers, scrapers, front end loaders.

- Transportation equipments;

eg: Tippers, dump truck, belt conveyor

- Compacting & finishing;

eg: Rollers, graders.

2) Material Hoisting Plant :-

- Mobile cranes : crawler mounted, self propelled, truck mounted.
- Tower cranes : Stationary, travelling, climbing types.
- Hoists : Mobile, fixed.

3) Concrete plant & equipments :-

b] Continuous flow type :-

Have continuous flow of work turned out.

eg: Belt conveyors, pipelines, air compressors.

c] Fluid flow type :-

Combination of both intermittent & continuous flow type. They are completely operated over a definite surface area.

1) Earthwork equipments :

- Earthwork and lifting equipments.

eg: Backhoe, face shovel, Dragline, clamshell.

- Earthwork cutting and moving equipments;

eg: Bulldozers, scrapers, front end loaders.

- Transportation equipments;

eg: Tippers, dump truck, belt conveyor

- Compacting & finishing;

eg: Rollers, graders.

2) Material Hoisting plant :-

- Mobile cranes: crawler mounted, self propelled, truck mounted.
- Tower cranes: stationary, travelling, climbing types.
- Hoists: Mobile, fixed.

3) Concrete plant & equipments :-

- Transporting equipments :- truck mixer & dumpers.
- Placing equipments :- Concrete pumps, buckets, hoists.
- Precasting equipments :- Vibrators, steam curing, surface finish.
- Vibrating equipments :- needle vibrators, plate compactors.

4) Support and utility service :-
Pumping equipment, pipelaying equipment, power generation equipments, welding equipments.

5) Special purpose heavy construction plant :-
Aggregate production plant and rock blasting equipment, hot mix plant and paving equipment, pile driving equipments, bridge & railway construction equipments.

---

3. Write a short note on different methods of calculating depreciation.

→ Depreciation is defined as the expensing of the cost of an asset involved in producing revenues throughout its useful life.

The methods of calculating depreciation are;

- Straight-line :-
Straight line depreciation has been the most widely used depreciation method in US for many years due to its simplicity. To apply the straight line method, a company charges an equal amount of

- Transporting equipments :- truck mixer & dumpers.
- Placing equipments :- Concrete pumps, buckets, hoists.
- Precasting equipments :- Vibrators, steam curing, surface finish.
- Vibrating equipments :- needle vibrators, plate compactors.

4) Support and utility service :-

Pumping equipment, pipelaying equipment, power generation equipments, welding equipments.

5) Special purpose heavy construction plant :-

Aggregate production plant and rock blasting equipment, hot mix plant and paving equipment, pile driving equipments, bridge & railway construction equipments.

---

3. Write a short note on different methods of calculating depreciation.

→ Depreciation is defined as the expensing of the cost of an asset involved in producing revenues throughout its useful life.

The methods of calculating depreciation are;

- Straight-line :-

Straight line depreciation has been the most widely used depreciation method in US for many years due to its simplicity. To apply the straight line method, a company charges an equal amount of

(assets historical cost - the assets estimated salvage value) / the asset's useful life.

> Units of production :-

The units of production depreciation method assigns an equal amount of expense to each unit produced or service rendered by the asset. This method is typically applied to assets used in the production line.

> Sum of years digits :-

Sum of year's digits is a depreciation method that results in a more accelerated write off than straight line, but less accelerated than that of the double declining balance method. Under this method, annual depreciation is determined by multiplying the depreciable cost by a series of fractions based on the sum of the assets useful life digits.

> Double-declining balance :-

The double-declining balance method is a type of accelerated depreciation method that calculates a higher depreciation charge in the first year of an assets life and gradually decreases depreciation expense in subsequent years.

Rawat
11/4/2018

7/4/18 Assignment - 3

1. Write a short note on the following.

> Quality assurance :-

→ Quality assurance is a program covering activities necessary to provide quality in the work to meet the project requirements. Quality assurance essentially involves development, implementation and supports the quality system and guides the organisation towards the goal to achieve quality.

