Illinois Coaches Association 1996 Tournament Round 1 TRIAD QUESTIONS

1.

TOSS-UP MISCELLANEOUS

In 1851 the H.M.S. Sans Pareil became the first military vessel to be powered by it. The first ever was launched by John Fitch in 1787, but it did not become a successful design until 1807 with Robert Fulton's Clermont. For ten points name this type of power which replaced the sail.

ANSWER——(**Steam** or **Coal**)

1.

BONUS MISCELLANEOUS

At the end of 1995, three well known government agencies were closed for the final time. Answer the following questions about them.

1. Created in 1989 and known as the RTC, this agency's job was to clean up the S & L scandal, which it did through 90 billion dollars in spending, closing or merging 747 institutions and selling 450 billion dollars in assets.

2. Founded in 1887 to regulate railroad rates, this agency known as the ICC was expanded over the next one hundred years to include buses, trucks, barge, freight forwards, telephone and cable communications.

3. Costing 13 million dollars in its five year lifetime, it is estimated that this agency has saved taxpayers 5 billion dollars a year with its proposals to close 243 military facilities, all of which were accepted.

ANSWER——1.(**Resolution Trust Corporation**)   2.(**Interstate Commerce Commission**)
          3.(Defense **Base Closure** and Realignment **Commission**)

2.

TOSS-UP SOCIAL STUDIES

Mainly because of the Nazis blitzkrieg this act became law on August 25, 1940, but was limited to only one year. In the summer of 1941 the House extended it by a margin of one vote, but nevertheless millions signed up and 1.6 million Americans were conscripted into service. For ten points name this act which was the first peace time draft in American history.

ANSWER——(**Selective Service** Act)

2.

BONUS SOCIAL STUDIES

Including the present one, name the last four Speakers of the US House of Representatives.

ANSWER——(Newt **Gingrich**, Thomas **Foley**, James **Wright**, Jr., & Thomas[Tip] **O'Neill**, Jr.)

3.

TOSS-UP LITERATURE

His 80 to 90 plays won first prize only 4 times and because of this he was cruelly lampooned twice by Aristophanes (air-i-sto-phanes) . The rejection of his peers caused this playwright to leave Athens and seek refuge in Macedonia. His plays such as Orestes and The Suppliant Women are known for their humanity and biting social criticism. For ten points name this Greek playwright of Medea and The Trojan Women.

ANSWER——(**Euripides**)

3.

BONUS LITERATURE
Identify the following about Don Quixote.
1. The real name of the woman Don Quixote calls Dulcinea.
2. The name of Don Quixote's horse.
3. The real first name of Don Quixote.
4. The name of Sancho Panza's donkey.
ANSWER—1.(Aldonza Lorenzo)   2.(Rocinante)   3.(Alonso)   4.(Dapple)

4.

TOSS-UP MATH
In terms of one trigonometric function and no fractions, what does the expression 1 plus the tangent squared of X equal?
ANSWER—(Secant squared of X)

4.

BONUS MATH
In order of descending power, what are the first five coefficients in the expanded form of the quantity 2X plus 1, quantity raised to the 6th power?
ANSWER—(64, 192, 240, 160 & 60)

5.

TOSS-UP LITERATURE   Goldsmith
In his shop known as the 'Bible and Crown', he published such children's works as The History of Goody Two Shoes and Mother Goose's Melodies. A friend of Johnson, Smollett and Goldsmith, his Juvenile Library publications were a great advance in printing technology. For ten points name this man in whose honor a Medal award was created to honor the best American children's book each year.
ANSWER—(John Newbery)

5.

BONUS LITERATURE
Identify the 20th century English author of the following works.
1. The Russia House.   2. Dulce et Decorum Est.
3. Dr. No.   4. The Murder of Roger Ackroyd.
ANSWER—1.(John Le Carre or David Cornwell)   2.(Wilfred Owen)   3.(Ian Fleming)
                4.(Agatha Christie)

6.

