# Sheridan $\left\lvert\, \begin{gathered}\text { office of } \\ \text { the Registrar }\end{gathered}\right.$ Sheridan College Assessment Centre 

## Mature Student

 Assessment Information Booklet(Updated July 5, 2023)
http://assessment.sheridancollege.ca

## What is the Mature Student Assessment?

Applicants who do not possess a secondary school diploma or equivalent and who are 19 years of age before the starting date of their program may be required by the Sheridan Admissions Office to demonstrate their ability to work at the postsecondary level by taking a Mature Student Assessment.

The Mature Student Assessment is a set of tests used to measure the applicant's skills in English, Science and/or Mathematics for the purpose of admission to the selected Sheridan program.

## What is the assessment fee?

The fee for the Mature Student Assessment is $\$ 35$. Payment will be made on the day of the test with a Canadian debit card only. Applicants who have been approved to write their test virtually will receive instructions by email about how to pay online.

## How can I book my test?

Applicants are expected to write at one of our Assessment Centres on campus. We do not accept walk-in or same day appointments, so please book your time in advance. To book your admission test, please click on the link below that corresponds to a campus location convenient for you:

HMC Campus - Mississauga: www.hmcac.as.me
Davis Campus - Brampton: www.davisac.as.me
Trafalgar Road Campus - Oakville: www.trafac.as.me

Applicants who live out-of-province may request to write their test virtually from home while connected online to an Assessment Centre Specialist using conferencing software that enables screen sharing (Zoom). To request a virtual appointment, please visit:
https://hmcac.as.me/virtualtesting

If you are an applicant with a disability and require accommodation in the assessment process, you must register with Accessible Learning at Sheridan College. Please visit: https://www.sheridancollege.ca/student-life/student-services/accessible-learning-services

## What should I bring to my test?

- Valid Photo ID (e.g. driver's license, passport, Sheridan OneCard, etc.)
- Please make sure that you have a testing requirement notification from Sheridan. You can view this by logging in to your Sheridan Application Portal, or in some cases, you would have received an email directly from Admissions. If you have not received an invitation to test, please email admissions@sheridancollege.ca (or international.sheridan@sheridancollege.ca if you are an international applicant)


## Assessment Centre Contact Information

## Hazel McCallion Campus (HMC) - room A246

4180 Duke of York Boulevard, Mississauga, ON L5B 0G5
Phone: 905-845-9430, ext. 2476
Email: hmcac@sheridancollege.ca

## Trafalgar Road Campus - room BB26

1430 Trafalgar Road, Oakville, ON L6H 2L1
Phone: 905-845-9430, ext. 8100
Email: trafac@sheridancollege.ca

## Davis Campus - room B117

7899 McLaughlin Road, Brampton, ON L6Y 5H9
Phone: 905-459-7533, ext. 5288
Email: davisac@sheridancollege.ca

## Technical Requirements for Virtual Tests

To ensure that your test runs smoothly, please check that your computer or laptop is equipped with the following technical components:

- A webcam
- Audio and headphones
- Google Chrome or Mozzila Firefox. Please do not use Safari.
- Windows 7, 8, 8.1, and 10; Server 2008 R2, 2012 (32 or 64bit) with .NET 4.0 or higher and the latest updates OR The latest build of macOS: Yosemite (10.10), El Capitan (10.11), Sierra (10.12), High Sierra (10.13), Mojave (10.14), Catalina (10.15)
- Broadband connectivity to the Internet (i.e., T1, cable modem, ISDN or DSL)
- Audio Player (Windows Media Player or VLC) and Microsoft Word

Chromebooks are not compatible with the math tests.

## How will I know my results?

You can view your results by logging in to your Sheridan Application Portal approximately 5 business days after your test date. After logging in, your results will appear beside your application status.

Sheridan Application Portal:<br>https://sheridancollege.force.com/applicants/s/

Explanation of Assessment Scores can be viewed here:
https://sheridancollege.force.com/applicantsSSO/s/assessment-scores

The following are samples of the types of questions you could expect to find in your assessment. The sample questions reflect the format of the assessment items, but not the degree of difficulty of all the questions in the Assessment.