Quality assurance comprises administrative and procedural activities implemented in a quality system so that requirements & goals for a product, service or activity will be fulfilled.

> Quality control :-

Product of uniform acceptable quality is manufactured. The objectives of quality control is : to check the variation during manufacturing to decide about the standard of quality of a product that is easily acceptable by the customer.

Quality control is a process that starts in pre-construction & continues throughout construction, completion and occupancy of project.

> Importance of safety :-

Safety in construction is prime requirement but it is often neglected on work site. The range of construction and building activities involving complex technic...

environment, higher productivity and greater commitment of workers towards work.

> Ethics and ethical principles :-

Ethics describes a generally accepted set of moral principles.

Honesty :- Act with honesty.

Fairness :- Do not seek to obtain a benefit which arises directly or indirectly from the unfair treatment of other people.

Fair reward :- Avoid acts which are likely to result in another party being deprived of a fair reward at work.

Reliability :- Maintain upto date skills and provide services only within your area of competence.

Objectivity :- Identify any potential conflicts of interest & disclose the conflict to any person who would be adversely affected by it.

> Gifts & bribes :-

Bribes are the payment made to a person in a position of trust to corrupt his judgement. It is also known as kickback / pay off.

Gifts is nothing but something acquired without any compensation.

⇒ Price fixing :-

Price fixing is an agreement between participants on the same side in a market to buy or sell a product, service or commodity only at a fixed price.

A practice whereby rival companies come to an illicit agreement not to sell goods or services below a certain price.

⇒ Whistle blowing :-

It is an act of conveying information about a significant moral problem by a present or former employee, outside approved channels to someone, in position to take action on the problems.

It is an exposure to the public or authorities of wrong doing by an organisation, usually by an employee.

21/6/18

MCQ Test - 1.

1. C) Activity.
2. D) None of these.
3. A) Vertical lines.
4. C) Free float.
5. A) Event
6. B) 1900
7. B) Float.
8. D) Same
9. D) all the above.
10. A) Bar chart method.
11. A) Event flow scheduling technique.
12. A) Management
13. D) All the above
14. A) Technical.
15. C) Conceptual.
16. B) Planning and decision making.
17. A) Organizing
18. A) line and staff organization.
19. B) Logistic planning

20. A) Ethics

21. B) Price fixing

22. D) Total quality Management.

23. A) Inspection.

24. B) Quality control

25. C) Quality assurance.

26. B) Safety.

27. A) Policy

28. A) Single use plans

29. B) Budget

30. C) Statutory requirements.

22/30

16/4/18

CBCS SCHEME

USN | 4 | 0 | L | J | 5 | C | V | 0 | 5 | 3 | 15CV61

Sixth Semester B.E. Degree Examination, June/July 2018
Construction Management and Entrepreneurship

Time: 3 hrs. Max. Marks: 80

Note: Answer any FIVE full questions, choosing one full question from each module.

Module-1

1 a. Define Construction management. Explain the objectives of construction management. **(08 Marks)**

b. What are the functions of management? Explain any two of them. **(08 Marks)**

OR

2 a. What is construction planning? List the objectives of construction planning. **(06 Marks)**

b. Explain Bar chart or Gantt chart. Write its limitations. **(04 Marks)**

c. Draw the network for the project based on the following data of events:
Find Early start time, Early finish time, Late finish time, and determine the least number of days required to complete the work. Draw the critical path.

