

CITIZEN RESOURCE INFORMATION DEPARTMENT (CRID)  
Drone Imaging and Information Service of Haryana Limited (DRIISHYA)

Scheme and Syllabus of Examination

Drone Pilots for RPAS

**General Engineering – 70 Questions (1 mark each)**

Fundamental concepts and principles common to various branches of engineering covering essential topics in mathematics, physics, and engineering basics.

**General Aptitude – 15 Questions (1 mark each)**

General Aptitude question of graduation level.

**General English – 15 Questions (1 mark each)**

General English question of graduation level.

All the questions shall be of Engineering Graduation Level. Examination shall be computer based MCQ with 100 questions as per above mention topics of 90 minutes duration. Each question will have four options with only one correct answer. Each correct answer will carry one mark and there will be no negative marking. No marks will be given to un-attempted question.

## Co – Pilot for RPAS

### **Verbal Aptitude – 25 Questions (1 mark each)**

Basic English grammar: tenses, articles, adjectives, prepositions, conjunctions, verb-noun agreement, and other parts of speech Basic vocabulary: words, idioms, and phrases in context Reading and comprehension Narrative sequencing

### **Quantitative Aptitude – 25 Questions (1 mark each)**

Data interpretation: data graphs (bar graphs, pie charts, and other graphs representing data), 2- and 3-dimensional plots, maps, and tables Numerical computation and estimation: ratios, percentages, powers, exponents and logarithms, permutations and combinations, and series Mensuration and geometry Elementary statistics and probability

### **Analytical Aptitude – 25 Questions (1 mark each)**

Logic: deduction and induction, Analogy, Numerical relations and reasoning

### **Spatial Aptitude – 25 Questions (1 mark each)**

Transformation of shapes: translation, rotation, scaling, mirroring, assembling, and grouping Paper folding, cutting, and patterns in 2 and 3 dimensions

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## Drone Maintenance Technician

### Part – A (Core Domain: 70 Questions)

1. Different types of drones, drone rules and regulations, drone applications, and important safety precautions.
2. Different drone's mechanical parts, aerodynamics of wings, propellers and disassembly and reassembly of common drone platform with flying practices.
3. Identify and test various electronic SMD components using proper measuring instruments and Identify, place, solder and de-solder and different SMD discrete components and ICs package with due care and following safety norms using proper tools/setup.
4. Measure different type electrical parameters and record the data related with drone hardware.
5. Identification of different type of batteries, battery specifications and their charging techniques used in drone.
6. Test different sensors, their characteristics and repair which are commonly used in different drones.
7. Identify, select and test hardware assembly, driver for BLDC motors.
8. Inspect, test and execute GPS navigation and telemetry module, different RF blocks and antennas used in RF transmitter and receiver.
9. Test and troubleshoot Flight Controller Board (FCB), Electronic Speed Controller (ESC) and its associated peripherals.
10. Calibrate and troubleshoot drone gimbals and drone payload.
11. Identify and resolve common error messages and corrections by Software debugging.
12. Inspect, test and execute primary and secondary servicing with troubleshoot malfunctioning, and repair issues discovered

### Part – B (General Aptitude : 15 Questions – Graduation Level)

### Part – C (General English : 15 Questions – Graduation Level)

All the questions shall be of Engineering Graduation Level. Examination shall be computer based MCQ with 100 questions as per above mention syllabus of 90 minutes duration. Each question will have four options with only one correct answer. Each correct answer will carry one mark and there will be no negative marking. No marks will be given to un-attempted question.

## Team Lead Survey

### **General Engineering – 70 Questions (1 mark each)**

Fundamental concepts and principles common to various branches of engineering covering essential topics in mathematics, physics, and engineering basics.

### **Managerial Competencies and General Aptitude – 20 Questions (1 mark each)**

General managerial skills and competency aptitude of graduation level.

### **General English – 10 Questions (1 mark each)**

General English question of graduation level.

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