Helpful Hints

1. Get a good night's sleep before the test and arrive early for the assessment session.
2. Don't let the thought of writing an assessment make you too nervous, although a little nervousness is natural and even helpful.
3. When the Assessment Centre Specialist is explaining the process, listen carefully and follow all the directions.
4. Ask questions if anything is unclear. The Assessment Centre Specialist is there for that purpose. We are here to help!
5. The assessment is multiple-choice, except for the essay portion and the High Tech Electrical/Mechanical Math Test. You will be required to choose the best answer to a question from several choices. You may mark an answer even if you are not perfectly sure it is right.
6. If one question is too hard, leave it and go on to the next. You can always come back and try it again if there is time.
7. If you come to a section in the assessment that you cannot do, don't give up. There may be parts of the assessment further on which are easier for you. Keep working.
8. Work steadily and complete as many questions as you can.
9. To help you succeed, we highly recommend that you review material related to areas covered in the Mature Student Assessment (e.g. Reading Comprehension, English grammar skills and Math skills.) Inquire at your Public Library or a local bookstore about texts that provide a review of these areas.

## Mature Student English Test (MSET)

The Mature Student English Test (MSET) is completed through the Accuplacer platform and consists for three sections: Next-Generation Reading, Next-Generation Writing/Sentence Skills, and an Essay. For more information and additional sample practice questions please visit https://accuplacer.collegeboard.org/

## Next-Generation Reading

## 20 questions, 45 minutes

Next-Generation Reading assesses the test-taker's ability to derive meaning from a range of texts and to determine the meaning of words and phrases in short and extended contexts. Passages on the test cover a range of content areas, writing modes, and complexities. Questions are multiple choice in format and appear as both discrete (stand-alone) questions and as parts of sets of questions built around a common passage or passages. The test covers a range of content areas including careers, history, social studies, humanities, science, and literary texts either fiction or non-fiction. Four broad knowledge and skills categories are assessed:

- Information and Ideas (reading closely, determining central ideas and themes, summarizing, understanding relationships)
- Rhetoric (analyzing word choice rhetorically, analyzing text structure, analyzing point of view, analyzing purpose, analyzing arguments)
- Synthesis (analyzing multiple texts)
- Vocabulary


## Sample Questions

Directions for questions 1-18: Read the passage(s) below and answer the question based on what is stated or implied in the passage(s) and in any introductory material that may be provided.

In this passage, an amateur theater group called the Laurel Players is putting on its first production.
(1) The Players, coming out of their various kitchen doors and hesitating for a
minute to button their coats or pull on their gloves, would see a landscape in which only a few very old, weathered houses seemed to belong; it made their own homes look as weightless and impermanent, as foolishly misplaced as a great many bright new toys that had been left outdoors overnight and rained on. (2) Their automobiles didn't look right either-unnecessarily wide and gleaming in the colors of candy and ice cream, seeming to wince at each splatter of mud, they crawled apologetically down the broken roads that led from all directions to the deep, level slab of Route Twelve. (3) Once there the cars seemed able to relax in an environment all their own, a long bright valley of colored plastic and plate glass and stainless steel-KING KONE, MOBILGAS, SHOPORAMA, EAT-but eventually they had to turn off, one by one, and make their way up the winding country road that led to the central high school; they had to pull up and stop in the quiet parking lot outside the highschool auditorium.
(4) "Hi!" the Players would shyly call to one another.
(5) "Hi! ..."
(6) "Hi! . . ." (7) And they’d go reluctantly inside.
(8) Clumping their heavy galoshes around the stage, blotting at their noses with Kleenex and frowning at the unsteady print of their scripts, they would disarm each other at last with peals of forgiving laughter, and they would agree, over and over, that there was plenty of time to smooth the thing out. (9) But there wasn't plenty of time, and they all knew it, and a doubling and redoubling of their rehearsal schedule seemed only to make matters worse. (10) Long after the time had come for what the director called "really getting this thing of the ground; really making it happen," it remained a static, shapeless, inhumanly heavy weight; time and time again they read the promise of failure in each other's eyes, in the apologetic nods and smiles of their parting and the spastic haste with which they broke for their cars and drove home to whatever older, less explicit promises of failure might lie in wait for them there. (11) And now tonight, with twenty-four hours to go, they had somehow managed to bring it off. (12) Giddy in the unfamiliar feel of make-up and costumes on this first warm evening of the year, they had forgotten to be afraid: they had let the movement of the play come and carry them and break like a wave; and maybe it sounded corny
(and what if it did?) but they had all put their hearts into their work. (13) Could anyone ever ask for more than that?