TOSS-UP SCIENCE
Johannes Kepler believed that they traveled in straight lines, but in 1664 Giovanni Borelli calculated that this could not be true and proposed a parabolic orbit. Finally in 1682 Edmund Halley calculated that they had very elliptical paths and orbited the sun just like planets. For ten points name these small icy bodies of which Halley's is the most famous.
ANSWER—(Comets)

6.

BONUS SCIENCE
Identify on what planet the following storms are or have been located.
1. The Great Red Spot.   2. The Great Dark Spot.   3. The Great White Spot.
ANSWER—1.(Jupiter)   2.(Neptune)   3.(Saturn)

7.

TOSS-UP FINE ARTS

It goes back to the Minoan period, but the first real master of this painting technique was Giotto(jot-to), while Tiepolo(tya-po-lo) was the last of the Italian masters to use it. It has a rough layer called the arriccio on which a chalk drawing is usually made. It also has a fine layer called the intonaco and is divided into sections called giornata, since very few masters except Massacio (ma-SAHT-chee-oh) could work fast enough to complete a work in this technique before it dried. For ten points name this technique in which pigments bond to wet plaster on a wall.

ANSWER—(**Fresco** or **Boun fresco**)

7.

BONUS FINE ARTS

Identify the following landscape artists from a description.

1. This artist was famous for such landscape scenes as The Fall of Icarus (Ik-are-us) 1567, in which he continually portrays peasants in everyday life.
2. This English landscape painter of the 19th century was famous for the scenes around his native Suffolk, such as Salisbury Cathedral from the Meadows 1829-34.
3. This English landscape painter was famous for his dynamic canvases of nature which usually depicted violent actions such as storms of nature in a raw untamed manner. He used loose violent brush strokes which almost bordered on abstraction, such as Sun Rising through Vapor 1815.
4. This French Baroque painter was known simply by his first name and was one of the first painters to open people's eyes to the beauty of landscape painting, with travelers judging the beauty of real scenery based on his standards for nearly a century after his death. An example of his work include Embarkation of Saint Ursula 1641.

ANSWER—1.(Pieter **Brughel the Elder**)   2.(John **Constable**)

3.(Joseph Mallord William **Turner**)   4.(**Claude** or Claude **Lorrain** or Claude **Gellee**)

8.

TOSS-UP SOCIAL STUDIES

Founded in 1703 after the capture of the Swedish fortress Noteborg, it was started on Hare island in the mouth of the Neva river. The first building to occupy the site was the fortress of St. Peter and St. Paul; the Peter and Paul Cathedral, naval yards and the Hermitage soon followed. For ten points name this Russian city which used to be known as Petrograd and Leningrad.

ANSWER—(**St. Petersburg**)

8.

BONUS SOCIAL STUDIES

The term Commonwealth was first applied in 1917 to the international association of Great Britain and its dominions. Name the five dominions, four of which are now countries, which were members of that first British Commonwealth.

ANSWER—(**Canada**, **Newfoundland**, **New Zealand**, **Australia** and **South Africa**)

9.

TOSS-UP MATH

What is the total surface area in simplest form of a right circular cylinder with a height of 9 meters and bases with radii of 11 meters.

ANSWER—(**440 square meters**)

$\wedge$

π

9.

BONUS MATH

Identify the special name given to each of the following points.
1. The point of concurrency of the altitudes of a triangle.
2. The point of concurrency of the medians of a triangle.
3. The point of concurrency of the perpendicular bisectors of a triangle.
4. The point of concurrency of the angle bisectors of a triangle.
ANSWER—1.(Orthocenter)   2.(Centroid)   3.(Circumcenter)   4.(Incenter)

10.

TOSS-UP SCIENCE

This bone has two processes with which it joins to the tibia to form the knee joint, and also has an indented surface at its other end known as the acetabulum which forms a ball and socket joint with the ileum. For ten points name this largest and strongest bone in the human skeleton which is found in the upper leg.
ANSWER—(Femur)

10.

