Notes:

1. This examination paper contains 3 pages (including this page).

2. The following material(s) will be provided separately:
   (a) Answer Book.
This paper consists of TWELVE (12) questions. Answer any TEN (10) of them. Write all your answers in the answer book provided. Each question carries 10 marks. Draw sketches to aid your explanations if necessary. Hong Kong practice shall be referred to unless otherwise specified.

1. Discuss the difference between displacement piles and replacement piles. Given two examples to each type of them. (10 marks)

2. Explain, with the aid of sketches, two (2) methods to overcome the problem of eccentric loads applied to spread foundations. (10 marks)

3. Discuss the design consideration for building forms for commercial and residential functions. (10 marks)

4. Discuss the advantages of dry partition over the traditional wet ones. (10 marks)

5. Some of design criteria for windows are found to be contradictory with each other. Briefly discuss them. (10 marks)

6. Describe, with annotated sketches, any one type of suspended ceilings. (10 marks)

7. Briefly outline the requirement of a fire resisting door in Hong Kong that serves an escape route. (10 marks)

8. The design of a staircase, and in particular some of the critical dimensions, is strictly governed by rules and regulations. State these important dimensions in accordance with local regulations. (10 marks)

9. Discuss primary functions and design considerations of a wall. (10 marks)

10. What do you know about “fast track construction”. State any five new technologies or construction methods that fall into this category. (10 marks)
11. Before the inspection for Occupation Permit, some essential building services installations have to be completed, tested and certified. Discuss any five of them.

12. Building services installations is considered an essential part of the construction process which depends careful planning and thoughtful design. List the factors for the success of services installations.

- End of Questions -