From Richard Yates, Revolutionary Road. ©1989 by Richard Yates. Originally published in 1961

1. The contrasts the narrator draws in sentences 1 and 2 between the Players' homes and the houses in the "landscape" and between the Players' automobiles and the "roads" are most likely meant to suggest that the Players' homes and automobiles are
A. old and neglected
B. modern and alien
C. small but expensive
D. grand but unappreciated
2. Based on the passage, which of the following most accurately characterizes the claim that "there was plenty of time to smooth the thing out" (sentence 8)?
A. A comforting falsehood that the Players know to be untrue
B. An outright lie that the director persuades the Players to accept
C. An optimistic conclusion reached by outside observers watching an early rehearsal
D. A realistic appraisal offered by the director after careful analysis of the play's shortcomings
3. The descriptive language in sentence 10 is mainly intended to reinforce the passage's depiction of the Players'
A. growing resentment of the director's leadership
B. increasing reluctance to work as hard as they have been
C. lingering doubts about their fellow cast members
D. persistent mood of despair regarding the play
4. The narrator most strongly suggests that which of the following resulted in the transformation described in the last paragraph?
A. The change in time of day during which rehearsals were being held

> B. The greater frequency with which rehearsals were being scheduled
> C. The shift in the director's style from strict to more forgiving
> D. The break in routine occurring the day before the first performance

Directions for questions 19-20: The following sentence has a blank indicating that something has been left out. Beneath the sentence are four words or phrases. Choose the word or phrase that, when inserted in the sentence, best fits the meaning of the sentence as a whole.
19. Deciding that none of the nominees was $\qquad$ the award, the film committee began reviewing a new group of candidates with better qualifications.
A. known for
B. pleased with
C. worthy of
D. interested in

## Answer Key

$\begin{array}{lllll}\text { 1.B } & \text { 2.A } & \text { 3.D } & \text { 4.D } & \text { 19. } C\end{array}$

## Next-Generation Writing/Sentence Skills

## 25 questions, 45 minutes

Next-Generation Writing evaluates a test-taker's ability to revise and edit multi paragraph text. In answering the questions, test-takers must determine the best revision or editing decision in a particular case (or that no change should be made to the passage as originally presented). This section covers a range of content areas including careers, history, social studies, humanities, and science. Questions cover two broad knowledge and skills categories, each containing three subcategories:

## Expression of Ideas

- Development
- Organization
- Effective Language Use


## Standard English Conventions

- Sentence Structure
- Usage
- Punctuation


## Sample Questions

Read the following early draft of an essay and then choose the best answer to the question or the best completion of the statement.
(1) The prevalence of nectarines in US supermarkets today is directly related to the company started by two unrelated men who shared a last name, an inventive bent, and a drive to succeed. (2) Moving from Korea to the United States in 1914, Ho "Charles" Kim founded the Kim Brothers trucking company in California in 1921 with his friend Harry Kim. (3) Much of the freight their trucks carried in the early years were fruit grown in the San Joaquin valley. (4) Kim Brothers soon expanded to include nurseries, orchards, and fruit-packing sheds. (5) Eventually the operation became a major employer, providing year-round jobs for about two hundred people and up to four hundred part-time jobs during harvest season coming after growing season.
(6) Kim Brothers succeeded even in the face of the Great Depression of
the 1920s and 30s because the company produced and sold the first commercially viable nectarines. (7) The nectarine is a hybrid fruit. (8) It combines peach and plum, with the taste and texture of the former and the smooth skin of the latter. (9) With the help of a staff horticulturalist, Kim Brothers developed and patented the "fuzzless peach" known as the Sun Grand nectarine. (10) Though not the first nectarine—the fruit had existed in China for two millennia; the Sun Grand was unique in being hardy enough to ship great distances.
(11) By the 1960s, Kim Brothers included more than five hundred acres of farmland and grossed more than $\$ 1$ million annually. (12) Charles and Harry Kim were eventually recognized as the first millionaires of Korean descent. (13) They were also known for giving back to their community. (14) Charles was also instrumental in helping to create Los Angeles's Koreatown (home today to more Koreans than any place other than North and South Korea).

