

## **Professional Plumber Practical Examination (PPPE) Rules and Regulations**

### **(1) Introduction**

The Professional Plumber Practical Examination, hereafter referred to as the “PPPE”, is an effective and important tool by which the Chartered Institute of Plumbing and Heating Engineering-Hong Kong Branch, hereafter referred to as the “CIPHE-HKB”, measures an individual’s understanding of all aspects considered to be essential and desirable for the rational, executive practice of Professional Plumber before recommending an applicant’s application to License Plumber of the Water Supplies Department (WSD).

This examination is in addition to, and should not be confused with, any academic qualifications an applicant may hold following successful completion of a plumbing related course conducted by a tertiary educational institution either in or outside the Territory of Hong Kong. In fact, admission to the PPPE is available only to applicants who attained a pre-requisite level of academic achievement as assessed independently by the Executive Committee of the CIPHE-HKB.

Arranged, prepared and conducted by the CIPHE-HKB the PPE becomes the principal means of controlling and developing the standards of the profession in practice in Hong Kong, thus ensuring the continued recognition of the CIPHE-HKB as a Professional Institute of international repute.

### **(2) Professional License Plumber Requirement**

Passing the PPPE with the License Plumber Recommendation Certificate issued by CIPHE-HKB is a requirement under Part I for all who apply to the License Plumber of Water Supplies Department (WSD).

### **(3) Eligibility for admission to the PPPE**

To be accepted as a candidate for taking the PPPE an applicant must have:

- (i) been a Fellowship/ Membership (e.g. MCIPHE/ FCIPHE) of the CIPHE
- (ii) an academic qualification in plumbing related engineering course
- (iii) obtained the following prescribed period of full time professional working experience subsequent to the completion of an accredited plumbing related engineering course:
  - 5 years in plumbing/ fire services field (In supervisory level); and
  - 3 years continuous working experience in the above fields

#### (4) The Examination

The PPPE consists of two distinct parts as follows:

Part 1: A written examination of pre-determined extent and content, conducted at a time and date set by the CIPHE-HKB.

Written Examination of the PPPE - shall consist of:

- (a) 20 Multiple Choice Questions and
- (b) 4 Long Questions.

The candidates are expected to answer all of the questions under (a) and (b) within a time limit of 2 hours. The total complement of questions will cover the entire syllabus as promulgated by the CIPHE-HKB.

The number of questions produced is usually well in excess of requirements for that year's examination. This not only allows a wider scope for selection but also the building up of a library of questions for future use. Questions with their answers are submitted to the Chairman who checks them for any anomalies, inconsistencies and/or ambiguity. The selected questions are then passed to the Membership Committee, who prepares the official question papers for the PPPE.

The current practice for awarding points for answers to questions received from candidates is as described below:

- (a) Multiple Choice Questions.

Each correct answer to the 20 questions attracts three (3) point whereas 1 $\frac{1}{2}$  (1.5) point is deducted from a candidate's total score for every incorrect answer. Failure to answer a question attracts 0 points.

The maximum attainable score under this section of the paper is therefore 60 points.

- (b) Long Questions.

Each complete and comprehensive answer to a question can attract up to 10 points. The maximum attainable score under this section of the paper is therefore 40 points.

Overall Assessment - implications to candidates' progress.

The overall maximum number of points a candidate may score for Part 1 of the PPPE is therefore 100 points. In assessing the candidates' suitability to continue to sit for Part 2 (Oral Interview Examination) of the PPPE the following achievement levels are set:

*Pass* -Candidates who scored 50% e.g. 50 points.

*Fail* - Candidates who scored less than 50% e.g. below 50 points.

Candidates who 'passed' this examination are selected to sit for the Oral Interview Examination. When advising the results of Part 1 of the PPPE, candidates who achieved 'Pass' status are only informed of their selection to sit for Part 2 (Oral Interview Examination) of the PPPE.

#### Portfolio of Professional Working Experience

Candidates who are successful in the written examination will be required to prepare a portfolio of their professional working experience and present it in the subsequent oral interview examination. The project portfolio will need to illustrate projects that they had worked on, and to highlight the working experience they had gained with respect to the syllabus of the PPPE. The project portfolio shall be submitted at least two weeks prior to the date of the oral interview examination.

The Project Portfolio shall be a bound booklet/ folder made up of a maximum of 10 A3 pages (not including the front and back covers) printed on one side. Candidates are expected to use photographs, drawings, and other illustrations as the main component of the portfolio while supplemented by text. The total words used for the text shall not be more than 1000. The written medium shall be English. Confidential are not allowed to submit.

