

# UPPER LEVEL IT

*November 2022*

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## AGENDA



- General Tips
- Subjects of Examination
- Understanding & Interpreting Tabular Material

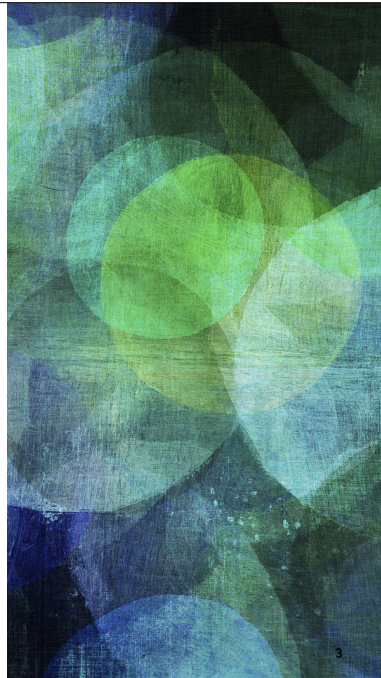
Next week (2022-11-12 at 2 PM EST):

- Project Management
- Supervision / Administrative Supervision

2022-11-19 at 2 PM EST: Full review of all topics/resources

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## GENERAL TIPS



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## WHAT TO STUDY



- Read the exam announcement!
- Look at the Civil Service sample questions.
- Materials on NYSITS.org are a **starting point**.
  - CSEA booklets (only available to CSEA members)
  - Wikipedia (follow links to sources)

## OTHER PREPARATION

- Get a good night's sleep.
- Know where you're going and get there early.

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## WHAT TO BRING



- Admission notice
- Photo ID
- #2 pencils and good erasers
- Calculator
- Food and drinks?

## WHAT NOT TO BRING

- Cell phone / smart watch
- Any other papers

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“ Answer all questions designated for your examination(s). At the test site, you will be given Candidate Directions that identify the Test Booklet(s) and question numbers to be completed for each examination. You are responsible for determining which questions you are to answer, for making sure you have the correct Test Booklet(s), and for completing all test material required for your examination(s).

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## CIVIL SERVICE INSTRUCTIONS



### How to Determine What Questions You Are to Answer

Carefully follow these bulleted steps.

The Example Test Plan Chart shows three booklets (888-A, 889-A, and 890-A). The left column shows the number of the test plan that corresponds to the respective Examination Number (Exam No.) and Title. For example, Test Plan 3 includes the following blocks of questions:

Test Plan No.  
Exam No.

### Services Representative Series

January 1, 2020

- Questions to answer: You are responsible for determining which test questions you are to answer and which test booklets you need. The Monitor is not permitted to assist you in this.
  - Follow these directions and use the Examination Listing and the following chart to determine which questions you are to answer.
  - Circle the number of each examination you are taking on the Examination List. If you cannot find your exams on the list, raise your hand.
  - Read across each row and circle the Test Plan Number at the end of the row.
  - Look at the chart below. Circle each Test Plan Number that you circled on the Examination List.
  - Read across each row in which you circled the Test Plan Number and circle each X in that row.
  - Answer the blocks of questions indicated at the top of each column with a circled X.

For Example: If there were a column labeled "Questions 16 to 30," an X in that column would mean that you should answer the block of 15 questions, from Question 16 to and including Question 30.

Note: In the last column is the total number of questions to be answered for each Test Plan. If you are taking exams in more than one Test Plan, answer questions in every column in which you have circled at least one X. You should answer a block of questions only once.

Test Plan Chart

Test Plan No.	Test Booklet 888-A					Test Bklt 889-A					Test Bklt 890-A					Total Number of Questions
	1 to 15	16 to 30	31 to 45	46 to 60	61 to 75	1 to 15	16 to 30	31 to 45	46 to 60	61 to 75	1 to 15	16 to 30	31 to 45	46 to 60	61 to 75	
1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	120
2																60
3																120

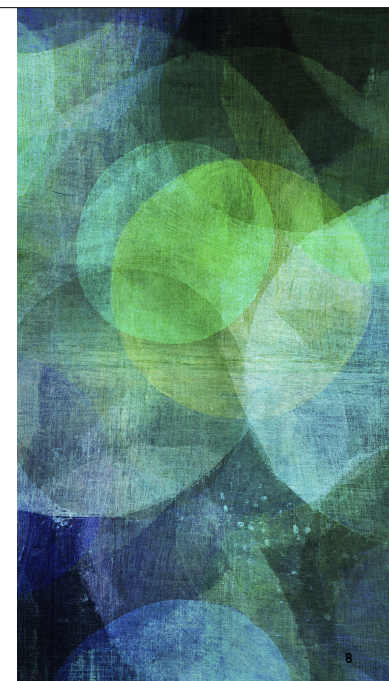
Examination List

State Exams	Exam No.	Title	Test Plan No.
	21-331	Services Representative 1	1
	31-332	Services Representative 2	2
	31-337	Services Representative 3	3

<https://www.cs.ny.gov/pio/publications/howtotakeawrittentest.pdf>

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## SUBJECTS OF EXAMINATION



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## HOW TO FIND OUT WHAT'S ON YOUR EXAM



### Information Technology Specialist 4

#### Written Test To Be Held

December 10, 2022

You may be assigned to either Saturday or Sunday.  
Please refer to the information below.

