

PRINCE OF SONGKLA UNIVERSITY  
FACULTY OF ENGINEERING

Midterm Examination : Semester 2

Academic Year : 2004

Date : 20 December 2004

Time : 09.00-12.00

Subject : 226-318 INDUSTRIAL CERAMICS

Room : R300

ทฤษฎีในการสอบโทษขั้นต่ำ คือ ปรับตกในรายวิชาที่ทฤษฎี และ  
พักการเรียน 1 ภาคการศึกษา โทษสูงสุดให้ออก

Instruction :

1. Do all of 21 questions.
2. The score appears at the end of each question.
3. Total score is 100.
4. Notes, books and calculator are allowed.

ผศ.เสน่ห์ ธีญธาดาลักษณ์

ผู้ออกข้อสอบ



1. What is ceramic material ? (4)
2. How many types of chemical reaction occur during glost firing? (4)
3. What are they? (4)
4. Why is clay very important for ceramic industry? (4)
5. Tell me the difference between HIP and hot pressing? (4)
6. Tell me 2 non-oxide ceramics which are mostly used. (4)
7. What do you know about calcium sulphate hemihydrate? (4)
8. Why are lead and boron compounds useful for ceramic industry? (4)
9. How should metal of ceramic machinery part be? (4)
10. How is refractory brick shoped? (4)
11. What is the extruder? (4)
12. How is constructional brick dried? (4)
13. Why have the high clay mixture to be deaired before shaping? (4)
14. What is "slip"? (4)
15. How do you find true density of ceramics piece ? (4)
16. How do you test the acid resistance of ceramic glaze? (4)
17. How do you find refractoriness under load? (4)
18. Why is ballclay more plastic than white clay? (4)
19. There are 3 methods which highly plastic body could be shoped. What are they? (4)
20. Given true density of a firebrick = 2.95 g./cc., apparent porosity = 25%and bulk density = 2.05 g./cc. Find the sealed porosity. (12)
21. Given apparent density of a brick = 2.73 g/cc, bulk volume = 2000 cc, and apparent volume = 1502 cc. Find the bulk density. (12)

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