

Innovative Ship Design

- Midterm Exam -

April 7th, 2012

Part I. Determination of Principle Dimensions, 13:00–13:50 (50 minutes)

Part II. Propeller and Main Engine Selection, 13:50–14:40 (50 minutes)

Part III. Freeboard Calculation, 14:40–15:30 (50 minutes)

Part IV. Mixed Problems, 15:30–16:00 (30 minutes)

Name	
SNU ID #	

Hurry!!!

Problem Number					Total
		1.1	1.2	2	
Grader	Max	10	10	10	30
	Score				

1. Explain the meaning of the following abbreviations:

1.1. Principle Dimensions

L_{BP} :

B_{mld} :

D_{mld} :

T_{design} :

$T_{scantling}$:

C_B :

C_M :

C_{Wp} :

C_P :

$DWT_{scantling}$:

DWT_{design} :

LWT:

1.2. Principle Particulars

R_t :

V_s :

S.M. :

F_n :

C_R :

EHP :

DHP :

BHP :

RPM :

NCR :

MCR :

NMCR :

Ballast water:

Gross Tonnage:

2. Answer the following questions.

- Explain what are GZ and GM in geometric aspect.
- Explain what do GZ and GM represent.
- Explain how to determine the position of M.

