

THE AERONAUTICAL SOCIETY OF INDIA

IMPORTANT INFORMATION FOR STUDENT MEMBERS

A. FOR STUDENTS OF SECTION 'B' MODIFIED SYLLABUS:

The examination of following Optional subjects will be conducted in December 2011 session.

Sr. No.	CODE	SUBJECT
1	OS 4	Vibration & Aeroelasticity
2	OS 6	Industrial Engineering
3	OS 8	Statistics & Quality Control
4	OS 11	Rockets & Missiles
5	OS 12	Introduction to the Finite Element Methods
6	OS 13	Computational Fluid Dynamics
7	OS 14	Optimization Methods in Engineering Design
8	OS 15	Non Destructive Evaluation
9	OS 16	Ground Handling & Support Systems
10	OS 17	Introduction to Automatic Flight Control Systems
11	OS 18	Introduction to Wind Engineering

The student members who wish to appear in the Optional Subject must intimate this Head Office in writing the name of the Optional subject immediately **latest by 30th September 2011.**

B. FOR STUDENT MEMBERS APPEARING FIRST TIME IN SECTION 'B'.

- 1 The student members are required to Register for Section B by making payment of Registration charges of Rs.5000/-. They have also to pay first installment of Composite Fee (For life membership of: Rs.750/-).
- 2 Submit original "6 week-workshop Training" certificate. The certificate must indicate that the training has been undertaken in any 3 out of 7 shops listed in the syllabus for minimum 2 weeks in each shop.

C. IMPORTANT INFORMATION FOR SUTDENT APPLYING FOR DEC 2011 SESSION EXAMINATION.

Send additional Demand Draft of Rs.100/- along with Examination Application for dispatch of Acknowledgement Card, Admit card and Result Sheet by DTDC Courier/Regd. Post / Speed Post. Do not affix stamps on the two envelopes. Write address of the Society at the back of each envelope. Also indicate on top of the envelope the mode by which you want it to be dispatched viz speed post or Registered Post or DTDC Courier.

D. Students taking Section A subject(s) for improvement, along-with Section B subject (s) may have to face if the dates of the two are coinciding.

E. Student members of Section A and Section B Registered with payment of Rs.5000/- as registration charges will not be required to pay Annual subscription of Rs.500/- per year. All other students are required to pay Annual Subscription of Rs.500/- for year 2011-12, if not paid earlier along with June,2011 exam session.

F. Those students who have completed Section 'A' but have not been able to complete the course (Both Section A and Section B) within the prescribed time limit of 8 years, can register again for Section B on payment of Rs.5000/- as Registration Charges. These students will get 4 years to complete section 'B'. However, they will have to pass all the ten subjects of Section B and no credit will be given for Section 'B' subjects already cleared by them.

G. FOR STUDENT MEMBERS WHO HAVE APPEARED FOR SECTION 'B' (MODIFIED SYLLABUS).

These students should apply for issue of P. C. and C. M. S. only when they have completed the following:-

- (a) Have passed all the ten subjects of Section B.
- (b) Have undergone six week Laboratory experiments and have submitted the certificate in this regards.
- (c) Have submitted two copies of the project report on a topic selected for the elective subject and the project report has been evaluated and found satisfactory. Evaluation will take 4-6 weeks (approx).
- (d) Have submitted a Demand Draft of Rs.1000/- (for project evaluation).

Important Information for student Members of Modified Syllabus

I Laboratory Training

- 1. 6 weeks Lab training is included in the curriculum of Section B.
- 2. The student member will undergo the Laboratory Training under his own arrangement in any AICTE approved Institute offering Graduate Engg. Degree Course after passing at least 5 subjects of Section 'B'.
- 3. The student member will be required to undertake Laboratory Experiments and related studies in any six out of list of total 14 experiments (List given below)
- 4. The student will obtain a Certificate from the Institute stating that he has successfully completed the required number of experiments (six). The Certificate must be signed by Head of the Deptt/Head of the Institute and must be on the Institute's letter-head and submit the same to this head office.
- 5. Release of the Completion Certificate will be subject to successful completion and submission of the certificate at Sub-Para (4) above.

List of Experiments for (1) Aero Mechanical Stream (2) Maintenance & Production Stream

(Mechanical):

1. Calibration of test section of a subsonic wind tunnel.	2. Pressure distribution over a circular cylinder.
3. Pressure distribution over an aerofoil at different angles of attack.	4. Flow visualization in subsonic wind tunnel.
5. Pressure distribution over a diamond airfoil in a supersonic tunnel.	6. Stress-stain curve for ferrous & non ferrous alloy materials for tensile load.
7. Shear centre for open and closed section.	8. Bending of beams.
9. Experiments of spring-mass, spring-mass-damper	10. Determination of heating values of

system.	fuel.
11. Characteristics of a centrifugal blower.	12. Study of piston engine/jet engine in detail.
13. Study of all metal airplane-different components.	14. Study of flight instruments Altimeter, Air Speed Indicator and Mach Meter.

List of Experiments for (1) Avionics Stream (2) Maintenance & Production Stream (Electrical):

A. GENERAL AERONAUTICS

1. Study of all metal airplane-different components.
2. Study of flight instruments Altimeter, Air speed Indicator and Mach Meter.
3. Gyroscope and gyro based instruments.
4. Study of piston engine/ jet engine in detail.

DIGITAL ELECTRONICS

5. Multiplexer/Demultiplexer Circuits and Encoder/Decoder Circuits.
6. Timer Circuits, Shift Registers, Binary Comparator Circuits.

B. AVIONICS DATA BUSES

7. Addition and Subtraction of 8-bit and 16-bit numbers.
8. Sorting of Data in Ascending & Descending order.
9. Sum of a given series with and without carry.
10. Greatest in a given series & Multi byte addition in BCD mode.
11. Interface programming with 4 digit 7 segment Display & Switches & LED's.
12. Study of Different Avionics Data Buses.
13. MIL-Std-1553 Data Buses Configuration with Message transfer.
14. MIL-Std-1553 Remote Terminal Configuration.

II. Project Work:-

1. 6 week Project Work is included in the curriculum of Section B.
2. The Student member will undertake the project work relating to one of the Optional subjects listed in the syllabus after passing the Optional subject.
3. The student member will undertake literature survey and prepare a Project Report and submit 2 copies of the same to the Head Office along with a demand draft of Rs.1000/-. Head Office will get the same evaluated by the Examiner of the subject. Evaluation of project will take 6-8 weeks (approx.).
4. It will be mandatory to submit the Project Report and its subsequent gradation by the Examiner for release of the Completion Certificate.