Illinois Coaches Association 1996 Tournament Finals TRIAD QUESTIONS

1.

TOSS-UP FINE ARTS

This artist's mistress, Jeanne Hebuterne, pregnant with their second child, committed suicide the day after he died in 1920 of tuberculosis, which was hastened by the use of alcohol and drugs. An Italian painter, he was active in Paris after 1906 and worked as a sculptor until 1914 when World War I made it difficult to get materials and his lungs forced him to stop, then he returned to painting. For ten points name this Italian known for his oval elongated shapes such as Reclining Nude.

ANSWER-(Amedeo Modigliani)

1.

BONUS FINE ARTS

Identify the following members of the surrealist movement from a description.

- 1. This German born artist used the technique of frottage which he invented to produced some of the most compelling surrealist works in a series of fantastic views suggesting jungles or underwater and lunar landscapes. One scary example is Europe After the Rain.
- 2. This Catalan painter reveals fantasy as unbridled as that of any surrealist and in wit was the sharpest. An example of his work includes Harlequin's Carnival.
- 3. The most famous of the surrealists, he joined the group in 1929 and called his painting "hand-painted dream photographs". Examples of his work include Sacrament of the Last Supper and Premonition of Civil War.
- 4. The son of Swiss Post-Impressionist painter, this artist is generally considered the greatest surrealist sculptor. His surrealist cages and slabs, haunted by isolated figures, initiate a theme of existential loneliness that characterize much of his work. Examples are Head and Dog.

ANSWER---1.(Max Ernst)

2.(Joan Miro)

3.(Salvador Dali)

4.(Alberto Giacometti)

2.

TOSS-UP SOCIAL STUDIES

This man's lifelong liberal politics stemmed from the time his family lost their home during the Great Depression. He left college to work in his father's drug store, but eventually graduated from the University of Minnesota and was elected mayor of Minnesota with the largest plurality ever recorded. He then had the distinction of being the first democrat from Minnesota ever elected to the Senate in 1948 and also helped found the ADA. For ten points name this man who lost to Nixon in the election of 1968.

ANSWER——(Hubert Humphrey)

BONUS SOCIAL STUDIES

Warren Harding had few qualifications when he was elected President, but was chosen by the Republicans because he had few enemies. He said though, that he would choose the "best minds" to help him in his cabinet. Identify them from a description.

- 1. This engineer and future president was chosen as his Secretary of Commerce.
- 2. This future chief justice of the United States, considered one of the wisest republicans, was chosen as Secretary of State.
- 3. This man, one of the nation's richest men and a wizard of finance, was chosen as Secretary of the Treasury, a position he held for three presidencies.
- 4. Widely known as an editor for a farm journal and a champion of conservation, this man was chosen as secretary of agriculture.

ANSWER—1.(Herbert <u>Hoover</u>)

2.(Charles Evans Hughes)

3.(Andrew Mellon)

4.(Henry Wallace)

3.

TOSS-UP MATH

Express the sine of 2X in terms of only sine and cosine with X having a coefficient of 1.

ANSWER---(2 times the sine of X times the cosine X)

3.

BONUS MATH

Given the function F of X equals 2X cubed plus 6X squared plus 6X, answer the following.

- 1. What is the first derivative.
- 2. What is the second derivative.
- 3. What are the coordinates of the critical point.
- 4. What are the coordinates of the point of inflection.

ANSWER--1.(6X squared plus 12X plus 6)

2.(12X plus 12) 3.(1, 5)

4.(negative 1, negative 2)

4.

TOSS-UP LITERATURE

Originally a Celtic sea god, Geoffrey of Monmouth transformed him into a king who ruled Britain from his capital at Leicester [LES-ter]. Stories of his reign and his ungrateful children are then told in works by Camden and Spenser, while Raphael Holinshed fixed his rule around 800 BC. For ten points name this man who then appears as a subject of a Shakespeare play along with his daughters Goneril, Cordelia and Regan.

