

### 1. US Literature

The footnote to this poem starts with the word 'Holy' repeated fifteen times. The poem contains the lines: "I'm with you in Rockland" and often addresses Moloch. It opens with: "I saw the best minds of my generation destroyed by Madness". Name this 1955 work by Allen Ginsberg.

ANSWER: Howl

### 2. Calculus/Combinatorics (10 Seconds)

(Note to moderator: Euler is pronounced Oiler.) A stained glass window at Caius College in Cambridge commemorates the work of this mathematician. The tool named after him existed before he was born, but he popularized it in his work *On the Diagrammatic and Mechanical Representation of Propositions and Reasonings*. The tool is similar to Johnston diagrams and Euler diagrams. Name this late nineteenth century mathematician whose name is used for diagrams that show relationships between sets.

ANSWER: (John) Venn (accept Venn Diagrams)

### 3. Music

One of his earlier operas was about a medieval Italian and was popular despite its six hour length and the composer's dislike of it. His final opera was based on a quest for the Holy Grail. This composer spent much of the 1850s, '60s, and '70s creating what he considered the music of the future, which included serious drama. Name this composer of *Rienzi*, *Parsifal*, *Tannhauser*, and *The Ring Cycle*.

ANSWER: (Richard) Wagner

### 4. Chemistry (30 Seconds)

(Note to moderator: Make sure you say molality, not molarity.) Find the molality of four grams of methanol dissolved in five hundred grams of water. The chemical formula of methanol is  $\text{CH}_3\text{OH}$ , so each molecule has one carbon atom, one oxygen atom, and four hydrogen atoms. You can give your answer as a fraction or as decimal with two significant figures.

ANSWER: 0.25 (or  $\frac{1}{4}$ ) (Molal or Molality)

### 5. Religion/Mythology

This Greek God was born in Thrace, and he returned there after being embarrassed by Hephaestus. According to one story, he was once locked in a bronze urn for thirteen months before being rescued by Hermes. He was the son of Zeus and Hera and father of Eros. Name this Olympian God of brutal war whose Roman counterpart was Mars.

ANSWER: Ares

6. Algebra (30 Seconds)

Put your answer in the form  $a+bi$ : square the quantity  $3+5i$ .

ANSWER:  $-16+30i$  (accept  $30i-16$ )

7. World History

Two national heroes of this country are Jose Rizal and Andres Bonifacio; they declared independence from Spain in 1898. True independence came from the United States in 1946. This nation was headed from 1965 to 1986 by Ferdinand Marcos. After being declared the winner of a questionable election, Marcos fled the country and was replaced by Corazon Aquino. Name this nation South of Taiwan and Northeast of Borneo in the Pacific Ocean.

ANSWER: (The) Philippines (or Pilipinas)

8. Technology

This was unveiled in January, 2001, nine months before the product it is commonly associated with. It is now on Version 7 and has had over one billion downloads in the past three years. Name this proprietary digital media player application run by Apple and associated with iPods.

ANSWER: iTunes (do not accept iTune Music Store or iTMS)

9. Pop Culture

She voices Gussy the Goose in the upcoming remake of *Charlotte's Web*, and she played Ellen DeGeneres's therapist on a famous episode of *Ellen*. In the past year, she has announced that she does not have a feud with David Letterman and that she is not a lesbian, though she is a close friend of Gayle King. Name this woman closely associated with the Oxygen Network, Harpo Productions, O Magazine, and her talk show.

ANSWER: Oprah Winfrey (accept Oprah or Winfrey)

10. World Literature

Give the first and last name of the illiterate laborer married to Teresa. He is promised an island, but ends up ruling a fictional one. Name this famous sidekick who rides a mule and first appeared in a 1602 novel by Cervantes.

ANSWER: Sancho Panza

### 11. Biology

This disease is generally considered to be autoimmune and caused by demyelination. There are four classifications of it; the most common is Relapsing-Remitting. In order to diagnose it, there must be symptoms in different parts of the nervous system. These symptoms can be verified by MRI, spinal tap, or reflex responses. Name this disease often associated with fundraising for further research.

ANSWER: Multiple Sclerosis (accept Disseminated Sclerosis, prompt MS or Sclerosis)

### 12. Language Arts

This noun comes from the Latin for 'from the beginning'. It usually refers to a certain group of Australians, though it can also refer to people in other parts of the world. Give this term beginning with the letter A referring to people who are indigenous to a land and are surrounded by other people who are now dominant.

