

Illinois Coaches Association

1996 Tournament Round 7

TRIAD QUESTIONS

1.

TOSS-UP SOCIAL STUDIES

This historic city was the site of Bacon's rebellion in 1676 and in 1698 the exhausted settlement moved to Williamsburg. 1619 was an important year in its history as it saw the first boat load of slaves and women both arrive and the establishment of the first elected legislature in America, the House of Burgesses. For ten points name this 1607 settlement famous for such people as Governor Dale, Lord De La Warr, John Rolfe and John Smith.

ANSWER—(Jamestown)

1.

BONUS SOCIAL STUDIES

Answer the following questions to George Custer's last stand.

1. On the banks of what historic river site in the Dakota territory did it take place.
- 2 + 3. An estimated 2500 Sioux and Cheyenne Indians under the command of what two Indian leaders overwhelmed Custer.
4. In what year did the famous battle take place.
5. What was the name of the only living remnant of the ill fated regiment. It was a horse that belonged to Captain Miles Keough.

ANSWER—1. (Little Big Horn) 2 + 3. (Sitting Bull & Crazy Horse) 4. (1876)
5. (Comanche)

2.

TOSS-UP LITERATURE

His great-grandfather wrote the romance The White Rose of Memphis and his violent death gave this author the material for the works Sartoris and The Unvanquished. These works would not bring him success but his novel Sanctuary would. For ten points name this author who wrote A Fable, The Reivers and The Sound and the Fury.

ANSWER—(William Faulkner)

2.

BONUS LITERATURE

Identify the following about The Deerslayer.

1. Name the author.
2. The state in which the book is set.
3. The name of the man known as the Deerslayer.
4. The Mohican chief who is a friend of the Deerslayer.

ANSWER—1. (James F. Cooper) 2. (New York) 3. (Natty Bumppo) 4. (Chingachgook)

3.

TOSS-UP SCIENCE

For his Ph.D. thesis in 1873 he submitted the paper "On the Continuity of the Gaseous and Liquid States" in which he proposed a modification of the ideal gas law which included the constants A and B which factored in the size of molecules and the attractive forces. For ten points name this Dutch scientist best known for a type of intermolecular force.

ANSWER—(Johannes van der Waals)

3.

BONUS SCIENCE

Observations by a Swiss team of Michel Mayor and Didier Queloz and a Mt. Lick group confirmed the discovery of the first planet to be found orbiting another star.

1. The planet was found to be orbiting the 51st star of this constellation.
2. The Jupiter-sized planet, which has been nicknamed Bellerophon, is believed to have an orbit of 4 days and a surface temperature of 1,800 degrees, which places it equivalent orbit in our solar system closest to which planet.
3. The planet was detected using this effect, in which when the star is traveling away from us the light is red-shifted and when it is traveling towards us it is blue-shifted.

ANSWER—1.(Pegasus) 2.(Mercury) 3.(Doppler effect)

4.

TOSS-UP MISCELLANEOUS

The first records we have are for 776 BC and it lasted until 400 AD when it was stopped by the Christians for corruption. Consisting of wrestling, stade, double stade, discus, javelin, the run in armor and the long run, it was intended to honor the god Zeus. For ten points name this most famous series of games held every four years in ancient Greece.

ANSWER—(Olympic Games)

4.

BONUS MISCELLANEOUS

Name any five of the seven Holy Sacraments of the Catholic faith.

ANSWER—(Baptism, Confirmation, Penance or Confession, Eucharist or Communion, Marriage or Matrimony, Holy Orders or Rite of Ordination for Priesthood and Extreme unction or Last rites or Sacrament of the sick)

5.

TOSS-UP FINE ARTS

Though he vowed never to write a comic opera, the failure of his previous operas and the attacks by critic Eduard Hanslick changed his mind. The opera features the villain Sixtus Beckmesser, who represents Hanslick, and Hans Sachs and Eva Pogner. For ten points name this German opera composer of The Mastersingers of Nuremberg, who also wrote The Flying Dutchman.

ANSWER—(Richard Wagner)

5.

BONUS FINE ARTS

Identify the Russian composers of the following works.