ANSWER---(King Lear)

4.

BONUS LITERATURE

Given the following animals, identify with what figure in Greek mythology they are most associated.

1. Eagle.

2. Horse.

3. Owl.

4. Dove.

ANSWER-1.(Zeus)

2.(Poseidon)

3.(Athena)

4.(Aphrodite)

5.

TOSS-UP SCIENCE

This Cornell astronomy professor recently had to take a leave of absence to get a bone marrow transplant which appears to have cured his myelodysplasia, which has allowed him to return to work on the movie version of his book Contact. For ten points name this man best known for the TV series and book Cosmos.

ANSWER-(Carl Sagan)

BONUS SCIENCE

Identify some of the following discoveries made by the English astronomer William Hershel.

1. Name the planet he discovered in 1781.

2 + 3. Name the two largest satellites of the planet in part one. They were discovered by Hershel in 1787 and given names from characters in a Shakespearean play.

ANSWER-1.(Uranus)

2 + 3.(Titania + Oberon)

6.

TOSS-UP MISCELLANEOUS

Meaning 'instruction' or 'study' in Hebrew, this work is divided into two parts, the Mishnah, which gives a simple statement of the laws and the Gemara which presents discussion and debate on each law. For ten points name this religious book which contains the civil and religious laws of the Jewish faith.

ANSWER-(Talmud)

6.

BONUS MISCELLANEOUS

Answer the following questions relating to recent discoveries in Biblical archaeology.

- 1. Examinations of the Tel Dan fragment and Moabite Stone have finally provided evidence that this king of Israel who slew Goliath really existed.
- 2. Although Indiana Jones supposedly discovered it in his first movie, recent scholarship has shown that this object was stored was probably stored for many years beneath the Dome of the Rock on Temple Mount.
- 3. The discovery of several imprints from the seal of Baruch indicate that this prophet was probably real because Baruch was his scribe in the Bible.
- 4. Although a few experts site the evidence of the gates of Hazor, Gezer and Megiddo, most scholars agree this is no evidence to support the claim that this wise king and son of David ever existed.

ANSWER---1.(David)

2.(Ark of the Covenant)

3.(Jeremiah)

4.(Solomon)

7.

TOSS-UP MATH

What is the surface area of a sphere with a diameter of 22 meters.

ANSWER—(484 square meters)

7.

BONUS MATH

Convert the following numbers to decimal numbers.

2.(109)

1. 101011, binary.

2. 1231, base 4.

3. 567, octal.

4. 13B, hexadecimal.

ANSWER-1.(43)

3.(375) 4.(315)

8.

TOSS-UP SOCIAL STUDIES

Wrapped in a purple robe, his body was hidden among some rocks in Pevensey Bay by the Normans. His mother offered his body's weight in gold if it were returned, but William replied that it should be buried upon the Saxon shore he was defending. For ten points name this short lived King of England who was killed by an arrow to the right eye while fighting at Hastings.

ANSWER-(Harold II Godwinson)

8

BONUS SOCIAL STUDIES

Identify the capitals of the following countries.

1. Australia.

2. South Africa's administrative capital.

3. Peru.

4. Zambia.

ANSWER-1.(Canberra)

2.(Pretoria)

3.(Lima)

4.(Lusaka)

TOSS-UP LITERATURE

Taken from the information in Tacitus, Suetonius, Pliny, Plutarch, Caesar and Seneca among others, it was proof read by Lawrence of Arabia. Using an autobiographical format it tells of the first 50 years of the Roman Empire from the perspective of one of the Emperors. For ten points name either of these two books by Robert Graves about Emperor Claudius.

ANSWER-(I, Claudius or Claudius the God)

9.

BONUS LITERATURE

Identify the following about The Age of Innocence.

- 1. Name the author.
- 2. The year in which it won the Pulitzer Prize for Fiction.
- 3 + 4. The two main characters who appear in the work who are married.

