c) Co-operative Society.
d) Self- Help Group.
e) Non Governmental Organization (NGO).

Unite-IV Importance of Agriculture in Rural Development :

a) Meaning, Nature, and Importance.
b) Role of Agriculture in Indian Economy.
c) Concept of Agro-Tourism.
d) Land Reforms.

Unite-V Importance of Research and Statistics in Rural Development :

a) Concept, Scope and Importance of Research.
b) Meaning, Scope, Importance and Limitations of Statistics.
c) Methods of Data Collection in Rural Development.

Book Recommended:

1. Madan, G.R. : India's Developing Villages (1983)
2. Day, S.K : Community Development
3. Dybes S.C. : India's Changing Villages

४. तिजारे बाबा : सामुदायिक विकास व विस्तार शिक्षण
५. रायखेलकर, ए.आर., अशोक डांगे : सहकार : तत्त्वे आणि व्यवहार.
६. महाजन, वाय. आर. : सांखिकी
७. डॉ. झामरे जी. एन. : भारतीय अर्थव्यवस्था विकास व पर्यावरणात्मक अर्थशास्त्र.
८. प्रा. फाले, कृ.ल. : सहकारी संस्थांसाठी अर्थसहाय्याच्या विविध योजना.

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Notification

No. : 15 /2014 Date :20 /02/2014

Subject : Syllabi for Certificate/Diploma/Advanced Diploma Course in Soil Conservation and Water Management, under U.G.C. Scheme of Career Oriented Programme.

It is notified for general information of all concerned that the authorities of the University have accepted the syllabus for Certificate/Diploma/Advanced Diploma Courses in Soil Conservation and Water Management, under U.G.C. Scheme of Career Oriented Programme in the faculty of Social Sciences as given in Appendix – A which is enclosed with this notification and to be implemented from 2014-2015 Session.

The eligibility criteria and other details along with the scheme of examinations shall be as provided under Ordinance No. 47 of 2005 and Regulation No. 38 of 2005.

Sd/-
(A.D.Chauhan)
Registrar,
Sant Gadge Baba Amravati University.

Appendix – A

Syllabi prescribed for Cer□ficate Course in Soil Conserva□on and Water Management

(Dura□on : One Year)

Marks – 100

Unit-I: **Natural Resources :** Concept, Significance and types of natural Resources, Soil as a natural resources, Types of Soil, Water as Natural Resources, types of water bodies.

Unit-II: **Soil Loss:** Due to Erosion – Water and Wind Erosion, Soil Pollu□on : Types, Causes and effects, Methods of Soil Pollu□on Control :

Unit-III: **Soil Conserva□on :** Importance and need of Soil Conserva□on, factors determining the fer□lity and produc□vity of Soils. Effec□ve methods of Soil Conserva□on.

Unit-IV: **Water Resources :** Consump□on and uses of water, Water Pollu□on : Sources of Water Pollu□on, Control of Water Pollu□on,

Unit-V : **Water Management :** Need of Water Management, Problems of Water Resources Management : Floods, Drought. Methods of Water Management, Rain Water Harves□ng

Prac□cal : **50 Marks**

A) Soil Conserva□on **15 Marks**

i) Use of pH meter for es□ma□on of pH in Soil Samples
ii) Study of Micronutrients in Soil
iii) Collec□on & analysis of Soil samples from local areas

B) Water Management **15 Marks**

i) Use of pH meter for es□ma□on of pH in Water Samples
ii) Es□ma□on of dissolved oxygen in water samples
iii) Es□ma□on of salinity in water samples

Viva-Voce **10 Marks**

Prac□cal Record Book **10 Marks**

Project / field work report **50 Marks**

Project / Field work report should be con□nued to the soil and water problems related with local areas. Project should follows the standard format of research design. Namely □tle, introduc□on, aims and objec□ves, study area, Methodology, Review of literature, Scheme of Chapteriza□on analysis, conclusions and sugges□on, Bibliography

Marks Distribu□on

Theory: 100 marks
(20 marks per unit)

Prac□cal

Two Prac□cal (Each 15 marks)	30 marks.	
Viva-voce	10 marks.	
Record Book	10 marks.	

	Total - 50 marks	50 marks

Project / Field work report 50 marks

Theory	100 marks.
Prac□cal	50 marks
Project /Field work report	50 marks.

	Total -200 marks

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Syllabi prescribed for Diploma Course in Soil Conserva□on and Water Management

(Dura□on : One Year)

Marks – 100

Unit-I: Soil quality : Concept, indicators, assessment, Soil Quality and Erosion, Soil Profile : Structure and texture, Bio-Chemistry of Soil – Water interac□ons, Soil Composi□on

Unit-II : Waste Land Management : Defini□on of waste land, causes of waste land, need for waste land management, Methods of waste land management – Establishment of vegeta□on, Selec□on of plant species, use of fer□lizers, improvement of vegeta□ve composi□on.

Unit-III : Water Resources : Water Cycle, Water Quality : indicators assessment, Rela□on between water quality and soil proper□es – salinity, sodium hazards, boron & fluoride hazards.

Unit-IV : Watershed Management : Concept, iden□fica□on, classifica□on and characteriza□on of watershed. Principles of watershed management, Watershed Planning and Management.

Unit-V : Soil Water Plant Rela□onship : Evapora□on, transpira□on and evapotranspira□on, consump□ve use measurement methods, water uptake & transpira□on by plants. Water Management for problems Soil – Defini□on, suitable irriga□on methods.

Prac□cal **50 Marks**

A) Soil Conserva□on 15 marks

i) Study of Soil Survey equipments
ii) Design and layout of Contour bunding / grabed bunding.
iii) Analysis of Satura□on extract of saline & sodic soils

B) Water Management 15 marks

i) Study of free Co2 in water samples
ii) Study of carbonates and bio-carbonates in water samples
iii) Study of calcium in water samples

Viva-voce 10 Marks
Prac□cal Record Book 10 Marks

Project / field work report **50 Marks**
Project / field work report should follows the standard format of research design.

