

Outline of ITPEC Common Examination

<This will be applied to the examinations from April 2024>

As of 2023-08-10

[Time, Type, and Number of Questions and Answers for Each Examination]

Examination Category	120 mins	
	Exam Type	No. of Qs No. of As
IT Passport Examination	Multiple-Choice (1 from 4)	100 (Short question) ¹⁾ 100 ¹⁾

Examination Category	Subject A		Subject B	
	90 mins		100 mins	
	Exam Type	No. of Qs No. of As	Exam Type	No. of Qs No. of As
Fundamental Information Technology Engineer Examination	Multiple-Choice (1 from 4)	60 60	Multiple-Choice	20 ²⁾ 20

Examination Category	Morning		Afternoon	
	150 mins		150 mins	
	Exam Type	No. of Qs No. of As	Exam Type	No. of Qs No. of As
Applied Information Technology Engineer Examination	Multiple-Choice (1 from 4)	80 80	Short Answer	7 5

Note ¹⁾ Questions to ask the ability to think like programming, in a pseudo programming language, are included.

Note ²⁾ Out of the 20 questions, 16 questions are about Algorithm and Programming and 4 are about Information Security.

[Points Allocation and Pass Points for Each Examination]

Examination Category	Time Slot	Point	Pass Points
IT Passport Examination	—	100 total points	Total points (of all fields): 60% Points in each field: Technology 30% Management 30% Strategy 30%
Examination Category		Time Slot	Total Point
Fundamental Information Technology Engineers Examination		Morning	100
Applied Information Technology Engineers Examination		Afternoon	100
			Pass Points
			60
			60

[Season of Examinations]

Examination Category	Season	
IT Passport Examination	Spring	Fall
Fundamental Information Technology Engineer Examination	Spring	Fall
Applied Information Technology Engineer Examination		Fall

[Scope of questions for FE Subject B]

1. General aspects of programming

Understanding required specifications of programs to implement (input/output, processes, data structures, algorithms, and others), implementing programs based on the programming language specifications to use, reading and changing of existing programs, supposing process flows and variable changes, testing programs, determining errors of processes (debugging) and considering methods for correction, etc.

[Note] Regarding the programming language, a pseudo programming language is used for Fundamental Information Technology Engineer Examination.

2. Fundamental elements for programming processes

Type, variable, array, assignment, arithmetic operations, comparison operations, logical operations, selection process, iteration process, calling a procedure/function, etc.

3. Data structures and algorithms

Recursion, stack, queue, tree structure, graph, linked list, sort, character string processing, etc.

4. Application of programming to various fields

Programs setting on the subject matters of mathematical science, data science, and AI, etc.

5. Ensuring information security

Presenting information security requirements (physical or environmental security, technical and operational security, protection from malware, backup, log collection and monitoring, maintaining information security in forwarding information, vulnerability control, user access management, inspection of operating conditions, etc.