

ORDINANCE NO. 16 OF 2015

Examinations leading to the Post Graduate Diploma in Ground Water Exploration and Watershed Management [Semester Pattern – Two Year (Full Time) P.G. Diploma Course] in the faculty of Science, (Amendment) Ordinance, 2015.

Whereas it is expedient to amend an Ordinance in respect of Examinations leading to the Post Graduate Diploma in Ground Water Exploration and Watershed Management [Semester Pattern – Two Year (Full Time) P.G. Diploma Course] in the faculty of Science i.e. Original Ordinance No. 8 of 2010, for the purposes hereinafter appearing, the Management Council is hereby pleased to approve the following Ordinance :

1. This Ordinance may be called "Examinations leading to the Post Graduate Diploma in Ground Water Exploration and Watershed Management [Semester Pattern – Two Year (Full Time) P.G. Diploma Course] in the faculty of Science, (Amendment) Ordinance, 2015".
2. This Ordinance shall come into force from the date of its approval by the Management Council.
3. In para 6 of the Ordinance in respect of Examinations leading to the Post Graduate Diploma in Ground Water Exploration and Watershed Management [Semester Pattern – Two Year (Full Time) P.G. Diploma Course] in the faculty of Science i.e. Original Ordinance No. 8 of 2010 (hereinafter referred to as the main Ordinance)-
 - (i) The sign and words ', B.C.A. (Bachelor of Computer Application) and B.A. with Geography' shall be added after the words 'Engineering faculty', and before the words 'of this University'.
4. The Appendix-A appended to main Ordinance be substituted by the revised Appendix-A appended herewith.

APPENDIX-A
POSTGRADUATE DIPLOMA IN GROUNDWATER EXPLORATION AND WATERSHED MANAGEMENT
(TWO YEAR POSTGRADUATE DIPLOMA COURSE) SEMESTER PATTERN

T- THEORY
P-PRACTICAL

| Sr. No | Paper/ Practical | Subject/Code | Teaching Scheme | | | Examination Scheme | | | | | | | | | |
|--------|------------------|---|-----------------|----|------------------------|-------------------------|---------------------------|-------------------------------|-------|-----------------|------------|------------------------------|-------|-------|-----------------|
| | | | T | P | Total Periods per week | Theory | | | | Practical | | | | Total | |
| | | | | | | Duration of papers(Hrs) | Maxim Marks theory papers | Max. Marks college Assessment | Total | Min. Pass Marks | Max. Marks | Max Marks College Assessment | Total | | Min. Pass Marks |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | Semester-I | | | | | | | | | | | | | |
| 1 | Paper-I | FUNDAMENTALS OF GEOLOGY /1GWM-1 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 2 | Paper-II | FUNDAMENTALS OF WATERSHED /1GWM-2 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 3 | Paper-III | FUNDAMENTALS OF HYDROLOGY /1GWM-3 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 4 | Paper-IV | FUNDAMENTALS OF GROUND WATER /1GWM-4 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 5 | Practical-I | GEOLOGY AND WATERSHED /1GWM-5 | -- | 3 | 3 | -- | -- | -- | -- | -- | 25 | 25 | 50 | 25 | 50 |
| 6 | Practical-II | HYDROLOGY AND GROUNDWATER /1GWM-6 | -- | 3 | 3 | -- | -- | -- | -- | -- | 25 | 25 | 50 | 25 | 50 |
| | | Total | 20 | 6 | 26 | | | | 400 | | | | 100 | | 500 |
| | | Semester-II | | | | | | | | | | | | | |
| 1 | Paper-V | WATER WELL TECHNOLOGY /2GWM-1 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 2 | Paper-VI | HYDROCHEMISTRY /2GWM-2 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 3 | Paper-VII | GEOPHYSICAL EXPLORATION /2GWM-3 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 4 | Paper-VIII | WATERSHED MANAGEMENT /2GWM-4 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 5 | Practical-III | HYDROCHEMISTRY AND WATER WELL TECHNOLOGY /2GWM-5 | -- | 3 | 3 | -- | -- | -- | -- | -- | 25 | 25 | 50 | 25 | 50 |
| 6 | Practical-IV | WATERSHED MANAGEMENT AND GEOPHYSICAL EXPLORATION /2GWM-6 | -- | 3 | 3 | -- | -- | -- | -- | -- | 25 | 25 | 50 | 25 | 50 |
| | | Total | 20 | 6 | 26 | | | | 400 | | | | 100 | | 500 |
| | | Semester-III | | | | | | | | | | | | | |
| 1 | Paper-IX | WATER MANAGEMENT /3GWM-1 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 2 | Paper-X | IRRIGATION WATER MANAGEMENT /3GWM-2 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 3 | Paper-XI | REMOTE SENSING/3GWM-3 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 4 | Paper-XII | REMOTE SENSING APPLICATIONS/3GWM-4 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 5 | Practical-V | IRRIGATION WATER MANAGEMENT /3GWM-5 | -- | 3 | 3 | -- | -- | -- | -- | -- | 25 | 25 | 50 | 25 | 50 |
| 6 | Practical-VI | REMOTE SENSING /3GWM-6 | -- | 3 | 3 | -- | -- | -- | -- | -- | 25 | 25 | 50 | 25 | 50 |
| | | Total | 20 | 6 | 26 | | | | 400 | | | | 100 | | 500 |
| | | Semester-IV | | | | | | | | | | | | | |
| 1 | Paper-XIII | DIGITAL IMAGE PROCESSING /4GWM-1 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 2 | Paper-XIV | GIS- FUNDAMENTALS AND APPLICATIONS/4GWM-2 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 3 | Paper-XV | INTEGRATED WATERSHED MANAGEMENT AND SUSTAINABLE DEVELOPMENT/4GWM-3 | 5 | -- | 5 | 3 | 80 | 20 | 100 | 40 | -- | -- | -- | -- | 100 |
| 4 | Pract.-VII | GIS AND DIGITAL IMAGE PROCESSING /4GWM-4 | -- | 3 | 3 | -- | -- | -- | -- | -- | 25 | 25 | 50 | 25 | 50 |
| 5 | Pract.-VIII | PROJECT /4GWM-5 | -- | 6 | 6 | -- | -- | -- | -- | -- | 75 | 75* | 150 | 75 | 150 |
| | | Total | 15 | 9 | 24 | | | | 300 | | | | 200 | | 500 |

