

ชื่อ-สกุล.....รหัส.....

PRINCE OF SONGKLA UNIVERSITY
FACULTY OF ENGINEERING

Midterm Examination : Semester 1

Academic Year : 2004

Date : 2 August 2547

Time : 09.00-12.00 น.

Subject : 226-316 FOUNDRY ENGINEERING

Room : R300

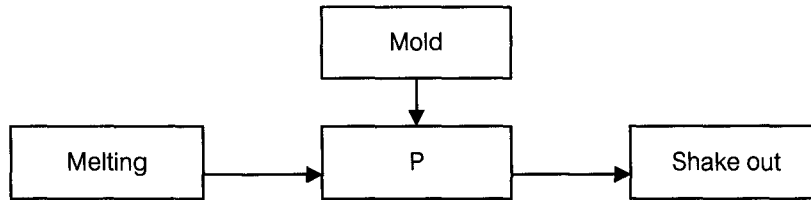
ทฤษฎีในการสอบ โทษขั้นต่ำปรับตกในรายวิชานั้น
และพักการเรียน 1 ภาคการศึกษา โทษสูงสุดให้ออก

Instruction :

1. Do all 22 questions.
2. The score appears after the end of question.
3. Total score is 100.
4. Books notes and calculator are allowed.

ผศ.เสนห์ ธีญธาดาลักษณ์
ผู้ออกข้อสอบ

Supa



1. What is P ?..... (3)
2. Why have we to make corner of pattern in round shape?.....(4)
3. Why have we to put weight on the top molding flask ?.....(3)
4. Tell me 4 different molding materials.....(3)
5. What are the components of molding sand? Why are they?.....(4)
6. Why don't we use graphite as a parting compound for steel costing ?.....(3)
7. How could you produce a small casting of complicate shape?.....(3)
8. How do you find clay percentage of molding sand?.....(4)
9. Tell me 4 defects of casting piece.....(4)
10. Quantitatively show me that the pressure of molten iron against the mold surface is larger than molten Al-alloy.....(4)
11. What is die costing?.....(4)
12. Why does sodium silicate play important role for foundry industry?.....(4)
13. What should mold washes be?.....(4)
14. How many parts are there in gating system? What are they?.....(4)
15. How should the good gating system be?.....(4)
16. What is the optimal pouring time?.....(4)
17. How many types of gating? What are they?.....(4)
18. What is fluidity of molten metal ?.....(4)
19. On what factors does the fluidity depend?.....(4)
20. How can you test the fluidity?.....(4)
21. The grey iron casting with 1200 lbs of weight and 2 in. of average thickness. The of pouring temperature and the chemical composition are 2900 ° F and 3.25% C 2% Si, 0.12% P, Find the pouring time.....(10)
22. Given $W = 60$ lbs , $d = 0.100$ lbs/cu.in, the pouring rate of 6 lbs /sec , top gating, round tapered sprue, 1 : 3: 4 gating ratio , 2 ingates and single runner. Find A_B , A_T , A_R and A_g(15)

Supern