# **REPUBLIC OF CAMEROON**

#### Peace - Work - Fatherland

# ORDER NO.0 0 4 4 6 / MINFOPRA OF 0 3 0CT 2017

To announce a training competitive examination for the recruitment of 10 (ten) student Meteorology Engineers into the National Advanced School of Engineering (ENSPY) of the University of Yaounde I, for the 2017/2018 academic year.

### THE MINISTER OF THE PUBLIC SERVICE AND ADMINISTRATIVE REFORM,

Mindful of the Constitution;

Mindful of decree No. 75/781 of 18 December 1975 to lay down the Special Rules and Regulations governing the corps of Meteorology civil servants, as amended by decree No.76/329;

Mindful of decree No. 94/199 of 7 October 1994 on the General Rules and Regulations of the Public Service, as amended and supplemented by decree No. 2000/287 of 12 October 2000;

Mindful of decree No. 2011/408 of 9 December 2011 to organize the Government;

Mindful of decree No. 2011/410 of 9 December 2011 to form the Government;

Mindful of decree No. 2015/434 of 2 October 2015 to reshuffle the Government;

Mindful of decree No. 2012/537 of 19 November 2012 to organise the Ministry of the Public Service and Administrative Reform;

Mindful of decree No. 2000/696/PM of 13 September 2000 to fix the General System of Government Competitive Examinations,

#### HEREBY ORDERS AS FOLLOWS:

<u>Article 1</u>.- (1) A training competitive examination to recruit 10 (ten) Meteorology Engineers into the National Advanced School of Engineering (ENSP) of the University of Yaounde I, have been announced for the 2017/2018 academic year.

(2) The written part of this competitive examination shall take place on 28 and 29 October 2017 in Yaounde, the only examination centre.

<u>Article 2</u>.- This competitive examination shall be open to all Cameroonians who meet the following conditions:

a) Be 17 (seventeen) years of age at least or 31 (thirty-one) years at most, as at 1<sup>st</sup> January 2017 (be born between 01/01/1986 and 01/01/2000);

b) Be holder of a Bachelor of Science degree or any other equivalent diploma recognized by the Administration of the National Advanced School of NEREINER MINEREINE eering (ENSP) of the University of Yaoundé I obtained in one of **VIRE A**following subjects: **Meteorology, Mathematics** and **Physics**.

#### Article 3.- FILE COMPOSITION

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Candidates' complete files shall be submitted, against a receipt, at the Ministry of the Public Service and Administrative Reform, Department of State Human Resources Development, (4<sup>th</sup> floor, Rooms 405 and 409) or in all Regional Delegations of the Public Service, not later than Friday 13 October 2017. The files shall comprise the following documents:

1. a registration form bearing a CFA 1000 francs fiscal stamp. The forms can be obtained at the Ministry of the Public Service and Administrative Reform or all its

Regional Delegations or downloaded at the following website address: <u>http://www.minfopra.gov.cm;</u>

- 2. a certified true copy of birth certificate signed by a competent civil authority;
- 3. a certified true copy of the required certificate signed by a competent civil authority;
- a certified true copy of the GCE-A/L certificate signed by a competent civil authority;
- 5. an attestation of presentation of the original of the required diploma;
- 6. GCE-A/L transcripts and results slips of the last three years spent in a University institution that has issued the diploma;
- 7. a receipt attesting payment of the sum of CFA 15 000 (fifteen thousand) francs issued by either the Service Head for Direct and Scholarship Competitive Examinations at the Ministry or the Service Head for Recruitment and Training at the Regional Delegations of the Ministry of the Public Service and Administrative Reform;
- 8. a certificate of non-conviction;
- 9. a medical certificate issue by a public sector Medical Officer;
- 10. a curriculum vitae and studiorium;
- 11. four passport-size photographs;

12. an envelope bearing a CFA 500 francs stamp and the candidate's address.

<u>N.B</u>:

- Candidates governed by the Labour Code and fulfilling the conditions laid down in Article 2 shall provide a copy of their contract or decision of employment.
- All incomplete or late files or files containing documents signed by the Police shall be rejected.
- Documents certified by administrative, municipal and judicial authorities shall be less than three months old at the time of submission.