Project College Assessment:- 75* = 50 (Project) + 25 (Seminar)

Note: Whenever the scheme / course content is updated the failures candidates shall have to appear in the examination as per the current scheme in force.

ORDINANCE NO. 17 OF 2015

Examinations leading to the Post Graduate Diploma in Watershed Technology and Management [Semester Pattern.....One Year (Full Time) P.G. Diploma Course] in the faculty of Science, (Amendment) Ordinance, 2015.

Whereas it is expedient to amend an Ordinance in respect of Examinations leading to the Post Graduate Diploma in Watershed Technology and Management [Semester Pattern.....One Year (Full Time) P.G. Diploma Course] in the faculty of Science i.e. original Ordinance No.8 of 2009, for the purposes hereinafter appearing the Management Council is hereby pleased to make the following Ordinance.

- 1) This Ordinance may be called, "Examinations leading to the Post Graduate Diploma in Watershed Technology and Management [Semester Pattern.....One Year (Full Time) P.G. Diploma Course] in the faculty of Science, (Amendment) Ordinance, 2015."
- 2) This Ordinance shall come into force w.e.f. the date of its approval by the Management Council.
- 3) In the Ordinance relating to Examinations leading to the Post Graduate Diploma in Watershed Technology and Management [Semester Pattern.....One Year (Full Time) P.G. Diploma Course] i.e. Original Ordinance No.8 of 2009,(hereinafter referred to as the main Ordinance), in para 6), (i) the words "or M.Sc. Agriculture" be added after the words "M.Sc. Geography" and before the words "or B.Tech." and (ii) the words "or B.Tech. in Agriculture Engineering" be added after the words "Water Resources".
- 4) In Appendix-A, appended to main Ordinance, following corrections shall be carried out.
 - i) under the column No.3 of subject, the subject title of papers No.2 and 3 be substituted as "Remote Sensing in Geosciences and GIS" and "Ground Water Hydrology and Geophysical Exploration" respectively.
 - ii) the notes printed under Appendix-'A' regarding 'PROJECT WORK' shall be substituted as given below-
PROJECT WORK :- * Each student should undertake PROJECT WORK allotted by the Head of the Department in a given area pertaining to Watershed Management. Each student will be responsible for assessing the characteristics of at least one watershed and should submit Project Report (Two copies) by the end of Semester Second.

