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UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2017

Program:	B-Tech	Semester –	I
Subject (Course):	Workshop Technology	Max. Marks	: 100
Course Code :	MEPD1001	Duration	: 3 Hrs.
No. of page/s:	1		

SECTION A [20 Marks]

Note: Attempt all questions. All question carry equal marks. Be brief and specific.

1. Explain about term fullering & swaging in forging 5
2. List out any five tool used in forging shop and explain any one in detail 5
3. Explain about cold shut and misrun defect in casting process with diagram. 5
4. State the effect of important alloying elements in steel. 5

SECTION B [40 Marks]

- 5 Explain about different defect and seasoning of timber in detail 10
- 6 Explain about reamer, taps, dies and hacksaw used in fitting shop. 10
7. List out the types of pattern used in casting and explain any two in detail with sketch. 10
8. Explain Ductile and Brittle materials and draw stress strain curve for ductile materials and explain each point. 10

SECTION C [40 Marks]

Note: Question no 11 is compulsory, and you can attempt only 1 question out of 9 & 10

- 9 Explain about electric arc welding, Polarities used in welding and Flux with proper sketches. 10+5+5

OR

- 10(i) Explain equipment's used in Gas welding & Difference between soldering, brazing and welding. 7+8
- 10(ii). Explain any one welding process in which non consumable electrode is used. 5
11. Explain any 5 parts and any 5 processes related to lathe machine with suitable diagram 20