

Name.....ID no.....

PRINCE OF SONGKLA UNIVERSITY  
FACULTY OF ENGINEERING

Midterm Examination : Semester 2

Academic Year : 2006

Date : December 19,2006

Time: 13.30-16.30

Subject : 226-318 INDUSTRIAL CERAMICS

Room: R200

ทฤษฎีในการสอบโทษขั้นต่ำ คือ ปรับตกในรายวิชาที่ทฤษฎี และ  
พักการเรียน 1 ภาคการศึกษา

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.
5. Don't ask.
6. Put your ID no. and name on every pages.

Assf.Prof.Sane Thanthalug



Name.....ID no.....

1. What is ceramic material? (4)
  
2. How many types of chemical reaction occur during glost firing?  
What are they? (4)
  
3. Why is clay very important for ceramic industry? (4)
  
4. Tell me the difference between HIP and hot pressing? (4)
  
5. Tell me 2 non-oxide ceramics which are mostly used. (4)
  
6. What do you know about calcium sulphate hemihydrate? (4)
  
7. Why are lead and boron compounds useful for ceramic industry? (4)
  
8. How should metal of ceramic machinery part be? (4)



Name.....ID no.....

9. How is refractory brick shaped? (4)

10. How is constructional brick shaped in mass production? (4)

11. How is constructional brick dried? (4)

12. Why has the high clay mixture to be deaired before shaping? (4)

13. What do you pour into plaster mold for shaping ceramic body? (4)

14. How do you find true density of ceramic piece? (4)

15. How do you test the acid resistance of ceramic glaze? (4)

16. How do you find refractoriness of ceramics? (4)



20. Given apparent density of a brick = 2.73 g./cc., bulk volume = 2000 cc, and apparent volume = 1502 cc. Find the bulk density. (12)

Name.....ID no.....

17. Why is ballclay more plastic than white clay? (4)

18. There are 3 methods which highly plastic body could be shaped. What are they? (4)

19. 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)

20. Given apparent density of a brick = 2.73 g./cc., bulk volume = 2000 cc, and apparent volume = 1502 cc. Find the bulk density. (12)

21. What is slip? (4)