ANSWER: Aborigine

### 13. Geography/Astronomy/Earth Science

This Canadian province contains the Laurentian Mountains and has been impacted by the Quiet Revolution. The Northern part of it is called Nunavik and inhabited by Inuits, and the Southern part borders New York, New Hampshire, Vermont, and Maine. Name this largest province that contains Montreal.

ANSWER: Quebec

### 14. Current Events

On October 8<sup>th</sup>, the Associate Press reported that this Senator had not properly reported income from stock options from companies which have federal contracts. Democrats claim that multiple arrest warrants were issued for him when he was in college. There are also allegations that he once stuffed a deer's head into an African American's mailbox. Name this son of a football coach and Virginia Senator who narrowly lost his reelection bid to Jim Webb.

ANSWER: (George) Allen

### 15. Geometry/Trigonometry (30 Seconds)

Include units in your answer. Find the area of a circle formed by the intersection of a sphere and a plane if the shortest distance between the plane and the center of the sphere is six centimeters and the sphere has a radius of ten centimeters.

ANSWER:  $64\pi$  square centimeters (or centimeters squared) (do not accept Centimeters or answers excluding pi)

#### 16. British Literature

This work is divided into five parts, the last of which is titled “The End of It”. The main character’s nephew, who visits him near the beginning of the story, is named Fred. The main character’s business partner, who died seven years before the action of the story takes place, is named Jacob Marley. Name this Charles Dickens work about Ebenezer Scrooge.

ANSWER: (A) Christmas Carol

#### 17. Nonfiction

Though better known for his fiction, he wrote travel narratives such as *Following the Equator*, *Roughing It*, *A Tramp Abroad*, and *The Innocents Abroad*. He also wrote accounts about life on the Mississippi River. Name this famous novelist and humorist who lived from 1835 to 1910.

ANSWER: (Mark) Twain (or (Samuel) Clemens)

#### 18. Physics (10 Seconds)

This phenomenon was first noted by Grimaldi and explained by Fresnel using Huygens’ Principle. It is associated with an equation stating that energy at an angle is equal to the energy at the center times the sine of alpha, all divided by alpha, where alpha is the maximum phase difference divided by two. This equation can be combined with interference equations to find out how much light gets to a particular point. Name this phenomenon defined as the bending of light as it goes around an obstacle.

ANSWER: Diffraction

#### 19. Art/Architecture

His early paintings include *The Procuress* and *A Woman Asleep at a Table*. His fame increased during the nineteenth century, two hundred years after he died. Other works include *Girl Interrupted at her Music*, *The Milkmaid*, and *Girl With a Pearl Earring*. Name this Dutch painter whose works played a prominent role in a 2003 novel by Blue Balliett.

ANSWER: (Johannes or Jan) Vermeer

#### 20. US History

British headquarters during this battle were at the home of Thomas Nelson, Junior. The British were expecting reinforcements from the sea, but Admiral De Grasse’s victory at the Battle of the Chesapeake made that impossible. This American victory led to the resignation of Prime Minister Lord North, whose successor acknowledged American Independence. Name this victory by George Washington over Lord Cornwallis.

ANSWER: Yorktown

Tiebreakers: (If you need to replace a question, take one from the Replacement Packet.)

Use these questions in the order given if you need to break a tie. The first correct answer wins the match.

(30 Seconds)

There are 25 prime numbers less than 100. How many numbers less than 100 are prime or divisible by three?

ANSWER: 57 [25 primes + 33 div by 3 – 1 overlap (3)]

His name often appeared on works that he had little or nothing to do with, such as a poetry collection titled *The Passionate Pilgrim* and plays titled *Lord Cromwell* and *The Life of Oldcastle*. Born in 1564, he moved to London in 1586 and started having his works produced around 1591. He completed thirty-four plays, one hundred fifty-four sonnets, and several other poems. Name this man famous for writing *Cymbeline*, *Titus Andronicus*, *The Winter's Tale*, *The Comedy of Errors*, *Othello*, and *Hamlet*.

ANSWER: (William) Shakespeare

Which state contains the towns of Janesville, West Allis, Appleton, Madison, and Milwaukee?

ANSWER: Wisconsin