ANSWER-1.(Edith Wharton)

2.(1921)

3 + 4. (Newland Archer and May Welland)

10.

TOSS-UP SCIENCE

Associated with the first mining venture for gems in history, this gem is virtually always found flawed in nature thus imitation gems of this type always have flaws introduced. For ten points name this type of expensive beryl gem which has various amounts of chromium oxide in it, thus accounting for its green color.

ANSWER--(Emerald)

10.

BONUS SCIENCE

Identify the following gemstones from a description.

- 1. This gemstone was made artificially as far back as the 13th century China where a small metal image of the Buddha was forced into the shell of a mollusk.
- 2. Found chiefly around the Baltic Sea, this orange colored gem is actually the fossilized remains of tree sap.
- 3. Coming most commonly in white, black and fire colors, this non-crystalline gem is a compound of water and silicon dioxide.
- 4. Often confused with sapphire because of its blue color, this stone which is comprised of lazurite was once used to make the pigment ultramarine.

ANSWER---1.(Pearl)

2.(Amber)

3.(Opal)

4.(Lapis lazuli)

11.

TOSS-UP MATH

What is the third derivative of 2 times the sine of 2X.

ANSWER—(Negative 16 times the cosine of 2X)

BONUS MATH

Expand the following binomials.

- 1. The quantity X minus Y, the quantity raised to the 4th power.
- 2. The quantity X plus 1, the quantity raised to the 5th power.
- 3. The quantity X minus 1, the quantity raised to the 7th power.

ANSWER—1. (X raised to the 4th power minus 4X cubed Y plus 6X squared Y squared minus 4XY cubed plus Y raised to the 4th power)

2.(X raised to the 5th power plus 5X raised to the 4th power plus 10X cubed plus 10X squared plus 5X plus 1)

3.(X raised to the 7th power minus 7X raised to the 6th power plus 21X raised to 5th power minus 35X raised to the 4th power plus 35X cubed minus 21X squared plus 7X minus 1)

12.

TOSS-UP SCIENCE

There are two basic types, granulocytes and agranulocytes. Granulocytes are divided into eosinophils, basophils, and neutrophils, while agranulocytes are divided into monocytes and lymphocytes. Monocytes, basophils and eosinophils function as we usually think of them, as phagocytes engulfing antigens. Lymphocytes are mainly involved in the synthesis of antibodies. For ten points name this type of blood cell which is known scientifically as leukocytes.

ANSWER-(White blood cells) Accept: leukocytes on early buzz

12.

BONUS SCIENCE

Identify the following parts of an egg from a description.

1. This is the special food in an egg which nourishes the developing embryo.

- 2. This is the extra-embryonic membrane which aids in the respiration and excretion of wastes in the eggs of birds and reptiles.
- 3. The is the egg white that surrounds the area named in question one.
- 4. These are the twisted strands of the term named in question three which extend from the egg cell of a bird's egg to the shell membrane.

ANSWER-1.(Yolk)

2.(Allantois)

3.(Albumen)

4.(Chalaza)

Half-Time

13.

TOSS-UP SOCIAL STUDIES

First started to prevent the intermingling of the Indo-Aryan race with that of the Dravidian, this system eventually evolved into five groups. The Brahmans or priests, Kshatriyas or warriors, Vaisyas or traders, Sudras or serfs and the untouchables. For ten points name this system of segregation in India.

ANSWER--(Caste)

BONUS SOCIAL STUDIES

Concluded in 1699, the Treaty of Karlowitz marked the end of 15 years of fighting in Eastern Europe.

- 1. Name the Muslim empire which lost the fighting and which was forced to cede much territory.
- 2. Name the empire led by King Leopold I and generals Charles of Lorraine and Eugene of Savoy which beat off the siege of Vienna and through the battles of Mohacs and Zenta was able to gain Hungary and Transvlvania.
- 3. Name the Baltic country led by King John III Sobieski which sent 30,000 troops to help the country in part two and was thus granted Podolia.
- 4. Name the eastern European empire led by Tzar Peter I which gained the port of Azov through the treaty.