<u>Article 4</u>.- (1) The syllabus of this competitive examination is that of study cycles leading to the award of the **Bachelor of Science degree**.

(2) The written part of this examination that shall take place in Yaounde, the only examination centre, shall be scheduled as follows.

Dates	Paper	Time	Time allowed	Coef.	Eliminatory mark
28 October 2017	General Knowledge	8:a.m 12:p.m.	4 hrs.	2	5/20
	Physics	1: p.m 5:p.m.	4 hrs.	3	5/20
29 October 2017	Mathematics	8:a.m 12:p.m.	4 hrs.	3	5/20
	Language (English for francophone candidates and French for Anglophone candidates)		2 hrs.	2	5/20

(3) The latest time to arrive the examination visation Visa

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<u>Article 5</u>.- The final results of the competitive examination shall be published through an instrument signed by the Minister of the Public Service and Administrative Reform.

Article 6.- This order shall be registered and published wherever necessary.

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Yaounde, 0 3 0CT 2017

THE MINISTER OF THE PUBLIC SERVICE AND ADMINISTRATIVE REFORM



#### SYLLABUS OF THE COMPETITIVE EXAMINATION INTO YEAR 3 OF NATIONAL HIGHER SCHOOL OF ENGINEERING, FIELD OF STUDY: METEOROLOGY

## I- MATHEMATICS

ANALYSIS

- I) Set of real numbers;
  - Properties of IR;
  - Real numbers sequence;
  - Numeric function sequence.
- II) Numeric functions of a real variable
  - Continuity and derivation;
  - Riemann integral;
  - Ordinary differential equation;
- III) Series
  - Series of numbers;
  - Series of functions, integral series and Fourier series.
- IV) Numeric function of several real variables
  - Continuity;
  - Differentiability;
    - Search of extremes;
    - Multiple integrals, curvilinear integrals, surface integrals;
    - Stokes formula.

#### ALGEBRA

- I) Algebraic structure;
  - Groups;
  - Rings;
  - Fields and algebra.
- II) Reduction of endomorphisms into finite dimension
- III) Multilinear algebra
  - Quadratic form;
  - Hermetian form;
  - Scalar product;
  - Euclidean space.

#### PROBABILITY

- I) Combinatory analysis
- II) Probability calculus, Central Limit Theorem
- III) Random variable
- IV) Classic probability laws
- V) Sampling and estimation in statistics
- VI) Hypothesis test
- VII) Regression and correlation

#### **GEOMETRY**

- I) Affine spaces
  - Barycentre
  - Vectorial product, mix product
- II) Curves and surfaces

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#### II- PHYSICS MECHANICS

- Relative Motion And Galilean Invariant;
- Build-Up Dynamics;
- Motion and Energy ;
- Harmonic Oscillators ;
- Reciprocal Force of Unit Square Distance;
- Elementary Dynamics of Solids ;
- Lorentz Transform ;
- Velocity of Light;
- Gravitation and Astronomic Laws ;
- Dynamic Relativity Notions.

#### THERMODYNAMICS

- Temperature, pressure ;
- Quantity of heat and calorimetry;
- Motion and heat ;
- Perfect gas and real gas ;
- Principles of thermodynamics ;
- Latent heat and first order transition.

#### **GEOMETRICAL AND ONDULATING OPTICS**

- The law of geometrical optics ;
- Optical imaging ;
- Centered systems ;
- Optical equipment ;
- Diffuse Light interferometry ;
- Ad infinitum diffraction.

#### **ELECTROMAGNETISM**

- Electric charge ;
- Electrostatic interaction ;
- Calculation of fields and potentials;
- Electrostatic dipole ;
- Magnetic field ;
- Magnetic Force and Energy ;
- Magnetic induction ;
- Maxwell's equations ;
- Propagation of electromagnetic waves ;
- Electromagnetic energy ;
- Oscillating electric dipole.

#### **BASIC CHEMISTRY**

- Chemical thermodynamics ;
- Chemical bond ;
- Atomic science ;
- Chemical Solutions and equilibrium ;
- Descriptive and structural chemistry.

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