BONUS SCIENCE

Identify the following biological terms which refer to the number of chromosomes in an organism.
1. This term denotes one half the normal set of chromosomes for an organism and could be applied to human gametes.
2. This term is defined as the normal number of chromosomes for an organism and in humans could be applied to normal somatic or body cells.
3. This is a condition in which there are three or more sets of the chromosomes in the organism and is common in plants.
4. This term refers to a condition in an organism in which the organism gains or loses one or more chromosomes, but not in complete sets.
ANSWER—1.(Haploid)   2.(Diploid)   3.(Polyploid)   4.(Aneuploid)

Half-Time

11.

TOSS-UP MISCELLANEOUS

In a move that shocked on-line computer service companies, this company said they would offer unlimited Internet access for a flat fee. What made the move interesting was that it came from a national company which has the capability to handle the large demand, unlike local carriers. For ten points name this company, more famous for its phone service.
ANSWER—(AT & T or American Telephone and Telegraph)

11.

BONUS MISCELLANEOUS

There is already speculation about who Bob Dole will name as a vice presidential running mate. Identify these potential candidates.
1. This Empower America leader may have destroyed his chances by endorsing Forbes.
2. This Michigan governor is known as a conservative leader among governors.
3. This California governor is considered to harsh on immigration to be nominated.
4. He is still a possibility to run even though Pat Buchanan has threatened to break up the Republican convention if he is nominated.
ANSWER—1.(Jack Kemp)   2.(John Engler)   3.(Pete Wilson)   4.(Colin Powell)

12.

TOSS-UP MATH

What is the range of the function F of X equals X squared minus 4X plus 1 equals 0 for all real numbers?

ANSWER——(F of X is <u>greater than or equal to negative 3</u>)

12.

BONUS MATH

Solve for X in the following equations and give all solutions in simplest form.

~~1. 9 times the quantity 3X minus 999999 equals 2X plus 8 times the quantity 4X minus 6~~

2. X divided by 3 plus X divided by 4 plus X divided by 5 equals 1.

3. X squared plus 3X minus 88.

4. 6X squared minus 5Xi plus 6 equals 0. Note: I equals the square root of negative one.

ANSWER—— ~~...~~   1.(<u>60/47</u>)   2.(<u>8 & negative 11</u>)   3.(<u>3/2(I)</u> & <u>negative 2/3(I)</u>)

13.

TOSS-UP LITERATURE

He grew up in misery and poverty before becoming an assistant at the Royal Library and beginning his own writing career. His first play <u>Master Olaf</u> was followed by <u>Sir Bengt's Wife</u> which was an answer to Ibsen's <u>A Doll's House</u>. His plays such as <u>The Father</u> deal with the relationships between men and women. For ten points name this Swedish author of <u>Miss Julie</u>.

ANSWER——(August <u>Strindberg</u>)

13.

BONUS LITERATURE

Given a quote, name the Edgar Allan Poe poem from which it comes.

1. "It was many and many a year ago, in a kingdom by the sea."

2. "Get thee back into the tempest and the night's Plutonian shore."

3. "To the glory that was Greece and the grandeur that was Rome."

4. Which poem was famous for the use of the word tintinabulation.

ANSWERS——1.(<u>Annabel Lee</u>)   2.(<u>The Raven</u>)   3.(<u>To Helen</u>)   4.(<u>The Bells</u>)

14.

TOSS-UP SOCIAL STUDIES

He taught economics at New York University and was a close friend of author Ayn Rand. He advised Nixon during the 1968 presidential campaign and served as Chairman of the Council of Economic Advisers under Nixon and Ford before moving into his current position. For ten points name this man who is now chairman of the Federal Reserve Board.

ANSWER——(Alan <u>Greenspan</u>)

14.

BONUS SOCIAL STUDIES

Answer the following questions about the Moroccan crises of 1905 and 1909.

1. Moroccan independence had been guaranteed by this 1880 treaty named after the capital of Spain which was signed by Spain, Great Britain, Italy, France and Germany.