ANSWER—1.(Ottoman Empire or Turkey)

2.(Austria)

3.(Poland)

4.(Russia)

14.

TOSS-UP LITERATURE

He has written a guide to Shakespeare, a Treasury of Humor, and a chronology of the world, but he is best known for his science fiction works. He has written In the Beginning and The Robots of Dawn but he is best known for his Foundation trilogy. For ten points name this author of Foundation and Foundation's Edge.

ANSWER---(Isaac Asimov)

14.

BONUS LITERATURE

Identify the following about The Sun Also Rises.

- 1. Name the author.
- 2. The name of the narrator.
- 3. The name of the woman the narrator loves.
- 4. The name of the bullfighter the woman in part three has an affair with.

ANSWER---1.(Ernest Hemingway)

2.(Jake Barnes)

3.(Lady Brett Ashley)

4.(Romero)

15.

TOSS-UP MISCELLANEOUS

His show drew big ratings but that was not enough to satisfy the sponsor. The original sponsor, Taco Bell, left his show after it deemed the material too controversial, but the show continued after Mug Root Beer agreed to sponsor it. For ten points name the comedian who heads this show, best known for his time on Saturday Night Live.

ANSWER-(Dana Carvey)

15.

BONUS MISCELLANEOUS

Identify the following states from a description of the origin of their names.

- 1. This state is commonly believed to be an English adaptation of the native word for homeland owhyhee.
- 2. This state was originally name New Netherland and received its later name after the Duke of York who received a patent to the region from his brother Charles II.
- 3. This state's name is from the Choctaw Indian word meaning "great", "fine" or "good river".
- 4.. This state's name is from the French version of the Algonquin word meaning "men" or "soldiers".

ANSWER-1.(Hawaii)

2.(New York)

3.(North Dakota)

4.(Illinois)

TOSS-UP MATH

What is the simplest factored form when the polynomial 2X cubed plus 4X squared minus 6X is divided by the binomial X plus 3?

ANSWER—(2X times the quantity X minus 1)

16.

BONUS MATH

Calculate the area of the following figures.

- 1. The area of square with a perimeter of 56 meters.
- 2. The area of a rhombus with diagonals of 18 and 24 meters.
- 3. The area of an ellipse with a minor axis of 28 meters and a major axis of 36 meters.
- 4. Given to concentric circles, with radii of 21 and 8 meters, the area contained in the larger one, but not the smaller one.

ANSWER—1. (196 square meters)

2.(216 square meters)

3.(252Pi square meters)

4.(377Pi square meters)

17.

TOSS-UP SCIENCE

Members of this phylum range from microscopic to macroscopic and all live in water. They develop layers called the ectoderm and the endoderm, and a jelly-like material called mesoglea separate the layers. Their inner layer of cells is called the gastrodermis and is formed from the ectoderm. Many have stinging cells called nematocysts. For ten points name this phylum containing corals, sea fans and the Portuguese man of war.

ANSWER--(Coelenterata or Cnidaria)

17.

BONUS SCIENCE

Answer the following questions relating to the bones of the human body.

- 1. What scientific name is given to the tissue which makes up bones.
- 2. What name is given to the thick double layered membrane which covers bones.
- 3. What name is given to the end of a bone.
- 4. What are the two types of marrow which are found in bones.

ANSWER--1.(Osseous tissue)

2.(Periosteum)

3.(Epiphysis)

4.(Red & Yellow marrow)

18.

TOSS-UP FINE ARTS

Used in Eastern Airlines 'Wings of Man' TV ad campaign, the movies Catch-22 and 2001, and recorded in a jazz style by Deodato, this work was inspired by the composer's preoccupation with Friedrich Nietzsche. For ten points name this tone poem by Richard Strauss about a religious prophet in Persia.

