



EAST AFRICAN SCHOOL OF AVIATION EXAMINATION

ENGINEERING SECTION

DIPLOMA IN AERONAUTICAL ENGINEERING

SUBJECT: AIRCRAFT PROPELLER SYSTEM

STREAM: MODULE 2 (A/ E)(march)

Duration: 3 Hrs.

DATE:: 11/04/2017

TIME: 9.00 – 1200 PM

INSTRUCTIONS TO CANDIDATE:

1. *This paper consists of **TWO (2)** printed pages.*
2. *Answer All Question*

- 1 a) State the pre-run checks to be carried out on a turbo propeller engine. **(15marks)**
b) State five safety features found on a propeller. **(5marks)**
2. With the aid of diagrams, explain five forces acting on a propeller while it is operating. **(20marks)**
3. With the aid of a diagrams, explain in detail how a propeller pitch change governor works. **(20marks)**
- 4.a) State five methods of increasing the ability of a propeller to absorb power stating their limitations **(10marks)**
b) State five critical instruments used to monitor the operation of a turbo propeller engine **(5marks)**
c) State five reasons why ice elimination on a propeller is necessary **(5marks)**
5. a) State ten checks that are mandatory to be carried out after installation of a variable pitch propeller. **(10marks)**
b) Explain the operation of an automatic feathering system. **(10marks)**