

2022 年 4 月高等教育自学考试全国统一考试

化学工程专业英语

(课程代码 11254)

注意事项:

1. 应考者必须按试题顺序在答题卡(纸)指定位置上作答,答在试卷上无效。
2. 涂写部分、画图部分必须使用 2B 铅笔,书写部分必须使用黑色字迹签字笔。

一、Translate the following words into Chinese.

将下列英文单词翻译成中文。(本大题共 10 小题,每小题 2 分,共 20 分)

1. nitrogen
2. synthesis
3. exothermic
4. compressor
5. conversion
6. petrochemical
7. extraction
8. intermediate
9. thermodynamics
10. pollution

二、Translate the following words into English.

将下列中文单词翻译成英文。(本大题共 10 小题,每小题 2 分,共 20 分)

11. 热交换器
12. 流体
13. 碳酸钠
14. 浓度
15. 溶液
16. 生物反应器

17. 比率
18. 间歇的
19. 蒸馏
20. 杂质

三、Translate the following words and expressions.

将下列短语英汉互译。(本大题共 10 小题,每小题 3 分,共 30 分)

21. contact process for sulphuric acid
22. stirred tank reactor
23. environmentally benign
24. homogeneous reaction
25. process design and control
26. 反应条件
27. 物料平衡
28. 二氧化碳
29. 污水处理厂
30. 膜技术

四、Translate the following passages into Chinese.

将下列段落翻译成中文。(本大题共 2 小题,每小题 5 分,共 10 分)

31. The concept of unit operations held that any chemical manufacturing process could be resolved into a coordinated series of operations such as pulverizing, drying, roasting, electrolyzing, and so on.
32. Process development for a new product depends on things such as the scale on which it is to be manufactured, the by-products formed and their removal/recovery, and required purity.

五、Translate the following passages into English.

将下列段落翻译成英文。(本大题共 2 小题,每小题 5 分,共 10 分)

33. 一种污染物以上的同时控制是一些近期开发的催化剂或吸附剂技术的目标。
34. 化学工程师通常涉及到“放大”化学家开发的小规模反应器和分离系统到很大的商业性工厂。

六、 Fill in each of the following blanks with an appropriate word from the list (You can only choose 10 from the following 12 words in the square)

从所列出的 12 个单词中选择恰当的单词填写入下面的空格中 (仅需从 12 个单词中选出 10 个)。(本大题共 10 个空, 每空 1 分, 共 10 分)

artificial, markedly, infection, livestock, pesticides, nutrients, replace, consumption, at least, manufacturing, make, contribution.

The chemical industry make a major (35) _____ to food production in

(36)_____ three ways. Firstly, by making available large quantities of

(37) _____ fertilizers which are used to (38)_____ the elements

(mainly nitrogen, phosphorus and potassium) which are removed as (39) _____ by the

growing crops during modern intensive farming. Secondly, by (40) _____ crop

protection chemicals, i.e., (41) _____, which (42) _____ reduce the

proportion of the crops consumed by pests. Thirdly, by producing veterinary products which

protect (43) _____ from disease or cure their (44) _____.