Event	Duration (Days)	Preceders
A	2	-
B	4	-
C	1	A
D	6	B
E	7	C, D

(06 Marks)

Module-2

3 a. Explain the importance of resource management in the construction of a project. **(08 Marks)**

b. Explain (i) Minimum wages act 1948 (ii) Labour production rate of productivity. **(08 Marks)**

OR

4 a. Explain the advantages of utilization of construction equipments in construction field. List the various classifications of equipments. **(08 Marks)**

b. Describe material management and objectives of material management. **(08 Marks)**

Module-3

5 a. Define quality. Describe quality control and quality assurance. **(08 Marks)**

b. Explain the importance of safety in construction. Explain the safety measures during (i) Excavation (ii) Drilling and blasting **(08 Marks)**

OR

6 a. Describe the safety insurance. Explain constructors all risk insurance. **(08 Marks)**

b. Differentiate between morals and values. **(04 Marks)**

c. List the professional rights. **(04 Marks)**

Module-4

7 a. What is economics? List the goals of economics. **(08 Marks)**

b. Differentiate between Microeconomics and Macroeconomics. **(08 Marks)**

OR

8 a. Explain : (i) Time value of money (ii) Simple interest (iii) Compound interest. **(10 Marks)**

b. Mr. X is planning to build his own house. He plans to deposit Rs. 40,000/- every year for next 10 years in a bank. The bank gives 12% interest rate compound annually. Find the maturity value of his account after 10 year. **(06 Marks)**

Module-5

9 a. Explain in brief the role of entrepreneurship in economic development. **(08 Marks)**

b. What do you mean by small-scale industry? List the characteristics of small scale industries. **(08 Marks)**

OR

10 a. What is business plan? Explain the importance of business plan. **(08 Marks)**

b. Explain in detail the contents of a good project report. **(08 Marks)**

* * * * *

Visvesvaraya Technological University, Belagavi

MODEL QUESTION PAPER- 6th Semester , B.E (CBCS) CV

Course : 15CV61 –Construction Management and Entrepreneurship

Time : 3 hours Max Marks : 80

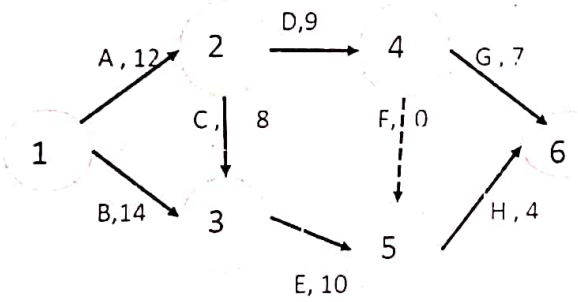
Note : (1) Answer any FIVE full questions selecting any one full question from each module.

(2) Assume missing data suitably and clearly mention in the answer script about it

Module-1

1a	Identify the Stake holders in a construction project and Explain the Roles of Contractor and PMC Consultants	08
1b	Define Lag time and Lead Time in a PND ? explain with diagram the different relationship between predecessor and successor activities using this concept	08

OR

2a	Explain the Concept of Work break down Structure with an Example	06
2b	Using CPM Method determine " Critical activities" and Critical path for the network given below. What is project duration ? 	10

Module-2

3a	List out various Inventory Control Techniques adopted in Material Management and Explain A-B-C analysis ?	08
3b	For a typical Project of Cost Rs Cr 900 , has its Direct Labour cost of 22% of Gross. Productive labour cost is 35% of labour Cost. By optimization of Work , there was 38% reduction in Labour non Productivity as compared to earlier. Estimate the total Cost of Saving in Labour productivity by above process in terms of Rs Cr and in % wrt Project Cost , Labour Cost and Productive labour Cost	08

OR

4a	List out Factors behind the Selection of Construction equipment's perform assigned tasks / Project's need	04
4b	An Excavator with a bucket capacity is 1.5 cum and rated horse power is 180HP is used for excavation of ordinary soil. Following information is available 1. Capital cost of excavator = Rs80 lakhs , Charged to the project : 2.25% per month of capital cost , 2. Employment hrs / month = 250 hrs ,Technical life 5 yrs , salvage value = 10% of Capital Cost 3. Prime mover = diesel , load factor = 0.85 , crank case capacity = 30 lit. , time between oil change = 100 hours. 4. Operational correction factors = 0.7 , load factor = 0.85 , bucket swing factor = 1.00 , bucket fill factor = 0.9 5. Operational manpower cost = Rs 175 / hr	12