ANSWER—(Also Sprach Zarathustra or Thus Spake Zarathustra)

18.

BONUS FINE ARTS

Given the name of a musical work or works by P.D.Q. Bach, identify the name of the composer whose work is being parodied by the title.

1. The 1712 Overture.

2. Sneaky Pete and the Wolf.

3. The Short-Tempered Clavier and The Little Pickle Book.

4. A Little Nightmare Music.

ANSWER—1.(Pyotr <u>Tchaikovsky</u>)

2.(Sergei Prokofiev)

3.(Johann S. Bach)

4.(Wolfgang Mozart)

TOSS-UP SOCIAL STUDIES

This principality contains the town with the longest name in the world, which shorted is Llanfairpwllgwyn-gyll [Lhan-viyr-pulh-GWIN-ghil] or translated from the Celtic 'St. Mary's Church in the hollow of the white hazel near a rapid whirlpool and the Church of St. Tysilio by the red cave.' For ten points name this part of Great Britain whose capital is located at Cardiff.

ANSWER-(Wales or Cymru)

19.

BONUS SOCIAL STUDIES

Identify the following National Monuments and sites from a description.

- 1. Located in Yellowstone, this geyser erupts approximately every 67 minutes.
- 2. Containing the highest waterfall in North America, this National Park in the Sierra Nevada Mountains of California boasts such sights as El Capitan, Half Dome Mountain and Mariposa Grove.
- 3. Known as Bear Lodge to the local Indians, this extinct volcano neck in Wyoming was given its present name by a scientific team led by Richard Dodge.
- 4. Including much of Florida Bay, this national park is a swampy, subtropical region is well known for its alligators.

ANSWER---1.(Old Faithful)

2.(Yosemite)

3.(Devils Tower)

4.(Everglades)

20.

TOSS-UP LITERATURE

Called an "insane American and depraved artist" by Winston Churchill, at age seven he lost his left eye to a toy arrow and in his 30's became totally blind. He worked as a code clerk in Paris during WWI because of his sight, then returned home and had his first piece published, "Credos and Curios". For ten points name this humorist author of My Life and Hard Times and The Secret Life of Walter Mitty.

ANSWER—(James Thurber)

20.

BONUS LITERATURE

Given a title, name the author.

- 1. The Children's Hour.
- The Cocktail Party.

ANSWER---1.(Lillian Hellman or Henry Longfellow)

2. To An Athlete Young.

4. The Destruction of Sennacherib.

4.(Lord Byron)

2.(A.E. Housman)

3.(T.S. Eliot)

21.

TOSS-UP MATH

What is the expanded form of the quantity X plus 1, quantity closed raised to the 4th power?

ANSWER—(X raised to the 4th power plus 4X cubed plus 6X squared plus 4X plus 1)

21.

BONUS MATH

Given the equation 2 times the secant squared of 3X minus 8 equals 0, give any five solutions in degrees from 0 to 2Pi inclusive.

ANSWER---(20, 40, 80, 100, 140, 160, 200, 220, 260, 280, 320 & 340)

22.

TOSS-UP SCIENCE

One of the greatest natural historians of the 19th century for his monumental works Research on Fish Fossils and Contributions to the Natural History of the United States, all the world held its breath for his decision when Darwin's Origin of Species came out and was shocked when he opposed it. For ten points name this Swiss scientist best known for his theory of glaciation.

ANSWER--(Louis Agissez)

BONUS SCIENCE

Answer the following questions relating to spin in physics.

- 1. Also known as the moment of momentum, this vector quantity which is symbolized L is equal to the moment of inertia time the angular velocity.
- 2. This principle states that no two electrons may have the same four quantum numbers, thus if electrons are in the same orbital they must have opposite spins.
- 3. Having a frequency known as the Larmor frequency, this is the circular path the axis of a rotating particle takes when it is placed perpendicular to a magnetic field.