ORDINANCE NO 18 OF 2015

Examination leading to One Year Post Graduate Diploma course in Non Conventional Energy System Ordinance, 2015.

Whereas it is expedient to provide an Ordinance in respect of Examination leading to One Year Post Graduate Diploma course in Non Conventional Energy System Ordinance, 2015, for the purposes hereinafter appearing, the Management Council is hereby pleased to make the following Ordinance.

- 1) This Ordinance may be called, " Examination leading to One Year Post Graduate Diploma course in Non Conventional Energy System Ordinance, 2015".
- 2) This Ordinance shall come into force w.e.f. the date of its approval by the Management Council.
- 3) Following shall be the Examinations leading to the-
 - (i) Post Graduate Diploma in Non Conventional Energy System, Semester-I - Examination
 - (ii) Post Graduate Diploma in Non Conventional Energy System, Semester-II - Examination
- 4) Duration of each of the above semester shall be six months with an examination at the end of each semester.
- 5) (i) The examinations specified in paragraph 3 above shall be held twice a year at such places and on such dates as may be appointed by the Board of Examinations.
 - (ii) Main Examination of Semester-I shall be held in Winter and Supplementary Examination in Summer.
 - (iii) Main Examination of Semester-II shall be held in Summer and Supplementary Examination in Winter.
- 6) Subject to his/her compliance with the provisions of this Ordinance and of other Ordinances in force from time to time, the following candidates shall be eligible for admission to the Post-Graduate Diploma in Non Conventional Energy System [Semester Pattern.....One Year (Full Time) P.G. Diploma Course] Examinations namely:-
Bachelor Degree in any discipline of Science subjects or B.Sc. (Agri.)

7) Subject to his/her compliance with the provisions of this Ordinance and of other Ordinances (Pertaining to examination in General) in force from time to time, the applicant for admission to examination at the end of the course of study of a particular Semester shall be eligible to appear at it, if:

(i) he/she satisfied the conditions in the table and the provisions thereunder :-

TABLE

| Sr.No. | Name of examination | The student should have completed the term satisfactorily | The student should have passed following examination |
|--------|---|---|--|
| 1 | 2 | 3 | 4 |
| 1 | Diploma in Non Conventional Energy System Semester-I | Semester-I | As indicated in Para 6. |
| 2 | Diploma in Non Conventional Energy System Semester-II | Semester-II | ----- |

(Note –(i) Subjects prescribed and numbered in the scheme of Examinations shall be treated as separate subjects, however, the theory and practical, if any, of the subject shall be treated as separate Head of Passing.

(ii) He/She has complied with provisions of Ordinance pertaining to Examination in general.

(iii) He/She has prosecuted a regular course of study in University Department/College affiliated to the University.

(iv) He/She has in the opinion of the Head of the Department/Principal, shown satisfactory progress in his/her studies.)

8) Papers and the Practicals in ‘which an examinee is to be examined, maximum marks for these and the minimum pass mark which an examinee must obtain in order to pass in the subject and the examination are detailed in the Examination Scheme appended herewith as Appendix-A with this Ordinance.

9) Examination fees for each semester of the examination and also the practical examination shall be as prescribed by the University from time to time.

10) An examinee who is successful at Semester-I, Semester-II examinations under this Ordinance and who obtained 75% or more marks in aggregate of Semester-I, Semester-II Examinations shall be placed in the First Division with Distinction, those obtaining 60% or more but less than 75% shall be placed in the First Division and all other successful examinees shall be placed in the Second Division.

11) (i) Scope of the subjects shall be as indicated in the syllabus.

(ii) Medium of instruction and examination shall be English.

12) Provision of Ordinance No.18 of 2001 relating to an Ordinance to provide grace marks for passing in a head of passing and Improvement of Division (Higher Class) and getting distinction in the subject and condonation of deficiency of marks in a subject in all the faculties prescribed by the Statute No.18 and of Ordinance No.10 relating to Providing for Exemptions and Compartments shall apply to the examination under this Ordinance.

13) An examinee who does not pass or who fails to present himself/herself for the examination shall be eligible for readmission to the same examination on payment of fresh fees and such other fees as may be prescribed.