	6. Time cycle for 1 operation of excavator = 45sec for 55 min hour. 7. Routine maintenance and major repair cost = 120% of depreciation cost. 8. Diesel rate = rs 70 / lit and lube rate is rs 200 / lit Estimate : • Hourly production rate of the excavator in cum / hr • Cost of ownership and operation in rs/ hr • Unit rate of equipment operation for Excavatorin Rs / cum. • Estimate The Number of Excavator needed to do a Job of Earthwork in Sub Grade having a Compacted Volume Quantity of 70,000 Cum , to be executed in 24 days with 10 hrs working per day. Determine the number of dumpers required for transportation if average lead from borrow area to site is 8kms and dumper have a capacity of 12 cum , its forward speed is 15 kmph , backward speed is 30 kmph , unloading time = 4 min , repositioning time = 2 min. performance efficiency factor = 50min hour time	

Module-3

5a	Briefly Explain the construction Quality process.	06
5b	List out broad principles of quality management systems as outlined under ISO 9000	04
5c	Describe safety measures to be adopted while doing Hot Bituminous Works to avoid accidents	06

OR

6a	Define Values , Morals and Ethics and List out seven ethical principles applicable to construction industry	06
6b	What is importance of tool box meeting and good house keeping in construction safety management?	04
6c	Explain " Quality Audit and its Process"	06

Module-4

7a	Discuss briefly " concept of engineering economic study and its principles"	08
7b	What is the Total Capitalized cost of a building which have construction cost Rs 1,50,000/- immediately , Rs 15000 expenses each year for first 5 yrs and annual year end maintenance cost of Rs 5000/- plus the expenditure of Rs 35000 at the end of each 10years period for replacement purpose ? assume rate of interest = 9.5% P.a	08

OR

8a	Cash Flow for two projects X & Y are given below using annual worth method make a selection from following alternatives : assume min attractive rate of return i*=10% End of Year 0 1 2 3 4 PRO X -50000 5000 17500 30000 42500 PROJ Y -30000 40000 15000 15000 15000	10
8b	What is present equivalent money value of Rs 75,000/- (a) 5 years from now (b) 5 years before today , take discounting rate = 12% compounded quarterly	06

Module-5

9a	Define Micro , small and medium enterprises ? list and explain characteristics of MSME	08
9b	List and Explain the Different sources of Finance for Entrepreneur	08

OR

10a	What id DPR , Discuss the guidelines for the preparation of model project report for starting new venture	08
10b	Explain the stages in Entrepreneur / entrepreneurial process	08

SIXTH SEMESTER B.E Degree EXAMINATION, MAY 2018
Construction Management and Entrepreneurship

Time -3hrs Max Marks-80

NOTE-Answer five full questions, choosing one full questions from each module

MODULE -1

1. (a)Explain Critical Path Method (CPM) **(8 Marks)**
   (b)Explain the construction project organization **(8 Marks)**

OR

2. (a) Explain AOA & AON network **(8 Marks)**
   (b)Write a short note on Construction project formulation **(8 Marks)**

MODULE-2

3. (a)Explain briefly the steps involved in selection process **(8 Marks)**
   (b)Explain communication process **(8 Marks)**

OR

4. (a)Describe the estimation of ownership cost, operational cost and maintenance cost. **(8 Marks)**
   (b)What are the factors which affects the selection of construction equipments? **(8 Marks)**

MODULE-3

5. (a)What is whistle blowing and describe the types of whistle blowing? **(8 Marks)**
   (b)Explain integrity and trustworthiness. **(8 Marks)**

OR

6. (a)Define inspection, What are the type of inspection ? **(10 Marks)**
   (b)What are the functions of inspection? **(6 Marks)**

MODULE-4

7. (a)With an example, explain problem solving process. **(8 Marks)**
   (b)Two types of trucks are available for transportation use the details are as follows.