ANSWER-1.(Angular momentum)

2.(Pauli exclusion principle)

3.(Precession)

23.

TOSS-UP SOCIAL STUDIES

Fearing Federal reinforcements, Captain Semmes of this ship signaled to Captain Winslow of the U.S.S. Kearsage that he desired a ship-to-ship action which was granted as he sailed out of Cherbourg. Moderated by a French ironclad, the British-built Confederate ship was defeated in the 70 minute fight. For ten points name the famous raider that was defeated during the Civil War.

ANSWER--(C.S.S. Alabama)

23.

BONUS SOCIAL STUDIES

Thomas Jefferson wished to be remembered for three things in life and had them inscribed on his tombstone. Name these three great achievements.

ANSWER—(Author of the <u>Constitution</u>, author of the <u>Statute of Religious Freedoms</u> and founder of the <u>University of Virginia</u>)

24.

TOSS-UP LITERATURE

His parents sent him to Athens to study law but he returned to Rome to become a poet. He wrote a series of love elegies titled <u>Amores</u> before writing his masterpiece concerning the history of the world. For ten points name this poet of Metamorphoses.

ANSWER---(Ovid)

24.

BONUS LITERATURE

Given the title of an Irving Stone biography identify the person it is about.

1. The Passions of the Mind.

2. Lust for Life.

3. The Agony and the Ecstasy.

4. The Origin.

ANSWER—1.(Sigmund Freud)

2.(Vincent van Gogh)

3.(Michelangelo)

4.(Charles Darwin)

Replacement Questions

TOSS-UP MATH

What is the first derivative of the tangent of 2X.

ANSWER—(2 times secant squared of 2X)

BONUS MATH

Convert the following numbers in different bases into numbers in base ten.

1. 10010, base 2.

2. 227, base 8.

3. 31A, base 11.

4. 1BD, base 16.

ANSWER---1.(18)

2.(151)

3.(384) 4.(445)

TOSS-UP LITERATURE

This group of English writers took its name from the title of a Leslie Allen Paul autobiography. This group of the 1950s voiced resentment of the British establishment through novels and drama. For ten points name this group of men whose views were expressed in John Osborne's <u>Look Back in Anger</u>.

ANSWER-(Angry Young Men)

BONUS LITERATURE

Identify the following about Charlotte's Web.

- 1. The name of the little girl in the book.
- 2. Name the rat in the story.
- 3. Name the pig the characters are trying to save.
- 4. Name the author.

ANSWER---1.(Fern Arable)

2.(Templeton)

3.(Wilbur)

4.(E.B. White)

TOSS-UP MISCELLANEOUS

After 21 years she announced she was stepping down from her current job to oversee a publishing of her manhunter's bible. For ten points name this woman who transformed *Cosmopolitan* from a fledgling magazine to a major publishing force.

ANSWER---(Helen Gurley Brown)

BONUS MISCELLANEOUS

Given a Super Bowl and the team on which the player played, identify the MVP winner.

1. Twenty-nine, San Francisco.

ANSWER---1.(Steve Young)

2. One, Green Bay.

4. Twenty-seven, Dallas.

3. Twenty Chicago.

2.(Bart Starr)

3.(Richard Dent)

4.(Troy Aikman)

TOSS-UP FINE ARTS

Meaning wolf-killer in Greek, and named after a nearby temple to Apollo, it was one of the most famous learning centers in ancient

Greece. For ten points name this school founded by Aristotle in Athens.

ANSWER-(Lyceum or Lykeion)

BONUS FINE ARTS

Identify the composers of the following works.

1. The Planets.

2. Maple Leaf Rag.

3. H.M.S. Pinafore.

4. Mephisto Waltz.

ANSWER-1.(Gustav Holst)

2.(Scott Joplin)

3.(Arthur Sullivan)

4.(Franz Liszt)