2. In 1905, El-Raisuli, a local chief, kidnapped several foreigners and triggered the first crises. This European nation that had long desired Morocco as a colony, threatened to send troops in and take over. Germany immediately threatened war against them and at the Algeciras conference Great Britain backed its ally and Germany was embarrassed and forced to back down.

3. The second crisis was triggered by the start of a civil war which killed a French officer. France dispatched a military column, and this action was immediately protested and answered by this nation which sent the gunboat Panther and light cruiser Berlin.

4. Eventually resolved by the ceding of a small slice of the French Congo in exchange for a French protectorate over Morocco, the crisis became known by the name of the harbor in which the Panther weighed anchor.

ANSWER——1.(Treaty of <u>Madrid</u>)   2.(<u>France</u>)   3.(<u>Germany</u>)   4.(<u>Agadir</u>)

15.

TOSS-UP FINE ARTS

Without being consulted he was appointed head of the Nazi state musical organization by Joseph Goebels, even though the librettist he was working with was Jewish. When the Germans ordered him to purge that man, he went to Switzerland where he spent the war. For ten points name this composer of Elektra and Also Sprach Zarathustra

ANSWER—(Richard Strauss)

15.

BONUS FINE ARTS

Identify the composers of the following symphonies.

1. Pastoral Symphony.   2. Sinfonia Antarctica.
3. Jupiter Symphony.   4. Great Symphony.

ANSWER—1.(Ludwig van Beethoven)   2.(Ralph Vaughn-Williams)
            3.(Wolfgang Amadeus Mozart)   4.(Franz Schubert)

16.

TOSS-UP SCIENCE

A hundred years ago the slogan arose, 'no this element, no thought' because people believed that it was essential to thinking. Since fish were rich in this element, the myth quickly arose that fish were brain food. For ten points name element number fifteen, the second member of the nitrogen group, which is used in matches.

ANSWER—(Phosphorus)

16.

BONUS SCIENCE

Answer the following questions about the soccer ball shaped molecule buckminsterfullerene.

1. How many carbon atoms are in each molecule.

2. Name one of the two, two-dimensional geometric figures which make-up the construction of the molecule.

3. Name the structure invented by Buckminster Fuller which resemble the molecule's shape, hence the reason Fuller was honored.

4. Name the related, more recently discovered molecules, which are small cylindrical shells of carbon atoms with open ends.

ANSWER—1.(Sixty)   2.(Hexagons or Pentagons)   3.(Geodesic dome)
       4.(Nanotubes or Buckytubes [tubules can be substituted for tubes])

17.

TOSS-UP LITERATURE

Based upon the author's experience aboard the Commodore on the New Year's Day in 1897, it tells the story of a captain, a cook, an oilier, and a newspaper correspondent who have escaped their sinking ship. The characters discuss being saved before trying to reach shore on their own. For ten points name this Stephen Crane short story.

ANSWER—(The Open Boat)

17.

BONUS LITERATURE

Given a character, name the Steinbeck work in which they appear.

1. Kino.   2. Aron Trask.   3. Tom Joad.   4. Lenny Small.

ANSWER—1.(The Pearl)   2.(East of Eden)   3.(The Grapes of Wrath)   4.(Of Mice and Men)

18.

TOSS-UP MATH

What is the indefinite integral in simplest terms of the function F of X equals 4X cubed minus 10X plus 9 times X raised to the negative fourth power?

ANSWER——(X raised to the 4th power minus 5X squared minus 3X raised to the negative 3rd power plus C)

18.

BONUS MATH

Calculate the first derivative of the following functions.

1. F of X equals 4X cubed minus 7X squared plus 12X minus 10.
2. F of X equals 5X raised to the 4th power plus 12X cubed minus 8X squared plus 3X minus 4 times X raised to the negative second power.
3. F of X equals 10 times e raised to the 4X power minus the 2 times the natural logarithm of X.
4. F of X equals tangent squared of 4X.

ANSWER——1.(12X squared minus 14X plus 12)
2.(20X cubed plus 36X squared minus 16X plus 3 minus 8 times X raised to the negative 3rd power)
3.(40 times e raised to the 4X power minus 2 over X)
4.(8 times the tangent of 4X times the secant squared of 4X)

19.