Particular	Truck A	Truck B
First cost (Rs)	10,00,000	15,00,000
Maintenance cost (Rs) (Annual)	20,000	15,000
Estimated Salvage value (Rs)	21,00,000	5,00,000
Estimated life	5 years	10 years

Both the truck delivers same amount work. Assume interest rate of 70% which truck is to be preferred on PW case. **(8 Marks)**

OR

8. (a) What is the significance of cash flow diagram? Sketch CFD for, **(8 Marks)**
   i) Borrowers point of view ii) lenders point of view.
   (b)Determine the effective interest rate for a nominal annual rate of 8% that is compounded.
   i) Daily ii) Monthly iii) Quarterly iv) Semi annually **(8 Marks)**

MODULE-5

9. (a)Explain the role of MSME in economic development **(6 Marks)**
   (b)Write a short note on following **(10 Marks)**
   i) SIDBI
   ii) KSFC

OR

10. (a)Write short notes on **(10 Marks)**
    i) International Entrepreneurship opportunities
    ii) Venture capital
    (b)Explain in brief the concept of entrepreneurship. **(6 Marks)**

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodabidri, Mangalore Taluk, D.K – 574225
Phone 08258-262725, Fax: 08258-262726

DEPARTMENT OF CIVIL ENGINEERING

VI SEMESTER, SECTION A: RESULT ANALYSIS

SL. NO.	USN	NAME OF THE STUDENTS	15CV651			15CV661			15CV61			15CV62			15CV63			15CV64			15CVL67			15CVP68			TOTAL MARKS	Result
			IA	EX	T	IA	EX	T	IA	EX	T	IA	EX	T	IA	EX	T	IA	EX	T	IA	EX	T	IA	EX	T		
1	4AL14CV013	ANNAPPA P SANI	13	55	68	15	54	69	12	64	76	16	48	64	10	60	70	15	33	48	14	10	24	15	37	52	447	F
2	4AL14CV035	HARSHITH.H.J	14	66	80	13	54	67	14	56	70	16	40	56	13	57	70	16	43	59	14	45	59	15	47	62	464	SC
3	4AL14CV045	M D KEERTHI	14	55	69	12	45	57	13	58	71	19	57	76	14	47	61	15	34	49	14	32	46	15	42	57	440	SC
4	4AL14CV046	MALLIKARJUNA	13	58	71	13	41	54	12	55	67	14	42	56	12	53	65	17	43	60	12	34	46	14	46	60	433	SC
5	4AL14CV050	MOHAMMED SHERIEF	15	41	56	14	41	55	16	58	74	18	31	49	12	55	67	14	47	61	16	43	59	15	61	76	438	SC
6	4AL14CV072	RAKESH H	12	52	64	13	51	64	14	45	59	14	64	78	12	44	56	14	43	57	14	44	58	16	46	62	440	SC
7	4AL14CV086	SHETTY SIDDESH JAYARAMA	16	51	67	13	41	54	15	67	82	16	21	37	12	51	63	16	34	50	12	14	26	14	45	59	412	F
8	4AL14CV111	VARSHA B M	15	54	69	15	67	82	19	61	80	18	56	74	18	57	75	19	47	66	14	38	52	18	59	77	523	FC
9	4AL14CV112	RAGHAVENDRA G R	13	41	54	17	49	66	13	60	73	15	40	55	16	49	65	17	50	67	15	35	50	15	66	81	461	SC
10	4AL14CV113	SEEMA SIDDAPPA SHIRAHATTI	11	41	52	15	44	59	14	44	58	17	31	48	13	28	41	16	28	44	12	35	47	16	57	73	375	SC
11	4AL15CV001	A N YASHWANTH	16	60	76	15	57	72	18	61	79	17	50	67	14	58	72	16	63	79	13	33	46	18	54	72	517	FC
12	4AL15CV003	ABHILASH N M	15	46	61	16	46	62	16	55	71	16	28	44	12	49	61	15	38	53	16	45	61	16	49	65	417	SC
