

HKIE Structural Exam 2020 -2021 Examiner's Report

HKIE Structural Examination consists of two main parts, the written exam and the interview. The written exam is a 7 hours exam and has two sections, a one hour multiple choice section and a six hours design question section. The design question is further divided into section A and B. The interview part generally adopts a competence-based approach which focus on the following four pillars, applying engineering knowledge, developing technical solutions, managing engineering works and upkeeping professional acumen. Non-competence-based is also available to cater for candidates whose training commenced before the adoption of competence-based approach. The interview usually takes about an hour. Candidates has to pass both the multiple choice and the design question section together with the interview to be considered passing the HKIE Structural Exam.

For the exam year 2020-2021, 497 number of candidates registered for the written exam of which 455 took the exam on 30 November 2020.

- 74.7% of the candidate passed the multiple-choice section and 31.4% passed the design question section. The overall pass rate is 25.9%.
- About 30% of the candidates passed Section A of the design question 2 and 3, with lesser percentage passing section A for question 1 and 4. Failure to provide two distinct and viable design solutions remains as the main cause.
- Regarding Section B of the design question, most candidates attempted question 1 were able to provide detailed design calculation, the requested connection details and construction programme but quite poorly on drawing and presentation of structural framing plans, and the recommendation regarding progressive collapse. About half of the candidates attempting question 2 and 3 could provide reasonable detailed design calculation, structural framing and foundation plans, method statements and construction programme. While about half of the candidates attempted question 4 could provide detailed design calculation, most failure in drawing presentation of framing plans, method statement and construction programme.

174 candidates took the interview between May to July 2021, of which 148 are under competence-based and 26 are under non-competence-based.

- 57% and 54% the competence-based and non-competence-based candidates respectively passed the interview.
- Main concerns on failure include: lack of design and / or site experience, lack of in-depth knowledge of the design project(s) presented, unable to discuss alternative solutions, fail to demonstrate sound structural principles and behaviour, insufficient project management experience and knowledge on construction contracts.