1. Which is the best version of the underlined portion of sentence 3 (reproduced below)?

Much of the freight their trucks carried in the early years were fruit grown in the San Joaquin valley.
A. (as it is now)
B. have been
C. are
D. was
2. Which is the best decision regarding the underlined portion of sentence 5 (reproduced below)?

Eventually the operation became a major employer, providing year-round jobs for about two hundred people and up to four hundred part-time jobs during harvest season coming after growing season.
A. Leave it as it is now
B. Revise it to "when the crops were ready to pick."
C. Revise it to "after the produce had ripened."
D. DELETE it and end the sentence with a period
3. Which is the most logical placement for sentence 7 (reproduced below)?

The nectarine is a hybrid fruit.
A. Where it is now
B. After sentence 3
C. After sentence 10
D. After sentence 11
4. Which is the best version of the underlined portion of sentence 10 (reproduced below)?

Tough not the first nectarine-the fruit had existed in China for two millennia; the Sun Grand was unique in being hardy enough to ship great distances.
A. (as it is now)
B. millennia. The
C. millennia-the
D. millennia) the
5. Sentence 13 is reproduced below.

They were also known for giving back to their community.

The writer is considering adding the following text at the end of the sentence.
by building churches, funding scholarships, and establishing the Korean Association of Southern California

Should the writer make this addition there?
A. Yes, because it elaborates on the claim made at the beginning of the sentence.
B. Yes, because it establishes the historical period in which Kim Brothers operated.
C. No, because it introduces details that are irrelevant to the paragraph's focus on nectarines.
D. No, because it fails to explain whether the institutions that the Kims established still exist today.

Answer Key

## $\begin{array}{lllll}\text { 1.D } & \text { 2.D } & \text { 3.A } & \text { 4.C } & \text { 5.A }\end{array}$

## Written Essay <br> 300-600 words, 65 minutes

This test measures your ability to write effectively, which is critical to academic success.

Your writing sample will be scored on the basis of how effectively it communicates a whole message to the readers for the stated purpose. Your score will be based on your ability to express, organize and support your opinions and ideas, not the position you take on the essay topic. The following five characteristics of writing will be considered:

- Focus - the clarity with which you maintain your main idea or point of view
- Organization-the clarity with which you structure your response and present a logical sequence of ideas
- Development and Support—the extent to which you elaborate on your ideas and the extent to which you present supporting details
- Sentence Structure - the effectiveness of your sentence structure
- Mechanical Conventions -the extent to which your writing is free of errors in usage and mechanics


## Sample Topic

Prepare a multiple-paragraph writing sample of about 300-600 words on the topic below. You should use the time available to plan, write, review, and edit what you have written. Read the assignment carefully before you begin to write.

Some schools require each student to participate in an organized school sport chosen by the student. People at these schools argue that athletics
is an important part of the educational experience and that there should be a rule requiring participation. Others argue that students should be free to decide whether or not they wish to participate in organized school sports. Write an essay for a classroom instructor in which you take a position on whether participation in organized school athletics should be required. Be sure to defend your position with logical arguments and appropriate examples. Your essay must be 300-600 words in length.

## HELPFUL RESOURCES - ENGLISH

You may find the following websites useful while preparing for your English test:

Accuplacer
https://accuplacer.collegeboard.org/

Literacy Education Online (LEO)
http://leo.stcloudstate.edu/

Purdue University online writing lab
https://owl.english.purdue.edu/

Grammar Bytes
http://www.chompchomp.com/

## Math Skills Assessment

A battery of assessments is used as an admission instrument to assess an applicant's readiness for our programs. The type of Math assessment varies according to the applicant's choice of program. We do not issue a Statement of Equivalency as part of the assessment results.