*Note 1: Multiple Choice Questions, as the name implies, offer a choice of three (3) or more possible answers to each question, of which only one is absolutely correct. These questions allow examiners to test candidates on the full spectrum of essential knowledge of the material included in the syllabus.*

*Note 2: Long questions may not have one definite answer and alternatives may be provided by the candidates in their answers. The examiners will therefore be looking for a general understanding of what is behind the question and may accept, upon further reflection of the answer given, a well-reasoned approach, as demonstrated by the candidate, to solving the problems set. The use of notes to indicate the candidate's own understanding of the question is often helpful in this respect, provided they are clear and unambiguous.*

Part 2: An oral interview examination conducted by a panel consisting of a minimum of two examiners selected by the CIPHE-HKB, at a time following the completion of Part 1.

Candidates are notified by the Administrator in writing of the details for each of the two parts, such as actual date, time, and venue. Such notification will be expected to be issued a minimum of three weeks before the dates set for each part. Eligible candidates will be charged a fee for admission to the PPPE to recover administrative and other costs involved in preparing for and conducting the examination.

## (5) Evaluation Aspect and Standards

With their academic studies completed, followed by at least five (5) years working experience as a graduate in a Plumber Practice, it is expected that applicants would expertise in:

- Potable and flushing water safety quality and supply system design (domestic, commercial, hospital and high-rise buildings).
- Hot water supply system including steam boiler design (residential, commercial, hospital and high-rise buildings, etc.).
- Piping materials, pump characteristic and selections. Up-feed water pump, system sizing and calculations
- Regulations and design guidelines for hot, cold and flushing water supply systems.
- Design of plumbing disposal and treatment system.
- Design for kitchens, spa, recycling system for cooling tower.
- Swimming pool water supply system and treatment.
- Operation, management, testing & commission maintenance procedures.
- Sustainability / green design.
- Water safety plan on building, fire prevention, industrial safety.
- Compatibility of water supply systems and auxiliaries.
- Formulate and monitor water supply system equipment installation procedures.
- Supervise plumbing equipment installation

Eligible candidates will be charged a registration fee HK\$ 1,000 and an examination fee HK\$ 1,500 in separate cheques for admission to the PPPE to recover administrative and other costs involved in preparing for and conducting the examination. The fees should be submitted along with the registration package and cheques should be addressed to 'CIPHE-HK'. Only the examination fee will be returned to a candidate should he or she be considered not eligible to take the PPPE.

## (6) Examination Syllabus

The syllabus of the examination is contained in the following general headings:-

- Professional code of conduct, responsibilities, liabilities, and ethics;
- Statutory Requirements and Procedures of Plumbing Works;
- Professional working management in Plumbing Services;
- Construction contracts, and pre-tender & tendering procedures; and
- Contract administration.

## (7) Timetable

The normal time frame for arranging and conducting the PPPE is as follows:

- ✧ 30 December - Closing date for candidates' registration to the PPPE.
- ✧ 1<sup>st</sup> week of January - Issue of notification of eligibility for admission to the PPPE.
- ✧ 1<sup>st</sup> week of February – Part I of PPPE – Written Exam.
- ✧ 1<sup>st</sup> week of March - Results of Part I of PPE issued.
- ✧ 4<sup>th</sup> week of March – Part 2 of PPPE – Oral Interview Exam
- ✧ April – Final results of PPPE issued.
  
- ✧ 30 June - Closing date for candidates' registration to the PPPE.
- ✧ 1<sup>st</sup> week of July - Issue of notification of eligibility for admission to the PPPE.
- ✧ 1<sup>st</sup> week of August – Part I of PPPE – Written Exam.
- ✧ 1<sup>st</sup> week of September - Results of Part I of PPE issued.
- ✧ 4<sup>th</sup> week of September – Part 2 of PPPE – Oral Interview Exam
- ✧ October – Final results of PPPE issued.

## (8) System Review and Monitoring.

The examination system will be subject to periodic reviews conducted at not more than three years intervals and modified as considered necessary and approved by the Executive Committee. To this effect the CIPHE-HKB, will set up an “Examination System Review Panel”, hereafter referred to as “the Panel”. The Panel will consist of a member from Executive committee and membership & technical committee.

The Panel will review the format and content of the examination, the criteria for selecting examiners and all other procedures relating to the proper conduct of the PPPE. The Panel will report their findings and submit any recommendations for improvements to the Chairman for their consideration and action as deemed appropriate.