



**STUDY AND TEST MATERIAL**  
for the  
**FPU2**  
**ASSESSMENTS**

(Fire Pump Installation & Service)  
March 1, 2023

This document contains sample questions and information to help participants study for these assessments.

If you intend to use this booklet in the test, make sure it is bound in a binder or stapled. Loose papers are not allowed.

**THE FOLLOWING ARE THE ONLY MATERIALS ALLOWED IN AN EXAM COVERED BY THIS STUDY GUIDE**

- NFPA 20 – Standard for the Installation of Stationary Pumps for Fire Protection
- NFPA 25 – Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
- NFPA 13 – Standard for the Installation of Sprinkler Systems
- NFPA 72 – National Fire Alarm and Signaling Code
- CSA Study and Test Material for the FPU2 Assessment
- Non-programmable calculator – at proctoring center, not online

Your exam may have a few questions from documents other than NFPA 20 and NFPA 25, and sample material will be indicated in this study guide. There may be some questions from NFPA 70 (NEC) related to clearance and Article 695. Control of hazardous energy questions (lock-out-tag-out) questions may also be on exam. However, neither the NEC or Control of Hazardous Energy are allowed in the exam. Thus, it is up to the candidate what books they want to take to the exam. The above are the only books that the proctors are to allow into this exam. Proctors have been informed that the edition/year is not specific, and that NFPA handbooks are allowed.

**Quick Example of How Exam Screens May Look**

The diagram shows a simulated exam interface with several callout boxes:

- Question and answer options:** Points to a question with options: "C.  Should" and "D.  Could".
- Check this box if you want to flag this question for review later with any remaining time:** Points to a checkbox labeled "Mark this item for later review."
- Select "Next" to go to the next question. Note: some exams will not allow you to go "Back", but only forward.** Points to the "Next" button.
- Select "Review All" to review questions before submitting.** Points to the "Review All" button.
- DO NOT "Submit" until you are finished as this will end and score your exam.** Points to the "Submit" button.

The interface includes buttons for "Back", "Next", "Review All", and "Submit".

## About the Assessments:

**Assessment Abbreviation:** FPU2 - Fire Pump Installation & Service

**Number of Questions:** 100

**Amount of Time for Test:** 120 minutes

**Exam format:** Open book (provide your own books). The candidate is required to bring/provide a basic non-programmable calculator for exams at a proctored facility. On-screen calculator and note section will be provided for online proctored exams. Scratch paper or dry-erase board will be provided for exams at a proctored facility. Any books or exam documents brought into exam must be bound as no loose papers are allowed.

**Passing Score:** 80%

**Cell Phones:** Do not bring cell phones, pagers, or radios into the test center or online proctored room.

### **Codes / Materials Used for FPU2 Exam and Editions:**

- 2022 edition of NFPA 20 Standard for the Installation of Stationary Pumps for Fire Protection
- 2020 NFPA 25 Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
- 2019 NFPA 13 Standard for the Installation of Sprinkler Systems (as related to fire pumps and referenced by NFPA 20)
- 2019 NFPA 72 National Fire Alarm and Signaling Code (as related to monitoring fire pumps)
- NFPA 70 (NEC) with general electrical clearance, hazards, and article 695
- CSA Study Guide for the FPU2 Fire Pump Installation & Service Assessment (from CSA website)
- NFPA Handbooks are recommended when available
- Calculator is recommended for this exam (basic non-programmable. Online calculator is used for online proctored exams.)

### **General Assessment Information:**

**About the Questions:** Questions are randomly selected from respective topics within a larger database. Answer choices are randomly mixed, meaning that choice “B” will not always be in position “B”.

**Exam Format:** Questions are computer based and will be delivered one at a time. You will have the opportunity to go back and review all questions. You can also “check” a box within each question which will flag it for later review. During the review, checked questions will be marked for easier identification.

**Time Clock:** Some assessments will have a count-down timer displayed on the screen. Do not focus on the clock but use it as a guide.

## Important Candidate Information

### **YOUR SCORE & PRINTING SCORE REPORTS**

All scores provided at the end of your exam and in your score email are “preliminary”. Exams are subject to review of audio / video recordings, or concerns raised by proctors.

Your preliminary score will be automatically emailed following the exam. Candidates may also log into their Webassessor account to view/print score reports. Use the link and info in your scheduling emails.

Score reports for failed exams will provide a breakdown of scores by topics/subjects within the exam. Your overall score determines Pass/Fail.

However, the topic scores help to identify areas that need more attention when studying. Topic scores will not be provided on Pass emails.

### **Taking Materials Into Exams**

CSA exams are open book. You must provide your own books and required exam materials, including calculators at physical centers. Online calculator is provided for online proctored exams. Check this guide to verify what editions exams are based on. All material must be bound (no loose papers). Other than items listed on Page 2 of this guide, do not take other items into the exam.

Page tabs must be of permanent type. Do not mark in any materials during an exam.

Phones, radios, pagers are not allowed in exam rooms, please leave these in your vehicles.

Two forms of ID are required for exams.

### **Photographs**

Your photo is required to be submitted to CSA with your initial registration request. This photo may be used by proctors to verify who is scheduled for the exam. Although not required, you may want to wear a company shirt/logo for your picture. Pictures are cropped to best fit ID card, so there is no guarantee the logo will show. You will be recorded and a photo may be taken during exam sessions.

