

Republic of the Philippines Professional Regulation Commission Manila



"NOT FOR SALE"

PROFESSIONAL REGULATORY BOARD OF AERONAUTICAL ENGINEERING

PROGRAM OF THE AERONAUTICAL ENGINEERS LICENSURE EXAMINATION IN MANILA ON NOVEMBER 16, 17, AND 18, 2021

DATE AND TIME	SUBJECTS	RELATIVE WEIGHT
TUESDAY, NOVEMBER 16, 2021		
7:00 A.M7:45 A.M.	GENERAL IMSTRUCTIONS FILLING OUT OF FORMS	
8:00 A.M12:00 NOON	AERODYNAMICS Fundamentals of Low-High Speed Aerodynamics Application of Aerodynamics to Fixed/ Rotary Wing Aircraft Configurations, Performance, Stability and Control; Wind Tunnels and Applications	25%
2:00 P.M. – 5:00 P.M.	MATHEMATICS Algebra, Trigonometry, Analytical Geometry, Calculus and Differential Equations with Aeronautical Engineering Applications	10%
WEDNESDAY, NOVEMBER 17, 2021		
8:00 A.M12:00 NOON	AIRCRAFT STRUCTURES AND DESIGN Aircraft Design Fundamentals; Structural Loading Conditions; Structural Analysis and Design of Airframe Components; Landing Gears, Engine Mounts and Other Structural Parts; Non- Structural Components Design	20%
2:00 P.M5:00 P.M. THURSDAY, NOVEMBER 18, 2021	AIRCRAFT CONSTRUCTION, REPAIR AND MODIFICATION Aircraft Materials and Processes; Methods and Techniques in Repair and Modification in accordance with Civil Airworthiness Regulations; Manufacturing/Production Processes and Quality Assurance	15%
8:00 A.M 12:00 NOON	AIRCRAFT POWER PLANT Thermodynamics and Power Plant Design and Operation Fundamentals with Applications to Internal Combustion Engine Reciprocating Engines Aircraft Gas Turbines, Pulsejet and Ramjet, Rocket Propulsion System and other Aircraft Power Systems	20%
2:00 P.M5:00 P.M.	ENGINEERING ECONOMICS AND MANAGEMENT LAWS AND ETHICS Principle of Economics and Management as Applied to Aviation Industry; Laws, Rules and Regulations Governing the Practice of Aeronautical Engineering to include PD 1570, Rules and Regulations with Code of Professional Ethics of the Board of Aeronautical Engineering and others	10%
	TOTAL	100%

GENERAL INSTRUCTIONS:

- 1. Check or verify your school building assignments at the PRC official website (<u>www.prc.gov.ph</u>) or through the Notices/ Announcements to be posted at the PRC premises two (2) to three (3) working days before the examination. Bring your NOTICE OF ADMISSION when you verify your school/ building assignment. Visit your school / building prior to the day of the examination.
- 2. Report to the school/building assignment before 6:00 a.m. on the first day of the examination to verify your room and seat number. Be punctual. Late examinees will not be admitted.
- 3. Examinees are required to wear the following attire every examination day:

Male Examinees - White polo shirt or shirts with collar, tucked-in (without any seal,

logo or mark)

Decent pants or slacks

Female Examinees - White blouse or shirts with collar (without any seal, logo or mark)

Decent pants, slacks or skirts

- 4. Bring the following on examination day:
 - a. Notice of Admission
 - b. Official Receipt
 - c. Two (2) or more pencils
 - d. Ball pens with **BLACK ink only**
 - e. One (1) piece long brown envelope
 - f. One (1) piece long transparent/plastic envelope (for keeping your valuables and other allowed items)
 - g. Health forms
 - h. Negative RT-PCR Test Results, if applicable, or Certificate of Quarantine
- 5. The following are **STRICTLY PROHIBITED** inside the examination premises/rooms:
 - a. Books, notes, review materials, and other materials containing coded data/ information/ formula.
 - b. Calculators which are programmable or with embedded functions especially CASIO FX991ES and CASIO FX-991ES plus
 - c. APPLE, SAMSUNG AND OTHER SMART WATCHES, CELLULAR PHONES, EAR PLUGS, TRANSMITTERS, PORTABLE COMPUTERS, BLUETOOTH AND OTHER ELECTRONIC GADGETS/DEVICES WHICH MAY BE USED FOR COMMUNICATION PURPOSES
 - d. Bags of any kind (ladies bag, shoulder bags, attaché case, backpacks, etc.);
 - e. Other examination aides not stated on this program.
- 6. Per Memorandum No. 24 (s.2020)¹, the following precautionary measures and protocols shall be observed and implemented during the conduct of licensure examination such as, but not limited to:
 - i. All examinees shall be required to wear and bring their own protective face mask ² and alcohol-based sanitizers. For identity verification purposes and pre-examination checking of examination paraphernalia, the face mask shall be required to be properly taken off temporarily to show the examinees' face and the inner part of the facemask. Face masks during the progress of the exam shall not be allowed to be taken off.
 - ii. All examination personnel shall be provided with extra protective face masks or face shield and latex gloves.
 - iii. All examinees and examination personnel shall be required to queue upon entry with a one-meter distance radius from other examinees.
 - iv. Body temperature shall be taken through thermal scanners prior entry to the testing venue premises. Those with fever, cough or colds shall not be allowed entry to the testing venues. Affected examinees shall be allowed, however, to take the next licensure exam without additional cost.

¹ Post Enhanced/Local Community Quarantine Interim Guidelines

² Face shield is also required

- v. Physical/social distancing among and between examinees and examination personnel during the entirety of the exam and during their entire stay at the testing venue shall be observed. Congregation, gathering or assembly within the examination rooms, hallways or any area within the testing venue shall be strictly prohibited.
- vi. All examinees and examination personnel shall not be allowed to go outside the examination room during break time and lunch time. They shall be advised to bring their own packed lunch and snacks with them to be placed under their seats, and to be taken out only during break time.
- vii. Proper hand hygiene shall be observed particularly every after use of the restrooms.
- viii. Prior to entry to the examination rooms, examinees shall be required to sanitize their hands and their plastic envelopes with their sanitizers or alcohol.
- ix. Prior to the distribution of the Test Questionnaires/Booklet, examinees shall again be required to sanitize their hands using their alcohol or hand sanitizers. Hand sanitizers thereafter shall be placed in their transparent envelopes and shall be deposited or placed at the designated area of the examination room. The same process shall be done every start of each examination subject.
- x. The testing venues shall be required to conduct thermal scanning procedure including the provision of sanitizing footbath and for their security personnel to implement proper COVID-19 precautionary measures.
- 7. In addition to the above, pursuant to Memorandum No. 68 (s. 2020), the examinees are required to submit RT-PCR Test Results, if failing under the groups stated in DOH Memorandum 2020-258A, or Certificate of Quarantine. Only those with negative results shall be allowed to take the examination. Please see this link https://www.prc.gov.ph/sites/default/files/2020-68Memo.pdf for detailed information.
- 8. Read carefully and follow the instruction on your **NOTICE OF ADMISSION** and **EXAMINEES GUIDE.**

NOTE: PRC WILL NOT BE ANSWERABLE FOR ANY ITEMS THAT WILL BE LOST.

Manila, Philippines September 7, 2021

APPROVED:

ERNESTO B./FERRERAS, JR. Chairman

CERTIFIED CORRECT:

ATTY. OMAIMAH E. GANDAMRA

Officer-in-Charge (PRB Secretariat Division

PRB-AER/D-SRB EBF/OEG/adc