

QUESTION BANK

Vol 1

JAR-FCL
Type Examples

Copyright 2012 Pooleys Flight Equipment Ltd

ISBN. 0-902037-49-8

First Edition published 2000

Reprinted 2012

This book is intended as a training aid and not a mandatory document. All rights reserved. No part of this book may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system, without permission from the publisher in writing.

Pooleys Flight Equipment Ltd

Telephone: +44(0)208 953 4870

Facsimile: +44(0)208 953 2512

Email: sales@pooleys.com

Website: www.pooleys.com

QUESTION BANK

Vol 1

by Mike Burton

General Knowledge

Systems

Powerplants

Instruments

Electrics

Electronics

Mass & Balance

Performance

Principles of Flight

Propellers

Preface

The questions contained within this book are representative of the questions that may be encountered in the J.A.R examination. The objectives of the book are to draw your attention to the level of detailed knowledge and breadth of knowledge required to achieve a pass in the J.A.R examinations.

It is very important that the student should practice the reading of questions, and answering the question that has been asked. Do not assume the question has asked anything more than it really has. Study hard, regularly, and practice question answering regularly.

Good Luck with your studies, and your future. I wish you well!

Mike Burton
Aviation Instructor
Author and Consultant.

CONTENTS

Aircraft General Knowledge. Airframes, Systems, and Powerplants. Paper 1 **Aircraft General Knowledge. Airframes, Systems, and Powerplants. Paper 2**

Which Include:

Airframes
Hydraulics
Undercarriages.
Tyres.
Brakes.
Air-conditioning.
Pressurisation.
Fuel.
Fuel Systems.
Fuelling Precautions.
Powerplants. (Piston and Gas Turbine Engines)

Aircraft General Knowledge - Instruments, Electrics and Electronics Paper 1 **Aircraft General Knowledge - Instruments, Electrics and Electronics Paper 2**

Which Include:

Instruments
Electronic Flight Instruments.
Autoflight.
Autoland.
Electrical Supplies.
Logic
Semi Conductors.
Flip Flops.
Electronics.

Loading - Paper 1. **Loading Mass & Balance - Section II** **Performance - Paper 1.** **Performance Aeroplanes - Section II** **Principles of Flight - Paper 1** **Principles of Flight - Paper 2**

Which Include:

Theory of Flight
Controls
Duplicate Inspections
Transonic Flight.
Supersonic Flight.
Propellers

Technical General Paper 1

Which Include:

Principles of Flight.
Systems.
Structures.
Undercarriages.
Tyres.
Brakes.
Hydraulics
Air Conditioning and Pressurisation.
Instruments.
Electrics

AIRCRAFT GENERAL KNOWLEDGE

AIRFRAMES SYSTEMS AND POWERPLANTS – PAPER 1.

1. On an aircraft which employs stressed skin construction:-
 - a) the skin of the airplane takes no part of the load.
 - b) the skin of the airplane takes all of the structural load.
 - c) the aircraft skin is designed to take part of the load.
 - d) the skin is fabric which is stretched over a structure, which in turn takes all of the load.

2. Aircraft wing construction which employs the principle of the skin taking part of the load is termed:-
 - a) Monocoque.
 - b) Stressed Skin.
 - c) Semi Monocoque.
 - d) Warren or Box Girder.

3. The component of an aircraft wing which can be considered to be the primary structural member is called:-
 - a) the rib.
 - b) the main spar.
 - c) the control surface spar.
 - d) the lateral datum.

4. The Control Surfaces on a wing are usually attached to:-
 - a) the main spar.
 - b) the rear spar.
 - c) the torque tube.
 - d) the wing trailing edge stiffeners.

5. On what type of structure does the skin take none of the structural load?:-
 - a) stressed skin.
 - b) monocoque.
 - c) box or warren girder.
 - d) semi monocoque.

6. In normal flight, what is the position of the Emergency Lighting Switch?:-
 - a) ON
 - b) OFF.
 - c) OPEN.
 - d) ARMED.

AIRCRAFT GENERAL KNOWLEDGE

AIRFRAME SYSTEMS AND POWERPLANTS – PAPER 1

ANSWERS

1. - c

2. - c

3. - b

4. - b

5. - c

6. - d

7. - c

8. - a

9. - d

10. - c

11. - a

12. - d

13. - b

14. - c

15. - b

16. - b

17. - b

18. - a

19. - a

20. - a

21. - d

22. - b

23. - c

24. - a

25. - d

26. - d

27. - d

28. - d

29. - a

30. - b

31. - d

32. - c

33. - a

34. - b

35. - d

36. - c

37. - b

38. - b

39. - d