#### Applications Must Be Submitted or Postmarked

By

October 12, 2022

#### Minimum Qualifications

##### Duties

##### Subject of Examination

##### How to Apply

#### Exams Included on This Announcement

EXAM NUMBER	EXAM TITLE	OPEN TO EMPLOYEES OF	SALARY	SALARY GRADE	NON-REFUNDABLE PROCESSING FEE (WAIVERS AVAILABLE)
38-714	Information Technology Specialist 4	Multiple Agencies	*	25/M-1	\$25
38-715	Information Technology Specialist 4 (Data Communications)	Multiple Agencies	*	25/M-1	
38-716	Information Technology Specialist 4 (Database)	Multiple Agencies	*	25/M-1	
38-717	Information Technology Specialist 4 (Operations)	Multiple Agencies	*	25/M-1	
38-718	Information Technology Specialist 4 (Systems Programming)	Multiple Agencies	*	25/M-1	

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## 38-714 INFORMATION TECHNOLOGY SPECIALIST 4



### Subject of Examination

There will be a **written test** which you must pass in order to be considered for appointment. The **written test** is designed to test for knowledge, skills, and/or abilities in such areas as:

- 1. Preparing written material** - These questions test for the ability to present information clearly and accurately, and to organize paragraphs logically and comprehensibly. For some questions, you will be given information in two or three sentences followed by four restatements of the information. You must then choose the best version. For other questions, you will be given paragraphs with their sentences out of order. You must then choose, from four suggestions, the best order for the sentences.
- 2. Supervising a project** - These questions test for the ability to conduct and supervise the activities necessary to achieve the goals and deadlines of a specific project. The questions cover such topics as setting up the project, developing the work plan for the project, assigning and reviewing work, evaluating performance and progress, coordinating phases of the project, handling problems as they arise, and meeting deadlines.
- 3. Systems analysis** - These questions test for techniques and concepts of computer systems analysis. They cover such subjects as feasibility and applications studies, systems development tools and software, the systems life cycle, types of systems (e.g., client/server, Web-based), controls, and systems documentation, testing, and implementation.
- 4. Understanding and interpreting a manual** - These questions test for the ability to comprehend a set of directions and apply them. Candidates will be provided with a procedural manual excerpt to read. This information will be used to answer questions about procedures and the way operations should be carried out. All of the information needed to answer the questions is provided in the set of directions. Candidates will not be required to have any special knowledge about the content area covered.
- 5. Understanding and interpreting tabular material** - These questions test your ability to understand, analyze, and use the internal logic of data presented in tabular form. You may be asked to perform tasks such as completing tables, drawing conclusions from them, analyzing data trends or interrelationships, and revising or combining data sets. The concepts of rate, ratio, and proportion are tested. Mathematical operations are simple, and computational speed is not a major factor in the test. **You should bring with you a hand-held battery- or solar-powered calculator for use on this test.** You will **not** be permitted to use the **calculator** function of your **cell phone**.

Next  
week

This  
week

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## SUMMARY (LOOK ON NYSITS.ORG)

