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B.Tech. Degree V Semester Regular/Supplementary Examination in Marine Engineering November 2022

19-208-0506 MARINE ENGINEERING DRAWING (2019 Scheme)

(All dimensions are in mm. Missing dimensions can be assumed suitably)

Maximum Marks: 60

Time: 4 Hours

Course Outcome

On successful completion of the course, the students will be able to:

CO1: On completion of this course the student will be able to draw the assembly drawing of machine parts given the views of components.

CO2: Drawing: Advanced marine machinery assembly drawings.

Bloom's Taxonomy Levels (BL): L1 – Remember, L2 – Understand, L3 – Apply, L4 – Analyze,

L5 – Evaluate, L6 – Create

PO – Programme Outcome

		Marks	BL	CO	PO
I.	Draw the following view of the Starting Air pilot valve shown in figure 1.	25	L3	1	1
(a)	Front elevation in section showing valve assembled.	10	L3	1	1
(b)	Plan.				
OR					
II.	Draw the following view of the cylinder relief valve shown in figure 2.	25	L3	1	1
(a)	Right half sectional elevation.	10	L3	1	1
(b)	Plan.				
OR					
III.	Draw the following view of the Stop valve (Piston type) shown in figure 3.	30	L3	2	1
(a)	Front elevation in section through braches showing valve assembled.	10	L3	2	1
(b)	Plan.				
OR					
IV.	Draw the following view of the Four stoke piston and rod shown in figure 4.	30	L3	2	1
(a)	Front elevation in section showing valve assembled.	10	L3	2	1
(b)	Plan.				

(P.T.O.)

British Standard Pipe Thread - Parallel (BSPP/BSPPF) Inner					Tap			
Outer		Diameter	Threads		Pitch	Thread		Drill
Nomina l	Dash	Diameter	Male Thread	Pitch	per	Diameter	Height	Diameter
Size	Size	(mm)	(mm)	(mm)	inch	(mm)	(mm)	(mm)
1/8"	02	9.728	8.566	0.907	28	9.147	0.581	8.7
1/4"	04	13.157	11.445	1.337	19	12.301	0.856	11.6
3/8"	06	16.662	14.95	1.337	19	15.806	0.856	15
1/2"	08	20.955	18.631	1.814	14	19.793	1.162	19
5/8"	10	22.911	20.587	1.814	14	21.749	1.162	20.75
3/4"	12	26.441	24.117	1.814	14	25.279	1.162	24.5
7/8"	14	30.201	27.877	1.814	14	29.039	1.162	28
1"	16	33.249	30.291	2.309	11	31.77	1.479	30.5
1 1/8"	18	37.897	34.939	2.309	11	36.418	1.479	35
1 1/4"	20	41.91	38.952	2.309	11	40.431	1.479	39.5
1 3/8"	22	44.323	41.365	2.309	11	42.844	1.479	41.5
1 1/2"	24	47.803	44.845	2.309	11	46.324	1.479	45
1 3/4"	28	53.746	50.788	2.309	11	52.267	1.479	51
2"	32	59.614	56.656	2.309	11	58.135	1.479	57
2 1/4"	36	65.71	62.752	2.309	11	64.231	1.479	63
2 1/2"	40	75.184	72.226	2.309	11	73.705	1.479	72.5
2 3/4"	44	81.534	78.576	2.309	11	80.055	1.479	79
3"	48	87.884	84.926	2.309	11	86.405	1.479	85.5

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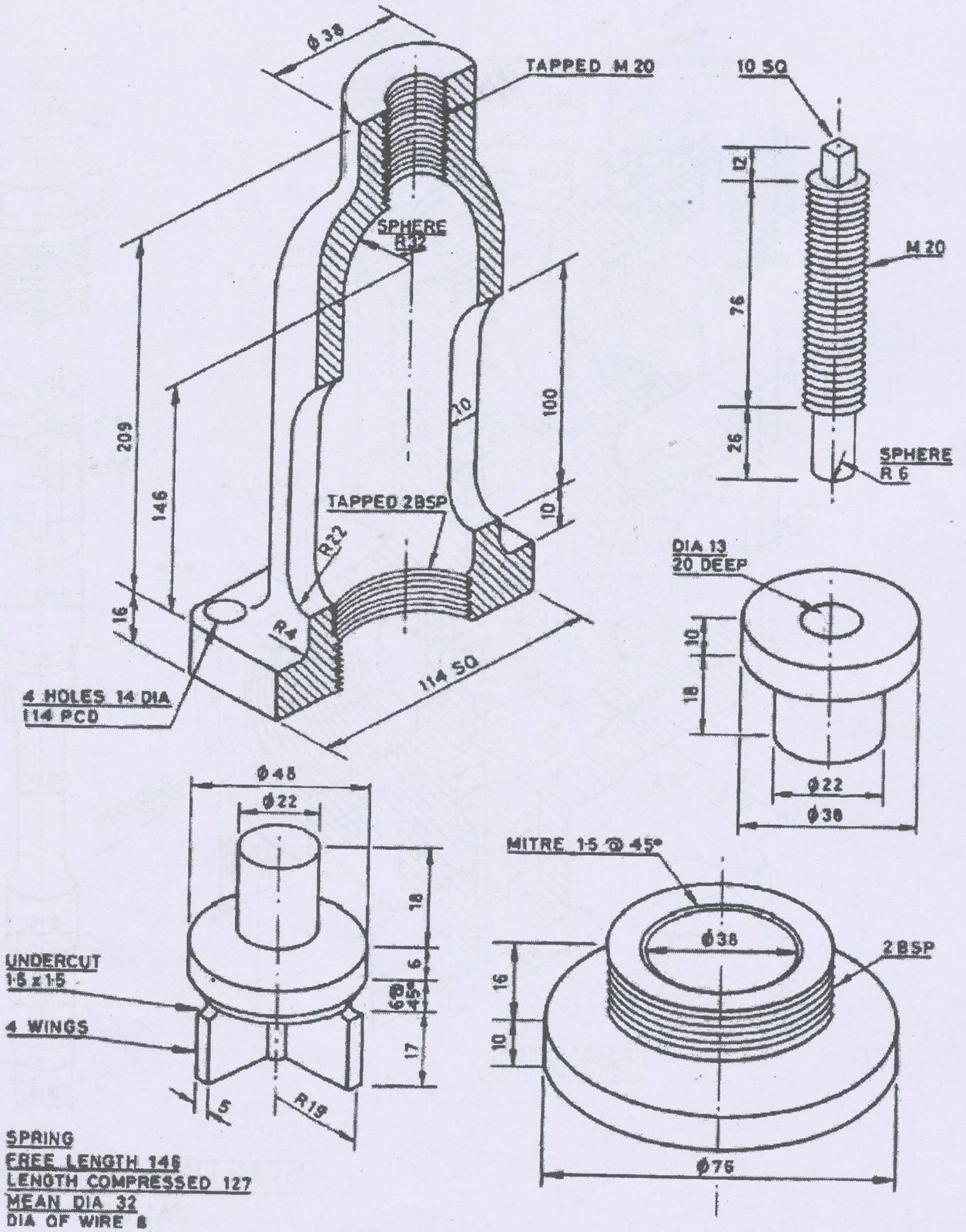


Figure 2 Cylinder Relief Valve

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