



PROFESSIONAL FINANCIAL MODELER

POLICY FOR PFM COMPUTER PRACTICE EXAMINATION GRADING STANDARD



International Financial Modeling Institute

POLICY FOR PFM COMPUTER PRACTICE EXAMINATION GRADING STANDARD

Common Problems in Grading Case Study or Spreadsheet Based Examination

Every professional certification program should ensure that the program participant possesses at least a well defined minimum competency level in order to become eligible to hold a certain designation. In the field of financial modeling, ultimately, the proficiency has to be demonstrated through the development of full set financial model.

There are problems with such assessment process which mainly results in grading process which is largely based on subjective judgment of graders. Financial model is a field which requires a lot of personal judgment and analysis, causing highly divergent work by different candidates. This makes the grading process of such work to become difficult as standardization of grading process must require qualitative guidelines which can be interpreted differently by different graders.

In that case, subjectivity of the grader plays great role in determining pass or fail and grades. Such subjectivity causes similar quality work by candidates to receive significantly different grades by different graders, or even by the same grader at different time. This could be caused by difference of perception, knowledge, personal standard (flexible versus perfectionist) or even mood.

Personal like or dislike on the candidate may also cause real subjectivity. Graders may bring factors such as race, gender, social status, seniority level and even familiarity with the candidate and personal interest as a determinant factor for grading. For example, a grader may be tempted to provide better grading to a candidate with whom he/she has personal interest such as client. All kinds of subjectivity cause the exam process and result to become questionable.

Subjective grading process undermines the whole process and in general, undermining the credibility of the certification program greatly. In certification program, even though some subjectivity remains when grading spreadsheet based work, such subjectivity has to be reduced to such an extent that it does not significantly affect the quality of the grading or the assessment of candidate competence.

Another problem facing spreadsheet based financial model is perception variation among candidates. A case study, no matter how refined, will be viewed differently by different people. This creates a difficult paradox. The case study must be complicated enough to enable credible assessment on the competency of the candidate. However, complicated case study in financial model means different candidates will prepare models differently, resulting in different end results and different analyses as well. In preparing complex models, there could be situation where none of candidates produce exactly the same work result.

This is caused by the fact that a financial model may have numerous assumptions and connectivities, in which everything has to be calculated differently. Difference or mistake on the calculation in one cell may affect the end result. It is unfair to judge a candidate to be incompetent only because of difference in calculation methodologies or mistakes in some spreadsheet cells.

This makes grading process difficult, as a grader is commonly equipped with answer key. In many cases, it is impractical to rely on exact numbers in answer key as benchmark during grading process. To contend with this problem, a grader resorts to personal judgment to assign grades.

Another problem, each candidate is commonly very attuned to certain industries where he/she works. A case study in a certain industry or sector may cause candidates who are insiders to such sector to prepare a better model than candidates who are outsiders or unfamiliar with such industries. Familiarity of the grader also matters. Graders may be unfamiliar with the sector chosen by the candidate or have insufficient understanding on business process of the company covered by a candidate, and as a result, provides biased grade.

Cheating or plagiarism is a serious problem which causes incorrect assessment of the competency level of a candidate. A candidate may be able to obtain the work of other candidate or other people simply through means of illicit communication, copying other people's work or theft. The candidate may also obtain or purchase financial models from internet or assign someone else to do the work. All the candidate has to do next is doing some minor brush up in order to make the model appear authentic. Even the most experienced grader may find it hard to detect such infringement.

Plagiarism problem is a real challenge. If there is no sufficient measure is taken to avoid this problem, the whole examination process is questionable indeed.

How PFM Computer Practice Examination is Structured to Ameliorate Problems in Conducting Spreadsheet Based Examination

IFMI understands that the credibility of a certification program, among other things, is affected by the quality of the examination process. There are steps taken to avoid the problems mentioned earlier, especially on the Computer Practice Examination and ensure the credibility of PFM Examination.

First of all, the design of the program matters. PFM is never given freely to anyone. Everyone must attend preparation program and pass examination in which a candidate will only pass if the candidate possesses adequate competence to master the examination. This practice is in accordance with an understanding that someone's name is a very valuable property. In order to have something such as a designation placed behind someone's name, the designation should have value which enhances the brand equity of the person. Giving a title or designation to someone just because the person pays a sum of money or attend short training will degrade the designation into gimmick worths nothing more than souvenir of no professional value.

Adherence to ISO 17024 provisions means that the whole process, including the grading process must ensure impartiality and fairness to each candidate where each candidate obtains result he/she deserves.

PFM Examination is only conducted in certain premises and test centers on a certain date, supervised by functions acting as IFMI representative called invigilator and proctor. Given the complexity of administering PFM Computer Practice Examination, the number of supervisors involved is adjusted to the number of participants. Procedures are enacted to ascertain that the examination process can be closely controlled and monitored.