## CAAT-D Math Test - Sample Questions

48 multiple choice questions, 40 minutes, no calculators, or dictionaries

## Topics covered:

- complex decimals, fractions, percentages
- complex algebra including estimation
- integers (positive and negative functions)
- geometry
- word problems using all above

1. Multiply 0.06 by 0.021
(a) 0.0126
(b) 0.0000126
(c) 0.00126
(d) 0.126 (e) None of these
2. Divide 4.2 by 0.07
(a) 1.333 (b) 60 (c) 6 (d) 600 (e) None of these
3. $9-3(2+6) \div 6-2 \times 5=$
(a) -2 (b) 3 (c) 5 (d) -5 (e) None of these
4. The decimal equivalent of $\frac{9}{40}$ is:
(a) 4.44 (b)
(b) 2.25
(c) 0.225
(d) 0.0225
(e) None of these
5. Express 0.275 as a common fraction in lowest terms:
(a) $\frac{11}{40}$
(b) $\frac{11}{80}$
(c) $\frac{22}{80}$
$\begin{array}{ll}\text { (d) } \frac{11}{25} & \text { (e) None of these }\end{array}$
6. Express $\frac{2}{5}$ as a percent:
(a) $.4 \%$ (b) $20 \%$
(c) $4 \%$
(d) $2 \%$ (e) None of these
7. $60 \%$ of $\$ 10.60$
(a) $\$ 1.63$ (b) $\$ 6.36$ (c) $\$ 63.60$ (d) $\$ 16.31$ (e) None of these
8. 24 is what percent of 40 ?
(a) $60 \%$ (b) $3.75 \%$ (c) $6 \%$ (d) $37.5 \%$ (e) None of these
9. 0.85 is $25 \%$ of what sum?
(a) 3.4 (b) 34 (c) 21.25 (d) 2.125 (e) None of these
10. 36 is what percent of 30 ?
(a) $83.3 \%$ (b) $90 \%$ (c) $120 \%$ (d) $72 \%$ (e) None of these
11. 6 is $15 \%$ of what number?
(a) 90 (b) 0.9 (c) 2.5 (d) 40 (e) None of these
12. The population of Snowtown was 4,500 in 1990. In 1994 it had decreased to 3,600 . Find the percent decrease in population during those four years.
(a) $80 \%$ (b) $90 \%$ (c) $16.2 \%$ (d) $20 \%$ (e) None of these
13. You receive a grade of $75 \%$ on a test of 60 questions. How many questions did you answer correctly?
(a) 45 (b) 8 (c) 12 (d) 50 (e) None of these
14. Sandra's monthly salary is $\$ 3,200$. If deductions for taxes from her monthly paycheck are $\$ 800$, what percent of her salary goes to these deductions?
(a) $25 \%$ (b) $25.6 \%$ (c) $40 \%$ (d) $4 \%$ (e) None of these
15. The cost of an article including $15 \%$ for taxes is $\$ 138.00$. What is the cost of the article without taxes?
(a) $\$ 120.00$ (b) $\$ 117.30$ (c) $\$ 20.70$ (d) $\$ 92.00$ (e) None of these
16. The average of the following group of numbers 43, 29, 51, 36, $33,42,32$ is:
(a) 36 (b) 33 (c) 38 (d) 43 (e) None of these
17. Brian had marks of $80,94,70,68$ and 83 on five tests. His average score is between
(a) 65 and 70 (b) 70 and 75 (c) 75 and 80 (d) 80 and 85 (e) None of these
18. $6.42 \times 10^{4}$ is equivalent to:
(a) 64,200 (b) 642 (c) 0.000642 (d) 642,000 (e) None of these