13	4AL15CV004	ADARSHA A	16	65	81	15	57	72	18	64	82	19	67	86	15	46	61	18	56	74	18	35	53	18	54	72	528	FC
14	4AL15CV005	AISHWARYA D	16	50	66	17	58	75	17	66	83	18	54	72	16	47	63	16	54	70	14	34	48	17	70	87	516	FC
15	4AL15CV007	AKHILA F	17	66	83	16	51	67	15	60	75	17	58	75	16	45	61	18	43	61	14	34	48	14	62	76	498	FC
16	4AL15CV008	AKSHATHA M CHAVAN	16	73	89	16	55	71	16	54	70	17	50	67	16	50	66	15	55	70	15	35	50	17	53	70	503	FC
17	4AL15CV012	ANAND P R	16	66	82	13	45	58	17	38	55	19	45	64	13	42	55	15	33	48	12	35	47	16	62	78	440	SC
18	4AL15CV013	ANANYA M H	15	57	72	14	65	79	17	66	83	17	30	47	14	49	63	16	59	75	14	35	49	17	57	74	493	FC
19	4AL15CV015	ANUSHA SUNAGAD	16	58	74	16	56	72	18	57	75	20	60	80	15	65	80	17	48	65	15	35	50	17	60	77	523	FC
20	4AL15CV016	ANUSREE K PRADEEP	18	54	72	16	53	69	16	47	63	19	56	75	15	50	65	18	50	68	15	35	50	16	59	75	487	FC
21	4AL15CV018	ARUNKUMAR A BADMAL	15	40	55	15	47	62	13	64	77	16	63	79	14	60	74	15	51	66	14	34	48	16	63	79	492	FC
22	4AL15CV019	ASHRAYA SHETTY	15	55	70	14	60	74	15	56	71	15	44	59	13	60	73	17	40	57	15	35	50	15	48	63	467	SC
23	4AL15CV020	ASHWATHA NARAYANA M K	15	61	76	15	64	79	17	46	63	20	59	79	15	61	76	17	63	80	14	32	46	18	51	69	522	FC
24	4AL15CV021	ATHIRA SURENDRAN	16	53	69	14	62	76	16	52	68	20	61	81	15	60	75	16	60	76	14	37	51	15	55	70	515	FC
25	4AL15CV023	BASAVARAJ KANKANODI	16	60	76	17	51	68	15	60	75	18	54	72	15	50	65	18	60	78	16	34	50	17	43	60	494	FC
26	4AL15CV025	BHARGAVI B	17	53	70	16	47	63	19	64	83	18	28	46	17	47	64	18	49	67	15	40	55	17	50	67	460	SC
27	4AL15CV026	BHUPATHI L	12	47	59	13	35	48	13	56	69	16	45	61	12	41	53	15	54	69	13	40	53	15	26	41	400	F
28	4AL15CV027	CHAITANYA B S	16	64	80	15	53	68	17	44	61	16	47	63	17	55	72	19	57	76	19	40	59	18	35	53	473	SC
29	4AL15CV028	CHANNANASAPPA S MAKANUR	13	58	71	14	43	57	15	58	73	16	59	75	12	52	64	15	48	63	14	37	51	16	40	56	459	SC
30	4AL15CV030	DAMODHAR SHENOY P	19	62	81	16	49	65	20	60	80	20	44	64	18	65	83	19	63	82	17	35	52	18	42	60	515	FC
31	4AL15CV032	GOVIND RAJ H R	15	66	81	14	49	63	15	57	72	14	37	51	14	63	77	16	60	76	17	37	54	17	38	55	475	SC
32	4AL15CV033	GURU PRASAD M	13	50	63	13	51	64	13	60	73	14	35	49	12	40	52	16	35	51	15	34	49	15	46	61	413	SC
33	4AL15CV034	HANUMANTH Y MADAR	15	65	80	18	56	74	16	63	79	16	48	64	16	51	67	17	52	69	17	34	51	17	45	62	495	FC
34	4AL15CV035	HARSHITA RYAGI	15	50	65	15	59	74	12	50	62	16	66	82	13	44	57	19	51	70	14	40	54	15	36	51	461	SC
35	4AL15CV037	JAGADEESH KRISHNA JOGI	17	65	82	16	60	76	17	52	69	19	67	86	16	53	69	17	48	65	13	41	54	16	23	39	486	FC
36	4AL15CV038	JAGADEESHA	17	59	76	16	61	77	20	64	84	20	63	83	18	51	69	19	50	69	14	44	58	14	64	78	536	FC