1. In the Steps of Central Asia.
2. Scheherazade
3. 1812 Overture.
4. The Fairy's Kiss.

**ANSWER—1.(Alexsandr Borodin) 2.(Nikolay Rimsky-Korsakov) 3.(Pyotr Tchaikovsky)
4.(Igor Stravinsky)**

6.

TOSS-UP MATH

What is the solution for X to the equation the logarithm base 14 of 1 over 196 equals X.

ANSWER—(Negative 2)

6.

BONUS MATH

Factor completely over the integers the following polynomials.

1. X squared minus X minus 20.
2. 2X squared minus 7X minus 4.
3. 2X cubed minus 4X squared minus 126X.
4. 3X squared plus 8X minus 3.

ANSWER—1. (The quantity X minus 5 times the quantity X plus 4)
2. (The quantity 2X plus 1 times the quantity X minus 4)
3. (2X times the quantity X plus 7 times the quantity X minus 9)
4. (The quantity 3X minus 1 times the quantity X plus 3)

7.

TOSS-UP SCIENCE

Containing the membrane of reissener, fluids such as the perilymph and endolymph, and the ossicles, the outer part of it is scientifically known as the pinna. Also containing the organ of corti, this organ has the secondary function of balance and contains three fluid-filled tubes collectively called the bony labyrinth and made up of the semicircular canals, the vestibule and the cochlea. For ten points name sense this organ most noted for the tympanic membrane.

ANSWER—(Ear) Note: If buzz after Reissener accept Cochlea and if after endolymph accept bony labyrinth

7.

BONUS SCIENCE

Answer the following questions relating to the biology of pollution.

1. What term can be applied to wastes which can be decomposed by other living organisms.
2. What term refers to the stable number of individuals which an environment can support.
3. What acronym refers to the type pollutants which are scientifically known as polychlorinated biphenyls.
4. What is the process called in which pollutants such as heavy metals build up in higher and higher concentrations as you up move up through the food chain.

ANSWER—1. (Biodegradable) 2. (Carrying capacity) 3. (PCB) 4. (Biological magnification)

8.

TOSS-UP LITERATURE

A slave to fate, chance, kings and desperate men, it uses poison, war and sickness to do its work. For ten points name this word which completes John Donne's famous line, "blank be not proud, though some have called thee."

ANSWER—(Death)

8.

BONUS LITERATURE

Identify the authors of the following poems.

1. To a Louse.
2. Paradise Lost.
3. Lays of Ancient Rome.
4. Ode to the West Wind.

ANSWER—1. (Robert Burns) 2. (John Milton) 3. (Thomas Macaulay)
4. (Percy Shelley)

9.

TOSS-UP SOCIAL STUDIES

Named after the Phoenician people who settled there one thousand years before Christ, the Shardana, in the 17 and 1800's it was part of a kingdom that included Savoy and Piedmont and led in the unification of Italy. For ten points name this Italian island, the second largest in the Mediterranean.

ANSWER—(Sardinia)

9.

BONUS SOCIAL STUDIES

Identify the following major cities on the map which are labeled from A to D.

Moderator: Hand out map 1.

ANSWER—(A-Bombay, B-Riyadh or Al-Riyad, C-Baghdad + D-Karachi)

10.

TOSS-UP MATH

What is the least common multiple of the numbers 16 and 36?

ANSWER—(144)

10.

BONUS MATH

Answer the following questions about a ellipse with the equation $4X^2 + Y^2 = 36$.

1. What is the length of the major axis.
2. What are the endpoints of the major axis.
3. What are the endpoints of the minor axis.
4. What are the coordinates of the foci.

ANSWER—1. (12) 2. (0, 6) & (0, negative 6) 3. (3, 0) & (negative 3, 0)
4. (0, the square root of 27) & (0, negative square root of 27)

Half-Time

11.

TOSS-UP SCIENCE

During the Carboniferous Era it made up about thirty-five percent of the atmosphere, while during the Permian Era its concentration dropped to around fifteen percent. For ten points name this element which is now at a concentration of 20 percent, making it the second most common element in the atmosphere.

ANSWER—(Oxygen)

11.

BONUS SCIENCE

Identify in what state the following scientific institutions are located.