19. $\frac{1}{4}+\frac{5}{8}+\frac{7}{10}=$
(a) $\frac{14}{18}$
(b) $\frac{13}{22}$
(c) 1.325
$\begin{array}{ll}\text { (d) } 1.575 & \text { (e) None of these }\end{array}$
20. $3 \frac{1}{2}+4 \frac{3}{4}+5 \frac{3}{10}=$
(a) $12 \frac{7}{16}$
(b) $13 \frac{11}{20}$
(c) $\frac{46}{33}$
$\begin{array}{ll}\text { (d) } 12 \frac{9}{80} & \text { (e) None of these }\end{array}$
21. $7 \frac{1}{8}-3 \frac{1}{6}=$
(a) $4 \frac{1}{8}$
(b) $4 \frac{1}{2}$
(c) $3 \frac{23}{24}$
(d) $3 \frac{0}{2} \quad$ (e) None of these
22. $7-4 \frac{2}{5}=$
(a) $3 \frac{3}{5}$
(b) $-2 \frac{3}{5}$
(c) $-3 \frac{3}{5}$
$\begin{array}{ll}\text { (d) } 2 \frac{3}{5} & \text { (e) None of these }\end{array}$
23. $31.7+6+2.81+0.254=$
(a) 35.264 (b) 858 (c) 14.52 (d) 40.764 (e) None of these
24. Subtract 5.485 from 12
(a) -17.485 (b) 17.485 (c) -6.515 (d) 6.515 (e) None of these
25. Dividing by 10000 is the same as multiplying by
(a) 0.01 (b) $\frac{1}{10000}$ (c) $\frac{1}{1000}$ (a) 0.001 (e) None of these
26. Ginny baked a delicious apple pie. John ate $\frac{1}{4}$ of it. Then Aldo ate $\frac{1}{2}$ of what was left. How much pie was left after Aldo ate his piece?
(a) $\frac{1}{4}$ (b) $\frac{1}{8}$
(c) $\frac{1}{2}$ (d)
d) $\frac{3}{8}$ (e) None of these
27. It takes a bus $3 \frac{1}{4}$ hours to travel from Toronto to Parry Sound if the bus averages $88 \mathrm{Km} / \mathrm{hr}$. How far is it from Toronto to Parry Sound?
(a) $286,000 \mathrm{~m}$ (b) 2.86 km (c) 27 km (d) 286 cm
(b) None of these
28. Find the missing term: $\frac{4}{7}=\frac{28}{?}$
(a) 49 (b) 16 (c) 56 (d) 42 (e) None of these
29. If $\frac{a a}{10}=0.57$, then $a$ is equal to
$\begin{array}{ll}\text { (a) } 57 \text { (b) } .057 & \text { (c) } 5 \frac{7}{10} \\ \text { (d) } 0.057 & \text { (e) None of these }\end{array}$
30. Express the following product in lowest terms:
$3 \frac{1}{4} \times \frac{1}{7} \times 8$
(a) $3 \frac{3}{7}$ (b) $\frac{24}{28}$ (c) $\frac{13}{7}$ (d) $\frac{6}{7}$ (e) None of these
31. The value of $-3(-4)^{2}$ is:
(a) 48 (b) 49 (c) -48 (d) 144 (e) None of these
32. How many fifths are there in 4.8?
(a) 24 (b) 0.96 (c) 1.04 (d) 9.6 (e) None of these
33. Find the value of $y-6 y^{2}$, when $y=\frac{1}{3}$
(a) $-\frac{2}{3}$ (b) $-\frac{1}{3}$ (c) 1 (d) $-4 \frac{2}{3}$ (e) None of these
34. When $\mathrm{M}=-2$ and $\mathrm{P}=4$, find the value of $\frac{3 P P-M M}{3 M M P P}$
(a) 0 (b) $-\frac{7}{12}$ (c) $-\frac{5}{12}$ (d) $-\frac{3}{4}$ (e) None of thes
35. A student's total budget was $\$ 15,000$. How much more money was allocated to tuition than room and board?