TOSS-UP SCIENCE

It can be defined in many different ways. For a chemical reaction it can be the chemical potential times the change in moles, for stretching it is the tension times the change in length, while in thermodynamics it is the temperature times the change in entropy. For ten points name this quantity which is usually expressed as a force times a distance.

ANSWER——(Work)

19.

BONUS SCIENCE

Name the three particles that are formed as a result of the decay of a neutron.

ANSWER——(Proton, Electron + Electron Antineutrino)

20.

TOSS-UP SOCIAL STUDIES

Accessed by such trails as the Widforss, Thunder River and the Old Kaibob, you can see Angels Gate, the Buddha Temple, Ribbon Falls and the rare Kaibob squirrel. Containing many tributary canyons such as Fuller, Bright Angel, Transcept and Haunted, it is more than 200 miles long. For ten points name this canyon in Arizona.

ANSWER——(Grand Canyon)

20.

BONUS SOCIAL STUDIES

Given the war and the US opponent, give the female nickname of that opponent's most famous radio propagandist.

1. The Germans in World War II.
2. The Japanese in World War II.
3. The Iraqis in the Persian Gulf War.

ANSWER——1.(Axis Sally)   2.(Tokyo Rose)   3.(Baghdad Betty)

Replacement Questions

TOSS-UP MATH

What is the simplest result when the fraction 8/7 is multiplied by 4/3 and then is divided by 12/42?

ANSWER—(**16/3 or 5 & 1/3**)

BONUS MATH

Calculate the following related to angles.

1. The measure of an inscribed angle of a circle if it subtends an arc of measure 174 degrees.

2. The measure of a central angle of a circle if it subtends and arc of measure 70 degrees.

3. The measure of the angle formed when two secants intersect, given that the secants subtend arcs of 120 and 60 degrees.

ANSWER—1.(**87 degrees**) 2.(**70 degrees**) 3.(**30 degrees**)

TOSS-UP SCIENCE

The concept of this type of bond was first proposed by G.N. Lewis in 1916 and is central in the study of organic molecules such as C-H four. For ten points identify this type of bond in which atoms share electrons.

ANSWER—(**Covalent** bond)

BONUS SCIENCE

Identify the number of bonds each of the following elements normally form under ground state conditions.

1. Chlorine.   2. Oxygen.

3. Silicon.   4. Boron.

ANSWER—1.(**1**)   2.(**2**)   3.(**4**)   4.(**3**)

TOSS-UP SOCIAL STUDIES

Located in southern Idaho, this national monument was formed by lava flows more than 5 million years ago. It contains giant cinder cones such as Big Cinder Butte as well as various lava tubes and caves. For ten points name this national monument which is not on the moon.

ANSWER—(**Craters of the Moon**)

BONUS SOCIAL STUDIES

Given a description of a state flag, name the US state to which the flag belongs.

1. A red X on a field of white.

2. This flag has a bear and a red star on it.

3. This flag has red, white, and blue bars with the state seal in the center.

4. This state's flag has a blue field with a white star on its left side and bars of white and red on its right side.

ANSWER—1.(**Alabama**)   2.(**California**)   3.(**Missouri**)   4.(**Texas**)

TOSS-UP LITERATURE

The title characters are Aslan, the majestic ruler of a land called Narnia, and the White Witch who has cast a spell over Narnia. Four children enter the land of Narnia through a piece of furniture and set out on a quest to save Narnia from the White Witch. For ten points name this book which is the first in the Chronicles of Narnia series.

ANSWER—(**The Lion, the Witch, and the Wardrobe**)

BONUS LITERATURE

Given a year, name the Nobel Prize winner in Literature

1. 1907.   2. 1923.   3. 1930.   4. 1995.

ANSWER—1.(**Rudyard Kipling**)   2.(**G.B. Shaw**)   3.(**Sinclair Lewis**)   4.(**Seamus Heaney**)