

**CERTIFICATES OF COMPETENCY IN THE MERCHANT NAVY –
MARINE ENGINEER OFFICER**

EXAMINATIONS ADMINISTERED BY THE
SCOTTISH QUALIFICATIONS AUTHORITY
ON BEHALF OF THE
MARITIME AND COASTGUARD AGENCY

STCW 95 SECOND ENGINEER REG. III/2 (UNLIMITED)

042-24 – ENGINEERING DRAWING

WEDNESDAY, 30 MARCH 2011

1300- 1700 hrs

Examination paper inserts:

Drawing Fig Q1

Notes for the guidance of candidates:

Candidates should attach their drawing to the examination workbook front sheet

Materials to be supplied by examination centres:

Drawing Board
Candidate's examination workbook
A2 Drawing Paper
Tee Square

ENGINEERING DRAWING

Attempt ALL parts of the questions

Marks for each part of the question are shown in brackets

1 Fig Q1 shows details of a Cooler Drain Valve.

(a) Draw TWICE FULL SIZE in FIRST ANGLE PROJECTION using the centreline positions shown in Fig Q1(a):

(i) a sectional end elevation of the assembled valve in the fully open position and viewed from Arrow B; (60)

(ii) an elevation viewed from Arrow A. (20)

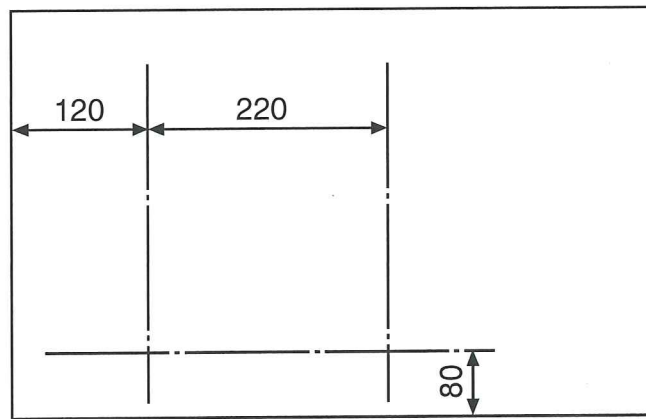


Fig Q1(a)

(b) Complete the drawing by adding the following:

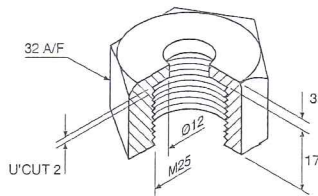
(i) a parts list with the individual items clearly identified on the assembly drawing; (12)

(ii) the projection symbol; (1)

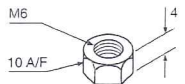
(iii) the scale; (1)

(iv) six main dimensions of the assembled valve. (6)

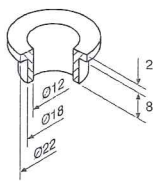
The drawing should be in accordance with B.S 308:1993 and hidden details should be omitted.



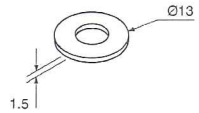
GLAND NUT



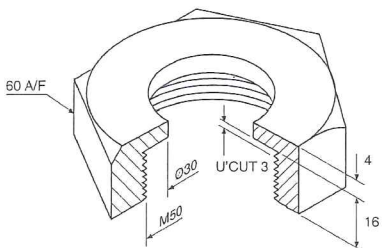
LOCKNUT



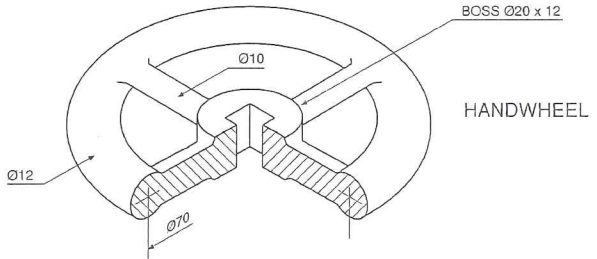
GLAND



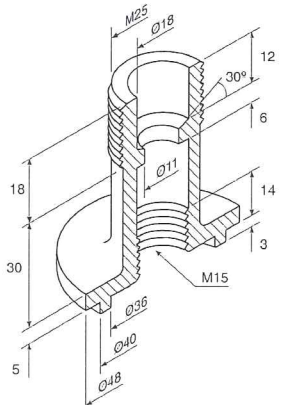
BOSS Ø20 x 12



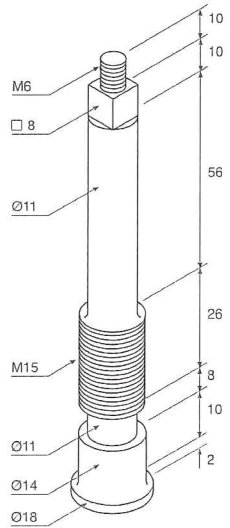
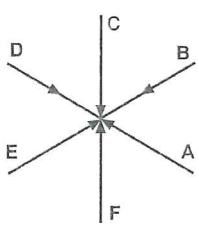
VALVE BODY NUT



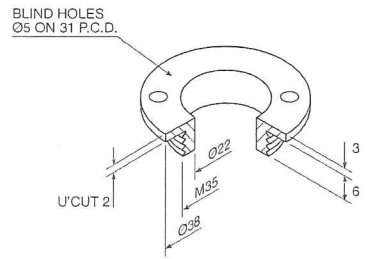
HANDWHEEL



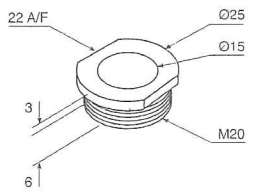
COVER



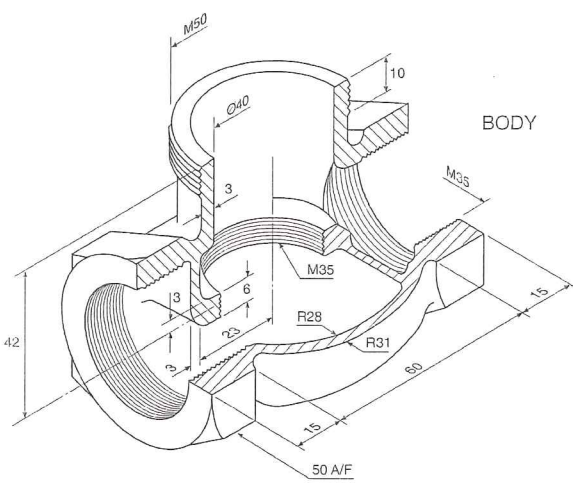
SPINDLE



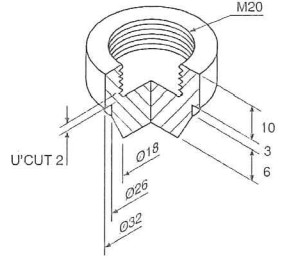
VALVE SEAT



LOCKNUT



BODY



VALVE

ALL ITEMS BRASS
UNSPECIFIED RADII AND DIMENSIONS
ARE LEFT TO THE DISCRETION
OF THE CANDIDATE

MARCH 2011	TITLE	
TS042 - 24	DETAILS OF COOLER	ISOMETRIC
QUESTION 1	DRAIN VALVE	Dim. in mm