14) As soon as possible after the examination, the Board of Examinations shall publish a result of the examinees. The result of the examinations shall be classified as above and merit list shall be notified as per Ordinance No. 6

15) Notwithstanding anything to the contrary in this Ordinance no one shall be admitted to an examination under this Ordinance, if he/she has already passed the same examination or an equivalent examination of any Statutory University.

16) Examinees who have passed in all the subject prescribed for Semester-I, Semester-II of the examination of the Diploma course shall be eligible for award of the Post-Graduate Diploma in Non Conventional Energy System [Semester Pattern.....One Year (Full Time) P.G. Diploma Course].

Appendix-A
Scheme of Teaching and examination for the Post Graduate Diploma in Non -Conventional Energy Sources (One Year - Semester Pattern)

| Sr. No. | Sub. Code No. | Paper / Practical No. | Subject | Teaching Scheme | | | Examination Scheme | | | | | | | | | Grand Total | |
|--------------------|---------------|-----------------------|---|-----------------|-----------|----------------------|---------------------------|--------------------------|-------------------------------|-------|-----------------|------------|--------------------------------|-------|--------------------------------|-------------|-----|
| | | | | Theory | Practical | Total Periods / week | Theory | | | | Practical | | | | | | |
| | | | | | | | Duration of Papers (Hrs.) | Max. Marks Theory Papers | Max.Marks Internal Assessment | Total | Min. Pass Marks | Max. Marks | Max. Marks Internal Assessment | Total | Min. Pass Marks | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
| Semester-I | | | | | | | | | | | | | | | | | |
| 1 | 1NCES1 | I | Introduction to Non-conventional Energy System | 4 | - | 4 | 3 | 40 | 10 | 50 | 20 | -- | -- | -- | -- | 50 | |
| 2 | 1NCES2 | II | Solar Thermal Energy | 4 | - | 4 | 3 | 40 | 10 | 50 | 20 | -- | -- | -- | -- | 50 | |
| 3 | 1NCES3 | III | Photovoltaic Effect and its applications | 4 | - | 4 | 3 | 40 | 10 | 50 | 20 | -- | -- | -- | -- | 50 | |
| 4 | 1NCES4 | IV | Wind Energy, Nuclear Energy and Magneto Hydro Dynamic Power | 4 | - | 4 | 3 | 40 | 10 | 50 | 20 | -- | -- | -- | -- | 50 | |
| 5 | 1NCES5 | P-I | Practical I - LAB I | - | 6 | 6 | -- | -- | -- | -- | -- | 40 | 10 | 50 | 20 | 50 | |
| 6 | 1NCES6 | P-II | Practical II - LAB II | - | 6 | 6 | -- | -- | -- | -- | -- | 40 | 10 | 50 | 20 | 50 | |
| | | | Total | 16 | 12 | 28 | | | | 200 | | | | 100 | | 300 | |
| Semester-II | | | | | | | | | | | | | | | | | |
| 1 | 2NCES1 | V | Geo-Thermal Energy, Tidal Energy and Thermoelectric Power | 4 | - | 4 | 3 | 40 | 10 | 50 | 20 | -- | -- | -- | -- | 50 | |
| 2 | 2NCES2 | VI | Bio-mass and Bio-gas Technology | 4 | - | 4 | 3 | 40 | 10 | 50 | 20 | -- | -- | -- | -- | 50 | |
| 3 | 2NCES3 | VII | Introduction to Material Science and Characterization | 4 | - | 4 | 3 | 40 | 10 | 50 | 20 | -- | -- | -- | -- | 50 | |
| 4 | 2NCES4 | VIII | Economics of Energy management Energy Policy | 4 | - | 4 | 3 | 40 | 10 | 50 | 20 | -- | -- | -- | -- | 50 | |
| 5 | 2NCES5 | P-III | Practical - III LAB - 3 | - | 6 | 6 | -- | -- | -- | -- | -- | 40 | 10 | 50 | 20 | 50 | |
| 6 | 2NCES6 | P-IV | Project | - | 6 | 6 | -- | -- | -- | -- | -- | -- | -- | 50 | 20 | 50 | |
| | | | Total | 16 | 12 | 28 | | | | | | | | 100 | | 300 | |
| | | | | | | | | | | | | | | | Grand Total of Semester-I & II | | 600 |