1. The Institute for Advanced Study and the National Oceanic and Atmospheric Administration at Princeton University.
2. The Woods Hole Oceanographic Institute.
3. The National Institute of Allergy and Infectious Disease, and the National Institute of Alcohol Abuse and Alcoholism, both of which are in Bethesda.
4. Argonne Laboratory and Fermi National Accelerator Laboratory.

ANSWER—1. (New Jersey) 2. (Massachusetts) 3. (Maryland) 4. (Illinois)

12.

TOSS-UP MISCELLANEOUS

When children in Mayibout, Gabon found a dead chimpanzee in the forest and brought it home to be cooked their village was delighted. A week later 13 people who had eaten the meat were dead and this deadly virus was to blame. Killing 245 people last year in Zaire, the W.H.O. fears this new outbreak may release an epidemic. For ten points name this deadly African virus.

ANSWER—(Ebola)

12.

BONUS MISCELLANEOUS

Given an NBA team identify their coach.

1. Portland Trailblazers.
3. Milwaukee Bucks.

2. L.A. Lakers.
4. Cleveland Cavaliers.

ANSWER—1.(P.J. Carlesimo) 2.(Del Harris) 3.(Mike Dunleavy) 4.(Mike Fratello)

13.

TOSS-UP MATH

What is the area of a sector of a circle if the circle has a circumference of 40π meters, and the sector subtends an arc of 30 degrees?

ANSWER—(33 & $\frac{1}{3}$ π square meters or $\frac{100}{3}$ π square meters)

13.

BONUS MATH

Calculate the volume of the following figures.

1. The volume of a square pyramid with a diagonal of the base of 16 times the square root of 2 meters and a height of 9 meters.
2. A right triangular prism with a side of the base equal to 6 meters and a height of 13 meters.
3. The volume of rectangular box with a surface area of one face equal to 54 square meters and the surface area of a different face equal to 108 square meters, given that the dimensions of the box are in a ratio of 2 to 3 to 4.
4. Given two concentric spheres with radii of 3 and 8 meters, the volume contained in the larger sphere but not contained in the smaller sphere.

**ANSWER—1.(768 cubic meters) 2.(117 times the square root of 3 cubic meters)
3.(648 cubic meters) 4.(1940 π divided by 3 cubic meters [$646 \frac{2}{3} \pi$])**

14.

TOSS-UP SOCIAL STUDIES

Probably founded around 8500 B.C., this city near the Jordan River is the oldest known city in the world. For ten points name this city whose walls supposedly fell before the trumpets of the Israelites under Joshua.

ANSWER—(Jericho)

14.

BONUS SOCIAL STUDIES

Answer the following questions about some of the disputed regions of the world.

1. Known as Takeshima or Tokdo island, it is only a small rocky outcropping in the Sea of Japan, but the rights to this island have seriously soured the relationship between Japan and this neighbor to the west, both of whom claim it and the surrounding fishing rights.
2. Due to Chinese military maneuvers in the area of this large island which the Chinese still claim is part of their country, the US has sent the aircraft carriers Nimitz and Independence and their battle groups to patrol the nearby waters.
3. In addition to their disagreement over Cyprus, Turkey and this European country both claim the island of Imia or Kardak and both have sent seven warships to protect it even though it is only home to a herd of goats.
4. Even though this South American country lost its access to the sea in 1879 during a war with Chile, the La Paz government still dreams of getting the land back.

ANSWER—1. (South Korea) 2. (Taiwan or Formosa) 3. (Greece) 4. (Bolivia)

15.

TOSS-UP LITERATURE

He struggled with acceptance of Communism for most of his life about which he wrote the play Dirty Hands. He put forth his views on existentialism in his first book Intimacy. For ten points name this author who wrote the novel Nausea and the play No Exit.

ANSWER—(Jean Paul Sartre)

15.

BONUS LITERATURE

Given a quote, identify the Shakespearean play in which it appears.

1. "Brevity is the soul of wit."
2. "I am constant as the north star."
3. "But I will wear my heart upon my sleeve."
4. "This is the way to kill with kindness."