| Tuition | $64 \%$ |
| :--- | :--- |
| Room and board | $26 \%$ |
| Books and supplies | $4 \%$ |
| Other | $6 \%$ |

(a) $\$ 9,600$ (b) $\$ 3,900$ (c) $\$ 5,700$ (d) $\$ 8,100$ (e) None of these

## Business Math Test - Sample Questions

50 multiple choice questions, 60 minutes, no calculators, or dictionaries.
Topics covered:

- Decimals
- Fractions
- Percentages
- Ratios
- Algebra
- word problems using all above

Review all the above questions and the following until question 38.
36. $22 r-15 s-3 r+3 s=$
(a) 15 rs (b) $22 \mathrm{r}-15 \mathrm{~s}$ (c) 7 rs (d) $19 \mathrm{r}-12 \mathrm{~s}$ (e) None of these
37. $\frac{a a^{6}}{a a^{2}}=$
(a) $a^{4} \quad$ (b) $a^{3}$ (c) $a^{8}$ (d) $a^{-8}$ (e) None of these
38. $\left(3 x y^{2}\right)^{3}=$
(a) $3 x^{3} y^{6}$
(b) $x y$ (c) $27 x^{3} y^{6}$
(d) $9 x^{2} y^{6}$
(e) None of these

## OCMA Math Test - Sample Questions

45 multiple choice questions, 60 minutes, no calculators or dictionaries
Topics covered:

- Decimals
- Percent
- Fractions
- Ratios
- basic algebra
- graphing
- word problems using all above

Review all the above questions and the following until question 43.
39. $4+2[6-(-5) 3]=$

$$
\text { (a) }-14 \text { (b)-54 (c) } 126 \text { (d) } 46 \text { (e) None of these }
$$

40. $\frac{10^{3}}{10^{-2}}=$
(a) 10 (b) $10^{-4}$
(c) $10^{-1}$
(d) $10^{-5}$ (e) None of these
41. The expanded form of $(3 r-4)^{2}$ is:
(a) $9 r^{2}-12 r+16$
(b) $9 r^{2}-24 r-16$
(c) $9 r^{2}+16(d) 9 r^{2}-16$
(e) None of these
42. If $T=\frac{1}{3} \mathrm{rm}^{2}$, then $\mathrm{r}=$
$\begin{array}{lll}\text { (a) } \frac{m^{2}}{3 T} & \text { (b) } \frac{\sqrt[3]{T}}{m}\end{array}$
(c) $3 T-m^{2}$
(d) $\frac{T}{3 m^{2}}$ (e) None of these
43. What numbered region does the point $(18,-36)$ fit into?

| 2 | 1 |
| :--- | :--- |
| 3 | 4 |

$\begin{array}{lllll}\text { (a) } 1 & \text { (b) } 2 & \text { (c) } 3 & \text { (d) } 4 & \text { (e) None of these }\end{array}$

## High Tech Math Test - Sample Questions

46 questions (written and multiple choice), 60 minutes, no calculators, or dictionaries

Topics covered:

- some basic operations of decimals, fractions and percent
- complex algebra including factoring, square roots
- geometry
- trigonometry
- word problems using all above

Review all the above questions and the following until question 52.
44. Simplify: $\sqrt{10^{2}-6^{2}}$
(a) 8 (b) $\sqrt{136}$ (c) 64 (d) 2 (e) None of these
45. Express y $-4[y-3(y-2)]-5$ in simplest form
(a) $19+9 y(b)-7 y-29$ (c) $-2 y^{2}+14 y-29$ (d) $9 y-29$
(e) None of these
46. Combine fractions and reduce
$\frac{5 b b}{4 a a}+\frac{b b}{3 a a}-\frac{3 b b}{a a}$
(a) $\frac{3 b b}{8 a a}$ (b) $\frac{17 b b}{12 a a}$ (c) $-\frac{17 a a b b}{12 a a^{2}}$ (d) $-\frac{17 b b}{12 a a}$ (e) None of these
47. Combine fractions $\frac{2 m}{t}+\frac{5}{m t}$
(a) $\frac{7}{t}$
(b) $\frac{2 m^{2}+5}{m t}$
(c) $2 m^{2} t+5 t$
(d) $\frac{2 m-5 t}{t+m t}$
(e) None of these
48. Which is equal to
$x^{2}-2 x-3$ ?
(a) $(x-3)(x+1)$
(b) $(x+3)(x-1)$
(c) $(x-3)(x-1)$
(e) None of these
49. $(3-y)(3+y)=$
(a) $9-y^{2}$
(b) $9+y^{2}$
(c) $9+6 y+y^{2}$
(d) $9-6 y+y^{2}$
(e) None of these
50. Find the circumference of a circle with a diameter of 10 :
(a) $10 \pi$ (b) $25 \pi$ (c) $100 \pi$ (d) $5 \pi$ (e) None of these
51. How many 4 cm by 4 cm tiles are needed to cover an area which measures 20 cm by 28 cm ?
(a) 48 (b) 35 (c) 140 (d) 560 (e) None of these
52. A piece of wire, 536 cm long is cut into two parts such that the longer part is 3 times as long as the shorter part. What are the lengths, in cm , of the two parts?
(a) 134 cm and 402 cm
(b) 144 cm and 392 cm
(c) 128 cm and 408 cm
(d) 124 cm and 412 cm
(e) None of these

