1.1.2_CE_file no: 4 –Report on Extract of syllabus change

(2017-18 to 2021-22)

REPORT ON EXTRACT OF SYLLABUS CHANGE (2017-18 TO 2021-22)

DEPARTMENT OF HBS

% Change in syllabus from JNTUA R-15 to AK19 Autonomous Regulations				
S. No	Course code	Name of the Course	Remarks	% of Syllabus content modified
1.	19ABS9905	Engineering Chemistry		40%
2.	19ABS9910	Engineering Chemistry Lab		20%
3.	19AHS9901	CommunicativeEnglish-1	New Course	90%
4.	19AHS9902	Communicative English-1 Lab	New Course	10%
5.	19ABS9901	Algebra and Calculus	New Course	60%
6.	19ABS9906	Differential Equations and Vector Calculus	New Course	100%
7.	19ABS9903	Engineering Physics		60%
8.	19ABS9908	Engineering Physics Lab		60%

Engineering Chemistry- One new unit were incorporated 1.Surface Chemistry, two to three new topics were added in AK 19 which are relevant to engineering applications.

Communicative English- 1 Text book lesson content 100% changed, 80% Grammar and Vocabulary similar

Communicative English-1 Lab 90% syllabus similar and 10% additional topics included. Summarizing and Note making, Information transfer, Precise writing, Paragraph writing are added.

Mathematics:

19ABS9901: Name of the Course changed from Mathematics-1 to Algebra and Calculus, three new units were introduced 1.Matrix Operations and Solving system of Linear equations.2.Quardratic forms and Mean value theorems.5.Special Functions in AK19 which are basics useful for current engineering technologies.

19ABS9906: Name of the Course changed from Mathematics-II to Differential Equations and vector calculus, Five new units were introduced 1.Linear Differential Equations of Higher Order 2.Equations reducible to Linear Differential equations and applications.3.Partial Differential Equations of First and Higher order.4Vector Differentiation.5.Vector Integration in AK19 which are incorporated according to basics of current industry needs

Engineering Physics (19ABS9903)

In engineering physics R15 regulation (15A56101) syllabus had to change 60% of AK19 regulation syllabus in Engineering physics.

Engineering Physics Lab (19ABS9908)

In engineering physics Lab R15 regulation (15A56102) syllabus had to change 60% of AK19 regulation syllabus in Engineering physics Lab.

% Change in syllabus from AK19 to AK20 Autonomous Regulations				
S. No	Course code	Name of the Course	Remarks	% of Syllabus content modified
1	20ABS9905	Engineering Chemistry		0%
2	20ABS9910	Engineering Chemistry Lab		0%
3	20AHS9901	Communicative English	New Course	90%
4	20AHS9902	Communicative English Lab	New Course	10%
5	20ABS9901	Algebra and Calculus		0%
6	20ABS9906	Differential Equations and Vector Calculus		0%
7	20ABS9903	Engineering Physics		0%
8	20ABS9908	Engineering Physics Lab		0%

Communicative English -80% Grammar and Vocabulary similar and additional Vocabulary included in every unit.

Communicative English Lab 90% syllabus is similar, 10% added , AK – 20 Ted talks, Vocabulary, Fun buzz are added activities.

REPORT ON EXTRACT OF SYLLABUS CHANGE (2017-18 TO 2021-22)

DEPARTMENT OF CIVIL ENGINEERING

% Change in syllabus from JNTUA R-15 to AK19 Autonomous Regulations				
S. No	Course code	Name of the Course	Remarks	% of Syllabus content modified
1	19APC0106	Surveying Lab		40
2	19AES0510	Basics of Python Programming Lab	New course	100
3	19APC0115	Building Planning and Drawing	New course	100
4	19APC0118	Computer-aided Civil Engineering Drawing Lab	New course	100
5	19APC0123	Remote Sensing and GIS Lab		20
6	19DMC9901	English for Research Paper Writing	New course	100
7	19DPC0103	Structural Design Lab-I		40
8	19DPC2007	Structural Design Lab-II		40
9	19DML0101	Research Methodology and IPR	New course	100
10	19AES0501	Problem solving and programming	New course	100
11	19ABS9906	Differential Equations and Vector Calculus	New course	100
12	19AES0202	Basics of Electrical and Electronics Engineering-I		20
13	19AES0502	Data Structures	New course	100
14	19ALC0101	Civil Engineering Workshop	New course	100
15	19ABS9913	Probability & Statistics, PDE and Complex Variables	New course	100

16	19APC0101	Mechanics of Materials	New course	100
17	19AMC9901	Biology for Engineers	New course	100
18	19APC0102	Surveying		20
19	19ABS9915	Transform Techniques and Numerical Methods		20
20	19AES0509	Basics of Python Programming	New course	100
21	19AMC9903	Environmental Studies		20
22	19AOE0401	Sensor Networks	New course	100
23	19APR0101	Socially Relevant Project (15 Hrs/Sem)	New course	100
24	19APC0121	Remote Sensing and GIS		20
25	19AMC9902	Constitution of India	New course	100
26	20APC0117	Building Technology	New course	100
27	19DPC0102	Advanced Solid Mechanics		
28	19DPE0102	Advanced Concrete Materials and Technology		20
29	19DPE0105	Energy Efficient Buildings	New course	100
30	19DPC2005	FEM in Structural Engineering		40
31	19DPE2010	Design of Pre-stressed Concrete Structures		20
32	19DMC9904	Constitution of India	New course	100
33	19DPE2015	Design of Industrial Structures	New course	100
34	19DOE2002	Project Management	New course	100
% Change in syllabus from AK19 to AK20 Autonomous Regulations				
1	20APC0115	Land surveying and 2D drafting	New course	100
2	20ABS9922	Mathematical Modeling & Optimization Techniques	New course	100
3	20AHS9905	Universal Human Values	New course	100
		Total no. of subjects in JNTUA syllabus	**76**	
		No.of subjects with >= 20% change in AK19 syllabus	**47**	
		% of subjects with change in contents	**60%**	

With Reference to R15 curriculum of JNTUA, few courses like water resources engineering, Advanced concrete Technology, advanced structural engineering, pre-stressed concrete and building construction management were discarded and having assessed the demand in the civil engineering core area and industry expectations. So to enhance the employability skills we have introduced new courses like design of industrial structures, energy efficient building, building planning and bye laws, sensor networks, civil engineering workshops and python programming subject as well as lab in AK19(2019) regulations. Also in AK20 (2020) regulation we have added new courses like land surveying and 2D drafting, Mathematical

Modeling & Optimization Techniques and Universal Human Values to enhance students' knowledge towards land survey, optimization techniques and human values and ethics.