ANSWER—1. (Hamlet) 2. (Julius Caesar) 3. (Othello) 4. (The Taming of the Shrew)

16.

TOSS-UP FINE ARTS

This artist worked on his masterpiece largely from 1915 to 1923, and it eludes final interpretation, as it is so complicated. It was not truly understood until 1934 when he published The Green Box Notes which partly explain it. A very fragile work of art, in 1926 it was accidentally shattered during transport, but he thought the change improved the work. For ten points name this artist responsible for The Large Glass, which is more well known as The Bride Stripped Bare by Her Bachelors, Even.

ANSWER—(Marcel Duchamp)

16.

BONUS FINE ARTS

Identify the artist responsible for the following modern paintings.

1. Joy of Life 1905-1906.
2. Les Demoiselles d'Avignon 1907.
3. Broadway Boogie Woogie 1944.
4. Departure 1932-1935.

ANSWER—1. (Henri Matisse) 2. (Pablo Picasso) 3. (Piet Mondrian) 4. (Max Bechmann)

Replacement Questions

TOSS-UP SCIENCE

If this constant had been equal to zero Joule-seconds, energy would be continuous and would not come in discreet quanta. Since it is equal to 6.63×10^{-34} Joule seconds, energy is grainy and quanta exist. For ten points name this constant symbolized by the letter H.

ANSWER—(Planck's constant)

BONUS SCIENCE

Just before the start of World War II numerous scientists realized the possibility of building an atomic bomb. Answer the following question about the start of the US project.

1. The project got off the ground because four scientists mailed a letter to President Roosevelt warning him of the danger of allowing the Germans to develop it first. Name the German scientist, the most preeminent in the world, whose signature carried the most weight in convincing Roosevelt.

2 + 3. Name any two of the three Hungarian scientists who were able to convince the man in part one to add his signature to theirs, one of whom went on to be the father of the hydrogen bomb.

ANSWER—1.(Albert Einstein) 2. + 3.(Leo Szilard, Edward Teller and Paul Wigner)

TOSS-UP LITERATURE

His early career as an actor may have helped him write the screenplays The Servant, Accident and The Go-Between but he is better known for his plays The Room and The Caretaker. For ten points name this British dramatist famous for the plays The Dumb Waiter and The Birthday Party.

ANSWER—(Harold Pinter)

BONUS LITERATURE

Given a title, identify the author.

1. Twenty Years at Hull House.

2. Johnny Tremain.

3. Portnoy's Complaint.

4. The Playboy of the Western World.

ANSWER—1.(Jane Addams)

2.(Ester Forbes)

3.(Philip Roth)

4.(John Synge)

TOSS-UP MATH

What is the total surface area of a right circular cylinder with a radius of the base of 7 meters and a height of 8 meters?

ANSWER—(210 Pi square meters)

BONUS MATH

Calculate the determinants of the following.

1. Entries row one: 1 and 3, row two: 4 and 2.

2. Entries row one: negative 2, 3 and 2, row two: 0, 7 and 4, row three: 1, negative 1 and 3.

3. Entries row one: 2, 1, and 1, row two: 1, negative 2 and negative 1, row three: 3, 3 and negative 1.

4. Entries row one: 6, 3 and 11, row two: negative 3, 4 and 5, row three: negative 1, negative 2 and 3.

ANSWER—1.(Negative 10)

2.(Negative 52)

3.(17)

4.(254)

TOSS-UP MISCELLANEOUS

This lawyer is representing some of the Oklahoma city bombing victims in a lawsuit against the fertilizer company whose ingredients were found in the bomb. Other clients have included Jim Brown, Snoop Doggy Dogg and Michael Jackson, but this lawyer is best remembered for winning one of the most publicized trials ever. For ten points name this O.J. Simpson lawyer who compared Mark Fuhrman to Adolf Hitler.

ANSWER—(Johnny Cochran)

BONUS MISCELLANEOUS

Given a current album, name the band or artist that released it.

1. Daydream.

2. Design of a Decade 1986/1996.

3. Tigerlily.

4. Jagged Little Pill

ANSWER—1.(Mariah Carey)

2.(Janet Jackson)

3.(Natalie Merchant)

4.(Alanis Morissette)