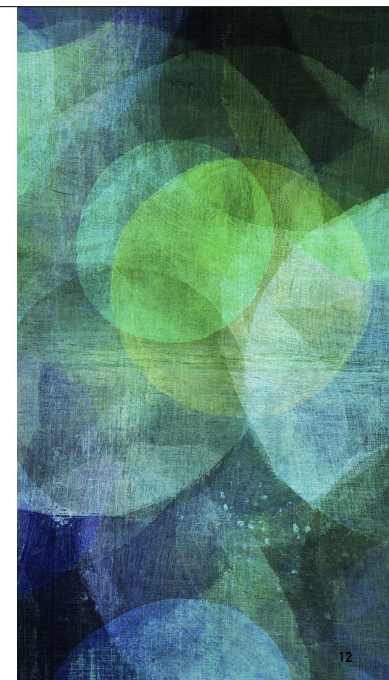


	G23 ITS 3	G25/M1 ITS 4	G27/M2 Manager ITS 1	G29/M3 Manager ITS 2	M4 (Asst) Dir ITS 1	M5 (Asst) Dir ITS 2 and M6 Dir ITS 3
Logical reasoning using flowcharts - These questions test for ability to reason logically by solving problems involving given variables expressed in flowcharts and accompanying information. All information needed to answer the questions is included within the flowcharts and the accompanying information. Prior knowledge of flowchart conventions is necessary to answer these questions.	x					
Understanding and interpreting a manual - These questions test for the ability to comprehend a set of directions and apply them. Candidates will be provided with a procedural manual excerpt to read. This information will be used to answer questions about procedures and the way operations should be carried out. All of the information needed to answer the questions is provided in the set of directions. Candidates will not be required to have any special knowledge about the content area covered.	x	x				
Preparing written material - These questions test for the ability to present information clearly and accurately, and to organize paragraphs logically and comprehensibly. For some questions, you will be given information in two or three sentences followed by four restatements of the information. You must then choose the best version. For other questions, you will be given paragraphs with their sentences out of order. You must then choose, from four suggestions, the best order for the sentences.	x	x				
Systems analysis - These questions test for techniques and concepts of computer systems analysis. They cover such subjects as feasibility and applications studies, systems development tools and software, the systems life cycle, types of systems (e.g., client/server, Web-based), controls, and systems documentation, testing, and implementation.	x	x	x			
Understanding and interpreting tabular material - These questions test your ability to understand, analyze, and use the internal logic of data presented in tabular form. You may be asked to perform tasks such as completing tables, drawing conclusions from them, analyzing data trends or interrelationships, and revising or combining data sets. The concepts of rate, ratio, and proportion are tested. Mathematical operations are simple, and computational speed is not a major factor in the test. You should bring with you a hand-held battery- or solar-powered calculator for use on this test. You will not be permitted to use the calculator function of your cell phone.		x	x	x		
Supervising a project - These questions test for the ability to conduct and supervise the activities necessary to achieve the goals and deadlines of a specific project. The						

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## UNDERSTANDING & INTERPRETING TABULAR MATERIAL

G25 / M1 , G27 / M2 , G29 / M3



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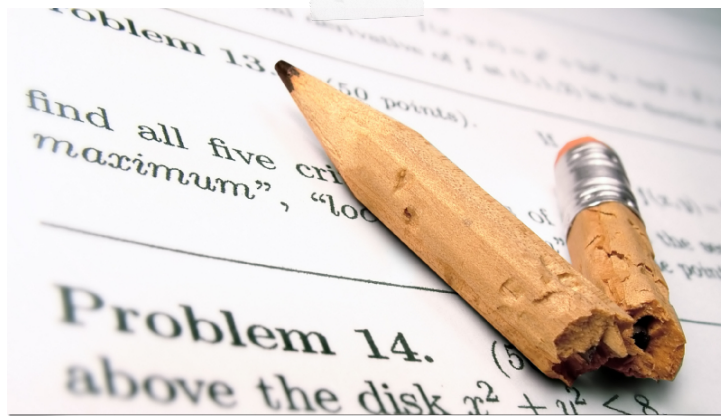
These questions test your ability to understand, analyze, and use the internal logic of data presented in tabular form.

You may be asked to perform tasks such as completing tables, drawing conclusions from them, analyzing data trends or interrelationships, and revising or combining data sets.

The concepts of rate, ratio, and proportion are tested.

## Calculator

- \* You should bring with you a hand-held battery- or solar-powered calculator for use on this test. You will not be permitted to use the calculator function of your cell phone.



## Math Review

"In real life, I assure you, there is no such thing as algebra." - Fran Lebowitz

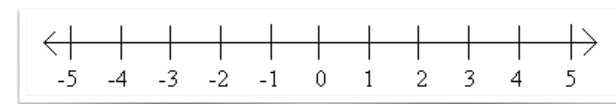
## Negative Numbers

BE CAREFUL WITH YOUR CALCULATOR!

$3 - (-2)$  is not the same as  $3 - 2$

Two wrongs make a right...

$$3 - (-2) = 3 + 2$$





## Average

$$\frac{A + B + C + \dots}{\# \text{ of items}}$$

	Y1	Y2	Y3
A	1	-3	6
B	4	5	-1
C	7	4	10
avg	4	2	5

## Participation Rate/Ratio

$$\text{Rate} = \frac{\# \text{ who are participating}}{\# \text{ who are eligible to participate}}$$

$$\text{Ratio} = \text{Participants : Eligibles}$$

## Changing % to Decimal

"per cent" means "out of one hundred"  
 $\% \div 100$

$$75\% \quad 75 \div 100$$

$$0.75$$

## Percentage

$$\frac{\text{part}}{\text{whole}} = \frac{\%}{100}$$

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100}$$

3 is what % of 40	$\frac{3}{40} = \frac{?}{100}$	7.5%
15% of 20 is ...	$\frac{?}{20} = \frac{15}{100}$	3
2.3 is 50% of ...	$\frac{2.3}{?} = \frac{50}{100}$	4.6

## Percent Change

increase, decrease, growth, decline, ...

$$\frac{\text{NEW} - \text{ORIGINAL}}{\text{ORIGINAL}} \times 100\%$$

"from 19 to 20"  $\frac{20 - 19}{19} \times 100\% \approx 5.3\%$

"compare 30 to 15"  $\frac{30 - 15}{15} \times 100\% = 100\%$

## More Key Words

<b>+</b> add total sum all together in all	<b>-</b> subtract fewer left less than minus
<b>X</b> multiply times every/each at this rate of	<b>÷</b> divide quotient per out of distribute

## Reading a Table

- \* How many tables are there?
- \* Read the row and column headings.
- \* Are there any subtotals or totals?
- \* What are the units for the numbers?
- \* Use a piece of scrap paper to keep focused.