Generic Exam Outline (2016 onwards)

(2 hour paper, marked out of 60)

Short answer Questions (Total 20 marks, 2-5 marks / Question)

Questions on all sections of Fluids 1, proportions will change year on year.

Long Questions (Total 40 marks, 20 marks / Question)

(Answer 2 from 3. Questions set in the exam will come from the 4 possibilities below)

Q Application of Fluid Statics (Buoyancy, hydrostatic thrust, or hydrostatic equation. Note, reproduction of derivations will not be asked)

Q Application of Bernoulli's equation - may bring in elements of "real flow behaviour" section

Q Control Volume analysis question including the derivation AND application of either Actuator Disc Theory OR Sudden Expansion/Contraction analysis (Expect changes in notation or an additional approximation but this will not change the derivation process)

Q Potential flow Question- may bring in elements of "real flow behaviour" section

Generic Exam Outline (2015)

(2 hour paper, marked out of 100)

Short answer Questions (Total 40 marks, 3-8 marks / Question)

Questions on all sections of Fluids 1, proportions will change year on year. Each question 2-5 marks

Long Questions (Total 60 marks, 30 marks / Question)

(Answer 2 from 3. Questions set in the exam will come from the 4 possibilities below)

Q Application of Fluid Statics (Buoyancy, hydrostatic thrust, or hydrostatic equation. Note, reproduction of derivations will not be asked)

Q Application of Bernoulli's equation - may bring in elements of "real flow behaviour" section

Q Control Volume analysis question including the derivation AND application of either Actuator Disc Theory OR Sudden Expansion/Contraction analysis (Expect changes in notation or an additional approximation but this will not change the derivation process)

Q Potential flow Question- may bring in elements of "real flow behaviour" section

Generic Exam Outline (upto 2014)

(3 hour paper, marked out of 100)

Short answer Questions (Total 40 marks, 4 marks / Question)

Questions on all sections of Fluids 1, proportions will change year on year

Long Questions (Total 60 marks, 20 marks / Question)

(Answer 3 from 5)

Q1 Application of Fluid Statics (Buoyancy, hydrostatic thrust, or hydrostatic equation. Note, reproduction of derivations will not be asked)

Q2 Application of Bernoulli's equation - may bring in elements of "real flow behaviour" section

Q3 Control Volume analysis question – may bring in elements of "real flow behaviour section"

Q4 Derivation AND application of either Actuator Disc Theory OR Sudden Expansion/Contraction analysis (Expect changes in notation or an additional approximation but this will not change the derivation process)

Q5 Potential flow Question- may bring in elements of "real flow behaviour" section