## Answer Key

1. c 2. b 3.d 4. c 5. a 6. e 7. B 8. a 9. a
2. c 11. d 12. d 13. a 14. a 15. a 16. c 17. c
3. a 19. d 20. b 21. c 22. d 23. d 24. d 25. b 26. D
4. a 28. A 29. c 30. e 31. c 32. a 33. b 34. b
5. c 36. d 37. a 38. c 39.d 40. e 41. e 42. e
6. d 44. a 45. d 46. d 47. b 48. a 49. a
7. a 51. b 52. a

Thank you to the Math Department at Humber College for permission to use their math sample questions.

## HELPFUL RESOURCES - MATH

To prepare for the assessments, you will need to study or review seniorlevel (Grades 11 and 12) high school course material in the subjects of your tests. You may also refer to GED Practice Books.

You may find the following websites helpful as well:
http://www.khanacademy.org/
http://www.mathleague.com/
http://www.aaamath.com/
http://www.purplemath.com/
http://www.themathpage.com/

## CAAT-D Science Test - Sample Questions

This test includes 50 multiple choice questions in 25 minutes on basic principles of biology, chemistry and physics.

## Biology

1. A cell would be unable to synthesize enzymes if it lacked -
a) ribosomes
b) centrioles
c) Galai bodies
d) endoplasmic reticulum
2. A person can be nourished by injecting glucose into the veins because glucose is in a form that can
a) be digested and utilized in the blood
b) react without energy input
c) be maintained in dynamic equilibrium with cell contents
d) pass out of the capillaries and be utilized by cells
3. The following diagram of a reflex arc shows the direction of impulses.

(a) A muscle or gland is most likely to be found at
(a) I .
(b) II.
(c) III.
(d) V .
(b) A sensory neuron is represented:
(a) II.
(b) III.
(c) IV .
(d) $V$.

## Physics

4. Light travels -
a) from the eye of the observer to the object
b) from the object to the eye of the observer
c) none of these
5. If a gas is cooled in a close container, its molecules
a) move faster
b) stay further apart
c) collide more often with the walls of the container
d) move more slowly

## Chemistry

6. Which of the following changes is a chemical change:
a) The crushing of stones
b) The formation of clouds
c) The separation of cream from milk
d) The lighting of a cigarette
7. The nucleus of an atom contains 10 neurons and 9 protons. The first two shells contain a total of 9 electrons.
a) the atomic number of this atom is 9
b) the mass number is 28
c) the atom is called potassium
d) all of the above
e) none of the above

Correct answers: 1(a) 2(d) 3 (a)(d) (b)(a) 4 (b) 5(d) 6(d) 7(a)

## HELPFUL RESOURCES - SCIENCE

When preparing for the Science Assessment, you may find the following study guides helpful in reviewing their knowledge. These study guides are usually available at bookstores and libraries. However, please note that the resources are to serve as guides only and that they do not represent an exact match with the test content.

- GED Study Guides. These study guides are published by various publishers.
- Master the GED Science. 2nd edition. This study guide is published by Arco. ISBN 768910005
- Biology Grade 11. A Personal Tutor in a Book and Biology Grade 12. A Personal Tutor in a Book. These study guides are published by The Academic Edge Ltd. ISBN 978-1-55202-029-6 (Grade 11) and ISBN 978-1-55202-030-2 (Grade 12).
- Biology 11 University Preparation. The Key Study Guide. This study guide is published by Castle Rock Research Corp. ISBN 1-55371-939-5.

