

选择题

- 1) Approximately what percent of the project time line should be devoted to each of the activities listed below?
Planning _____; Analysis _____; Design _____; Coding_____; Testing_____.
- 2) If you could expend more time in one activity, which would have the highest likelihood of improving software quality?
(A) Planning (B) Analysis (C) Design (D) Coding (E) Testing
(F) 2-3% (G) 10-25% (H) 15-20% (I) 20-25% (J) 30-40%
- 3) Approximately which activity listed below will consume the least amount of time in a project?
(A) analysis (B) design (C) coding (D) testing
- 4) Three categories of risks are
(A) project risks (B) planning risks (C) technical risks (D) business risks
- 5) A task set in project scheduling is a collection of _____
(A) responsibilities (B) engineering work tasks (C) milestones (D) cost estimates
- 6) Software risk always involves two characteristics
A) fire fighting
B) loss
C) uncertainty
D) crisis management
- 7) Risk projection attempts to rate each risk in two ways
A) likelihood and size
B) likelihood and impact
C) likelihood and probability
D) likelihood and mitigation

判断题

- 1) Adding more people to a project that is already behind schedule is a good way to catch up. ()
- 2) Timeline charts assist project managers in determining what tasks will be conducted at a given point in time. ()
- 3) Using a statistical technique like decision tree analysis can provide some assistance in sorting out the true costs associated with the make-buy decision.
- 4) The reason for refining risks is to break them into smaller units having different consequences.
- 5) A task selector value is most appropriately used to determine whether to accept or reject a given task for inclusion in the project task set.
- 6) If we get behind schedule, we can add more programmers and catch up.

简答题

- 1) Describe the difference between “predictable risks” and “unpredictable risks”.

论述题

- 1) **Given the description of a system, please analyze the system requirements and complete the requested models. (45 pts.)**

Online Digital Library System description: The system is supposed to provide online service of a digital library. A user can remote login to the server through a web browser, if the user can pass the authentication and has a positive balance in his (or her) account. The system will then display a list of books, related information and status, according to the user's authority and record of interests. By clicking on a book's title, the user can fetch the content of the book from the server, decode it and display it on screen. The user can view the abstract or the complete content of the book. After a transaction is made by clicking on a proper link, the system will start counting the charge (according to some rate \times the price of the book). At the mean time, the system will collect some statistical data from the online reading records (such as a ranklist of popular books). The system is also supposed to provide an interface for users to check account balance.

1. Please formulate your project scheduling and track plan. (7 pts.)

- 2) **Given the description of a system, please analyze the system requirements and complete the requested models. (40 pts.)**

Order-Processing System description: A company is establishing a new catalog sales division to sell casual apparel and outdoor merchandise. The catalog will be published on the World Wide Web, and orders can be placed by e-mail, via the Web site, or via telephone, or fax. A client/server system will be built to support order processing at the company site. Shipment can be made if payment is by credit card, and must wait until the check is cashed if payment is by check.

1. Please formulate your project scheduling and track plan. (6 pts.)

- 3) **Given the description of a system, please analyze the system requirements and complete the requested models. (40 pts.)**

Water-Monitoring System description: The water-monitoring system is to gather data at many points throughout a river valley. At the collection sites, several calculations are done according to the data (date, direction, level, flux, rainfall, etc.) and the results (statistics, forecast, summary report, etc.) are communicated to a central location for comprehensive reporting. An automatically generated report mainly contains charts and tables of all kinds of data collected from different locations, together with a summary document. Different department is allowed to access different part of a report.

1. Please formulate your project scheduling and track plan. (6 pts.)

4) Given the description of a system, please analyze the system requirements and complete the requested models by either the conventional methods or the object-oriented methods. (40 pts.)

The E-mail System description: You are responsible for the development of an electronic mail (e-mail) system to be implemented on a PC network. The e-mail system will enable users to receive letters from another user, or to create letters to be mailed to another user or to a specific address list. Letters can be read, copied, stored, etc. The e-mail system will make use of a simple full-screen editor on a video display terminal to create letters. The editor allows text to be inserted, deleted, and modified. Sections of text can be “cut” from one part of the file and “pasted” to another part of the file. The user can specify a text string, and the editor can find the next occurrence of that string. Through the editor, the user can specify margin, background, and tab settings.

Please specify your choice here: A – conventional methods; or B – object-oriented methods

A	B
(1) Suppose you have 5 people in your team. As the project manager, how would you assign jobs to your team members according to Chief Programmer Team organization? (5 pts.)	(1) Suppose you have 5 people in your team. As the project manager, how would you assign jobs to your team members according to Chief Programmer Team organization? (5 pts.)

5) 某市政部门欲开发计算机控制的路障与维修系统 (PHTRS)。路障被发现上报后, 系统赋予该路障一个识别号码, 并存入其所在街道地址、大小 (按 1 比 10 的比例)、位置 (路中、人行道上等等)、所属街区 (根据街道地址得出)、以及维修优先级 (根据其大小确定)。对每个路障有一个施工命令, 包括路障位置、大小、施工队编号、施工人数、配备工具、维修的工时数、路障状态 (施工中、已修复、临时修复、未修复)、材料用量、维护费用 (根据维修工时、人数、材料及工具等计算得出)。最后, 系统建立一个损失报告文件, 记录此路障造成的损失, 包括市民的姓名、地址、电话、损失类型、以及损失量 (以元为单位)。PHTRS 是一个在线系统, 可随时查询。

下面两套题目中, 请你**任选一套**完成。请圈出你的选择: **A B**

A

1. 假设有 8 个人来参与这一系统的设计, 你作为组长是按主程序员方法来如何分配人员? (7 分)

B

1. 假设有 8 个人来参与这一系统的设计, 你作为组长是按主程序员方法来如何分配人员? (7 分)

6) 拟开发一个机票预订系统 ZDBKG。该系统有如下需求: “旅行社把预订机票的旅客信息 (姓名、性别、工作单位、身份证号码、旅行时间、旅行目的地等) 输入系统, 系统为旅客安排航班, 打印出取票通知和帐单, 旅客在飞机起飞的前一天凭取票通知和帐单交款取票, 系统校对无误即印出机票给旅客。”所开发的系统要求在网络平台上运行。下面两套题目中, 请你**任选一套**完成。请圈出你的选择: **A B**

A

1. 假设有三个人来参与这一系统的设计, 你作为组长是按主程序员方法来如何分配人员? 并制定出开发这一系统的质量保证程序。 (5 分)

B

1. 假设有三个人来参与这一系统的设计, 你作为组长是按主程序员方法来如何分配人员? 并制定出开发这一系统的质量保证程序。 (5 分)