### **Respectful of Others**

At a proctoring center, please be respectful of others taking exams by minimizing noise and interruptions. If you have any exam or computer problems please notify the proctor so they can assist. If necessary, the proctor can log a report for further investigation. Then notify CSA so we can look into the problem.

If taking an Online proctored exam, please make sure others know to not interrupt. Your exam may be terminated and require new payments for interruptions or suspicious behavior.

### **Proctoring Options**

You have two options for proctoring. Online proctoring where you use your computer and USB webcam to take the exam with a proctor watching you via camera, or at a physical proctoring center.

See website for info.

### **How to Request Your First Exam / Assessment**

First, download study material and get the required codes/standards needed for your exam. Then, review our website to understand the options for proctoring, and decide which option works best for you.

You are required to pay for your assessment and submit a picture at the time of submitting the request. Have payment and a photo file ready.

To start the process, you must “Request an Assessment” from [www.CSAexams.com](http://www.CSAexams.com). Within 1-3 days you should receive an email with information to schedule your exam. Make sure you are requesting and paying for the correct exam as there are no refunds.

### **Cancel or Rescheduling an Exam**

To cancel or reschedule an exam you must log back into the system where you scheduled the exam, or using links at [www.CSAexams.com](http://www.CSAexams.com) under Contractor Info. Online Proctored exams require 24 hrs and Proctoring Centers require 72 hrs notice. If the system will not give you the option to Cancel/Reschedule than you must show up or firefright your fees. There are no refunds.

### **If You Fail an Exam**

If you fail an exam, you must Request a new Assessment and make full payment from [www.CSAexams.com](http://www.CSAexams.com). Within 1-3 days you will get an email to schedule your exam.

### **When you Pass an Exam**

ID cards and certificates will generally be mailed out within three weeks. They will be mailed to the address provided when requesting the assessment. If the address has changed, please email CSA with new address.

### **If You Need a New ID Card**

To change the company name, change your last name, or if you have lost your card, go to [www.CSAexams.com](http://www.CSAexams.com) and select Replacement ID link. Exams are good for 3 years. Then a new exam is required for renewal.

Please report cheating to the proctor or CSA.

## Fire Pump Study Material

The following questions are related to the FPU2 assessment. These are sample questions. Questions on the FPU2 assessment may come from the body of a standard, any of the Annex sections, or general theory as necessary to have a thorough understanding of fire pump installations and how flow/pressures are affected by fire pumps. Questions related to the impact of flow/pressure from other general sources for hydraulic principles, such as recommended books listed on the CSA website for sprinkler exams. NFPA 20 has references to NFPA 13 for some criteria. There are questions from NFPA 25 for inspection, testing, and maintenance. Questions may also come from NFPA 70 which include general electrical hazards, required clearances in front of panels, Article 695 for Fire Pumps, etc. Questions from NFPA 72 related to monitoring of fire pumps. Pay close attention to Page 2 on what books may be taken into an exam.

The questions below are not intended to provide an in-depth review. Rather, they are only intended to give you an idea of what to expect.

Additional practice questions to be added soon.

### SAMPLE QUESTIONS FROM NFPA 25

#### Question 1

[NFPA 25] Qualified personnel shall be in attendance whenever the pump is in operation unless automated inspection and testing is performed, including the provision for automated engine shutdown for diesel engine drives.

True

False

#### Question 2

[NFPA 25] Remotely monitored automated testing performed in accordance with 4.6.6 shall be permitted for the no-flow test. Qualified personnel shall be able to respond to the pump location upon abnormal condition within \_\_\_\_\_.

5 minutes

10 minutes

2 hours

4 hours

#### Question 3

[NFPA 25] If available suction supplies do not allow flowing of 150 percent of the rated pump capacity, the fire pump shall be tested at flow rates at \_\_\_\_\_ percent of the rated pump flow rate, and at the maximum flow allowed at the lowest permissible suction pressure.

65

100

120

125

Question 4

[NFPA 25] Fire pump systems often have inline flow meters for closed-loop testing. Contractors utilize these inline flow meters to reduce performing hose stream tests, where water is discharged to the ground. The use of these inline flow meters for an annual test requires that the flow meter be calibrated at minimum \_\_\_\_\_ per 8.3.3.5.3.

- Annually
- Every 3 years
- Every 5 years
- Not Required

Question 5

[NFPA 25] Where inline (closed-loop) flow meters are periodically used for annual flow tests, hose stream flow tests of fire pumps are required to be performed at least every \_\_\_\_\_.

- Year
- 3 years
- 5 years
- Hose stream tests are not required when inline flow meters are installed

Supplemental information:

Table from NFPA 70 (NEC) for required space in front of sources of exposed electrical components.

Table 110.26(A)(1) Working Spaces			
Nominal Voltage to Ground	Minimum Clear Distance		
	Condition 1	Condition 2	Condition 3
0–150	900 mm (3 ft)	900 mm (3 ft)	900 mm (3 ft)
151–600	900 mm (3 ft)	1.0 m (3 ft 6 in.)	1.2 m (4 ft)
601–1000	900 mm (3 ft)	1.2 m (4 ft)	1.5 m (5 ft)

Note: Where the conditions are as follows:  
**Condition 1** – Exposed live parts on one side of the working space and no live or grounded parts on the other side of the working space, or exposed live parts on both sides of the working space that are effectively guarded by insulating materials.  
**Condition 2** – Exposed live parts on one side of the working space and grounded parts on the other side of the working space. Concrete, brick, or tile walls shall be considered as grounded.  
**Condition 3** – Exposed live parts on both sides of the working space.