During examination, process is undertaken to ensure the integrity of the examination and to deter candidate from cheating, such as prohibiting candidate to use his/her own computer during the examination. The examination instruction including possible sanction is announced to deter participant from conducting infringement. Examination supervisors only allow people who have completed certain requirements to attend the examination. Several layers of checking, which includes photo cross checking is conducted to verify that the person attending the examination is the same person registered in examination database.

The examination spreadsheet is protected in such a way that each participant receives spreadsheet with unique secret codes embodied in it. The unique code is developed for each participant by using

a random generator software. The code is then scattered in the exam spreadsheet file. If a candidate's spreadsheet loses its codes or bears other candidate's codes, his/her examination status is pending and an investigation will be conducted which may result in the disqualification of the candidate from PFM Examination or other disciplinary action deemed necessary.

In order to conduct an examination which is fair and equitable for everyone, the format of the examination spreadsheet template is standardized based on the format commonly used during PFM preparation delivery. The template for spreadsheet has been provided, meaning the candidate does not need to prepare its own format. This greatly reduces potential for subjectivity. Candidate only needs to input formula in each designated input cell. Grading is based on how many cells and rows contain correct formula. For example, if a certain sheet has 25 lines to be filled and the candidate is correct on 18 of them, the candidate receives 18 points from that sheet.

The total correct number of points from all of the sheets in one section is added and compared to the total number of line answers for the sheets the particular section. Then, the result of each section is weighted to arrive at the total score for the computer practice examination.

Currently, there are three sections to be completed in PFM Computer Practice Examination with the weighting as follows:

- | | | |
|--------------|-----------------------|-----|
| 1. Section 1 | Financial Projections | 50% |
| 2. Section 2 | Valuations | 25% |
| 3. Section 3 | Analytics | 25% |

The passing rate for Computer Practice Examination is 60%.

Based on the methodology above, much part of the potential subjectivity is resolved. By standardizing the examination sheet and requiring grader to check each answer line and score accordingly, a grader will be much more objective in assigning score.

By designing the examination spreadsheet by using a standardized template, objectivity is more assured. The grader has no issue with unfamiliarity with a model submitted by a candidate. All aspects of the model can be assessed thoroughly. Moreover, the design enables the achievement of the goal to maximize learning process and enhance the retention rate of candidate knowledge. The candidate is forced to understand in great detail on how to prepare the model to face such examination. The examination problem can be structured to cover all the learning objectives which have to be achieved by a candidate. Hence, PFM Computer Practice Examination is part of learning process and not merely to show the result of learning process.

Impartial Grading Process

The grading process of PFM Computer Practice Examination is designed in such a way to promote impartiality of the process. Procedure is developed and progressed to achieve such goal.

One of the procedure is through the appointment of 2 graders for each candidate. The graders are appointed by Operation Bureau in IFMI Organization for each participant. The graders are selected based on specific criteria. The candidate answer file is encoded by using randomly generated code by using computer program in such a way that the grader does not know the identity of the candidate.

Procedure is also in place to minimize the possibility of candidate knowing who his/her graders are. This procedure is enforced to reduce potential of subjectivity and fraudulent act.

Each of the graders must submit the result of their examination online. The scoring results of two graders for a participant are averaged. The result of the average will determine whether a participant passes or fails.

If the grading result of the two graders brings conflicting conclusions (one grader grades as fail and one grader grades as pass), the result is deemed bias and cannot be used. A third grader is then appointed to re-grade participant result and the grading result is then considered final.

To ensure the quality of the grading process, the performance of each grader is also assessed from time to time.

In addition, graders must submit exam score directly via website access where administrator cannot interfere to alter the score.

Last but not least, if a candidate feels that he/she has been treated unfairly during examination process, the candidate may choose to submit an appeal or complaint. During appeal process, all his/her work will be regraded. The computer practice examination result will be regraded by a fourth grader where the result is final. As for complaint process, any submitted complaint must be resolved by IFMI within a limited time frame.

All the processes mentioned above are implemented in order to maximize the value and credibility of PFM Examination and bring value to candidates and designation holders.

Issuance of Merit Certificate

When attending Computer Practice Examination, a candidate is given 5 hours to complete full set of corporate financial model. Candidate has to exert his/her best effort in order to complete within the designated time limit. This is a tough task to achieve even for the most experienced modeler. However, those who have completed the model will gain new experience and understanding on financial model and will forever change the perception of the person when preparing a model in daily life.

To bring reward to such effort, IFMI provides Merit Certificate to those who have completed the whole set of financial model spreadsheet during examination. The Merit Certificate is issued regardless whether the candidate passes on computer practice examination. The goal of issuing Merit Certificate is to motivate a candidate to push beyond limitation and develop a new perception that it is possible to complete such challenge.