Marks Distribu□on

Theory		**100 marks.**
Prac□cal		
Two Prac□cal (Each 15 marks)	30 marks.	
Viva-voce	10 marks.	
Record Book	10 marks.	

	Total - 50 marks.	50 marks.
Project / Field work report		50 marks
Theory	100 marks.	
Prac□cal	50 marks	
Project /Field work report	50 marks.	

		Total -200 marks

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Syllabi prescribed for Advanced Diploma Course in Soil Conserva□on and Water Management
(Dura□on: One Year)
Marks – 100

Unit- I : Soil Conserva□on Survey : Soil Survey- Soil Variability, Des□na□on of Soil Survey, Types of Soil Survey, land use capability classifica□ons and their use.

Unit-II: Management of degraded, Waterlogged and other Problema□c Soils : Problem Soil and their distribu□on in India with special reference to Maharashtra Role of Soil Slope, Minerals, Quality of Irriga□on Water, Climate and vegeta□on cover on Salinity and alkalinity of soil, Reclama□on of saline of sodic soils

Unit-III: Water Budget : Na□onal and Global water budget, water conflicts, causes and effects, interstate disputes, Water Rights and legal aspects, Water policy in Maharashtra.

Unit-IV: Irriga□on Water Management : Principles of efficient irriga□on systems, Methods of irriga□on – Surface Methods, Over head methods, Drip & Sprinkles irriga□on. Merit and demerits of various methods, irriga□on efficiency and economics of different irriga□on systems, Major irriga□on projects in Maharashtra.

Unit-V: Soil Degrada□on : Deser□fica□on – Concept, Causes, effects and remedies. Drought : types, effects and remedies. Management strategies for Flood Prone and Drought prone areas. Environmental considera□ons in soil and water resources management.

Practical **50 marks**

(A) **Soil Conservation** 15 marks

i) Determination of water holding capacity of soil
ii) Determination of Gypsum requirement for acidic soil
iii) Measurement of Soil – Moisture by Tensiometer / Gypsum Block/ Neutron Probe.

(B) **Water Management** 15 marks

i) Determination of crop water requirement in drip irrigation / sprinkler irrigation
ii) Determination of electrical conductivity (EC) & pH of irrigation water
iii) Determination of total soluble salts (like Ca, Mg, Na, K) from irrigation water

Viva-voce 10 marks

Practical Record Book 10 marks

Project / Field work Report **50 marks**

Project and field work report should follows the standard format of research design.

Marks Distribution

Theory **100 marks**

Practical

Two Practical (Each 15 marks)	30 marks.	
Viva-voce	10 marks.	
Record Book	10 marks.	

	Total - 50 marks.	**50 marks.**

Project / Field work report **50 marks**

Theory	100 marks.	
Practical	50 marks	
Project /Field work report	50 marks.	

		Total -200 marks

References (For all Courses)

1) Chandana R.C. (1998) - "Environmental awareness" Kalyani Publication, New Delhi.
2) Singh S. (1991) "Environmental Geography" – Prayag Publication, Allahabad.

3) Gleick H.P. (1993) “Water in crisis”, Pacific Institute for studies in Dev., Environmental & Security, Stockholm env. Ins tute, Oxford Uni., Press.

4) Jadhav H. & Bhosale V.M. (1995) “Eenvironment Protection and Laws” - Himalaya Publica on House, Delhi.

5) Rao M.N. & Datta A.K. (1987) “Waste Water Treatment”, Orford & IBH Publication. Com. PVT. LTD.

6) Deshpande Dr. A.P., Chudiwale Dr. A.D., Joshi Dr. P.P., Lely Dr. P.P. “Environmental Studies”, Pimpalapure Publication, Nagpur.

7) Rajgopalan R.R. (2005) “Environmental Studies”, oxford uni., press, New Delhi.

8) Singh R.A. & Singh S.R. (1979) “Water Management : Principle & Practices”, Tara Publica on, Varanasi.

9) Tideman E.M. (1996) “Watershed Management”, Guidelines for Indian conditions, Omega, New Delhi.

10) Rao K.L. (1997) “India’s Water Wealth Orient Longman” , New Delhi

11) Ramarao M.S.V. (1962) “Soil Conservation in India” I.C.A.R. New Delhi.

12) Gurmel Singh, Venkatarman C. Sastry G. (1990) “Manual of Soil & Water Conservation Prac ces, Oxford & J.B.H. publica on, New Delhi.

13) Matter J.R. (1984) “Water Resources, Distribution , Use & Management”, John Viky Maryland.

14) Jones J.A. (1997) “Global Hydrology : Processess, Resource and Environmental Management” Longman.

15) घारापुरे डॉ. विठ्ठल (२०११) “पर्यावरणशास्त्र” (४ थी आवृत्ती) पिंपळापुरे प्रकाशन, नागपुर.

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No fica on

No. : 16/2014 Date : 20/2/2014

Subject: Scheme of equivalence and absorp on for failures students in the paper of M.Com. 102,202,302 & 303 in old scheme of examina ons.

It is no fied for informa on of all concerned that the authori es of the University have decided to provide the scheme of equivalence and absorp on for the failure students in the papers M.Com. 102-Sta s cal Analysis, 202-Corporate Tax Planning & Management, 302-Services Marke ng and Customer Rela onship Management & M.Com 303-Strategic Management in the old scheme of examina ons, to appear at examina on with the papers of new course as men oned in the following table. The said equivalence and absorp on scheme shall applicable on expiry of the a empts in the old course.