38	4AL15CV041	KARIGOWDA	14	71	85	12	47	59	16	52	68	19	42	61	13	37	50	17	31	48	16	36	52	17	54	71	442	SC
39	4AL15CV042	KARTHIK N S	18	71	89	15	57	72	18	74	92	20	35	55	19	70	89	20	44	64	15	49	64	18	59	77	538	FC
40	4AL15CV046	LEISHEMBA SOIBAM	14	50	64	12	41	53	17	56	73	19	60	79	18	60	78	18	65	83	18	49	67	17	74	91	521	FC
41	4AL15CV047	MADHU BHAJANTRI	14	62	76	15	59	74	17	56	73	17	58	75	15	60	75	17	54	71	16	34	50	17	71	88	532	FC
42	4AL15CV048	MAHAMMED JAKEER K	4	60	64	12	48	60	12	68	80	17	34	51	10	59	69	14	45	59	15	54	69	15	55	70	453	SC
43	4AL15CV049	MAHAMMADRASOOL AWATI	14	64	78	14	59	73	15	56	71	18	28	46	10	52	62	17	51	68	14	42	56	16	50	66	464	SC
44	4AL15CV050	MAHESH K N	14	58	72	16	52	68	15	46	61	16	50	66	14	51	65	16	40	56	15	44	59	16	64	80	468	SC
45	4AL15CV053	MANJULA PARAPPA KURBET	17	74	91	17	51	68	19	54	73	20	66	86	18	60	78	20	49	69	18	46	64	18	68	86	551	FC
46	4AL15CV054	MANJUNATH M	12	58	70	12	60	72	12	55	67	17	53	70	15	45	60	16	39	55	15	52	67	15	62	77	471	SC
47	4AL15CV055	MANJUNATHA K S	16	48	64	15	47	62	15	57	72	19	64	83	14	50	64	18	38	56	15	42	57	17	64	81	482	FC
48	4AL15CV056	MANOJ KUMAR H M	14	56	70	12	46	58	15	39	54	15	34	49	14	44	58	15	32	47	14	57	71	16	48	64	400	SC
49	4AL15CV057	MANU P	15	55	70	15	55	70	18	62	80	17	22	39	15	56	71	15	46	61	17	62	79	17	45	62	453	F
50	4AL15CV058	MEGHANA C G	16	73	89	18	60	78	19	76	95	18	64	82	17	44	61	19	56	75	17	74	91	18	62	80	560	FCD
51	4AL15CV060	MOHANKUMAR SHIVAPPA PUJAR	13	32	45	12	48	60	12	48	60	13	28	41	12	38	50	15	31	46	17	50	67	16	35	51	353	SC
		NO. OF PASS	51			51			51			49			51			51			49			50			
		ABSENT	0			0			0			0			0			0			0			0			
		NO.OF FAILS	0			0			0			2			0			0			2			1			
		% RESULT	100			100			100			96.08			100			100			96.08			98.04			
		FACULTY	SYS			VDS			RRB			RMH			SKS			SWT			VDS/ABS/ANKA GS			H.M.S/KRB/SKS/S K			

RESULTS

FCD	1
FC	22
SC	24
FAIL	4
ABSENT	0
MAL	0
PASS	48
% PASS	94.12%

CLASS TOPPERS

PLACE	USN	NAME	MARKS	%
I	4AL15CV058	MEGHANA C G	560	70
II	4AL15CV053	MANJULA	551	68.875
III	4AL15CV038	JAGADEESHA	536	67

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225