1996 Terrapin Invitational Questions by Illinois

- 1. The author said that the best outline he made for this novel was written on the back of a roll of wallpaper using his daughter's crayons. The climax point he chose was the trial and execution of Edgar Derby for stealing a teapot which Bernard O'Hare thought was a strange idea considering that 100,000 people died when Dresden was bombed. FTP, name this antiwar novel featuring Billy Pilgrim, written by Kurt Vonnegut.

 Answer: _Slaughter-House Five_, or The Children's Crusade: A Duty Dance with Death
- 3. Circuit satisfiability, 3 conjunctive normal form satisfiability, the clique problem, vertex-covering, the subset-sum problem, the hamiltonian-cycle problem, the subgraph-isomorphism problem, and the traveling salesman problem are all, FTP, in what complexity class of languages whose members can be verified by a polynomial-time algorithm, but cannot not be solved in polynomial time?

 Answer: NP-complete or nondeterministic polynomial time complete
- 4. He was serving in the Marine Corps when his helicopter went down and he had to spend a year relearning how to walk. After a stint on Wall Street, he taught history at the US Naval Academy before returning to government service as acting Deputy Director of Intelligence for the CIA. He then served as National Security Advisor before moving up the government ladder again. FTP, name this man who has just finished rebuilding his government after a terrorist attack on Washington DC and is president of the US according to Tom Clancy.

Answer: Jack _Ryan_

- 5. Two answers required. One was killed after making a sexual advance to another prisoner, while the other made parole after 34 years and moved to Puerto Rico. Armand Deutsch was the intended victim, but instead the beating with an iron chisel, disrobing, disfiguration by hydrochloric acid and dumping in Wolf Lake occurred to Bobby Franks. FTP, name these Chicago Nietzcheists who were defended by Clarence Darrow. Answer: Richard _Loeb_ and Nathan _Leopold_
- 6. This play takes place near a village on the coast of County Mayo on two autumn days. The protagonist wins a mule race and is promised marriage to Pegeen Mike, after being lionized by the villagers for having confessed to killing his father. Christy Mahon goes back with his father in the end, leaving Pegeen to grieve over her loss. FTP, this is a description of what play by John Millington Synge?

Answer: The _Playboy of the Western World_

- 7. The isotherm T equals zero and the isentrope S equals zero are the same, at absolute zero the entropy of every perfectly crystalline equilibrium compound is zero, the entropy of any equilibrium system is zero for the state in which the partial of U with respect to the partial of S at constant V is zero, and it is impossible to attain absolute zero by any process with a finite number of steps. FTP, these are different ways of stating which law of thermodynamics proposed by Walthar Nernst?

 Answer: _Third_ law of thermodynamics
- 8. Born in Paris and reared in Italy, he became an engineer and directed a railway company in Italy. One of the intellectual fathers of fascism because of his theory of the superiority of the elite class, that idea appeared in his work _Mind and Society_ which he wrote while serving as Professor of Political Economy at the University of Lausanne in Switzerland. FTP, name this turn of the century Italian sociologist and economist who also formulated the law, 'Whatever the political or tax system in a country, the distribution of income is more or less the same'. Answer: Vilfredo _Pareto_
- 9. Born in Fresno, this author left school at twelve to become a telegraph messenger. His autobiographical works include _Here Comes, There Goes You Know Who_, _Not Dying_ and _Short Drive, Sweet Chariot_. After works like _Inhale and Exhale_ and _The Trouble With Tigers_, he wrote a novel about a boy who delivered telegrams during World War II. FTP, who is this author of _The Human Comedy_, _The Time of Your Life_, and _The Daring Young Man on the Flying Trapeze_?

 Answer: William _Saroyan_
- 10. This naval officer was picked by James Cook as sailing master of the _Resolution_ on his third voyage. At the battle of Copenhagen he was given command of the _Glatton_, a ship directly behind Admiral Nelson's, and assisted in the capture of the Dutch flagship. As a reward he was appointed governor of New South Wales, but was overthrown by John MacArthur's Rum Rebellion. FTP, name this British naval officer who rose to the rank of Vice Admiral of the Blue, even though he had lost his ship the _Bounty_ to a mutiny.

Answer: William _Bligh_

- 11. Always very forgetful, he would often leave a cafe without paying his bill and at others times try to pay imaginary ones. A great admirer of Chopin, he nicknamed his Opus 25, No. 1 etude the "Aeolian Harp." His works include the _Poet's Love_ song cycle, Davidsbundler Dances, Flower-Music, and the Abegg variations, named after a dancing partner. FTP, name this German Romantic composer of Carnaval and Papillons, who was married to Clara Wieck. Answer: Robert _Schumann_
- 12. Proposed by Johann Bernoulli as a challenge problem to the mathematicians of his day, solutions were soon found by Johann and Jakob Bernoulli, Isaac Newton, Gottfried Leibniz and the Marquis de L'Hopital to this problem of finding the curve along which a particle will slide without friction in the minimum time from one given point to another. FTP, name this problem whose answer is a cycloid.

Answer: _Brachistochrone_ problem

- 13. While Lee preoccupied Grant in northern Virginia, Jubal Early's Corps slipped into Maryland and turned towards Washington DC. He was opposed by only 5,000 Union troops under this General who was able to delay the invading Confederates long enough for Grant to pull back and prevent the capture of the capital. His writings include _The Wooing of Malkatoon_ and _The Life of Benjamin Harrison_. FTP, name this Union general who also served as Governor of New Mexico and Indiana and was the author of _Ben-Hur_. Answer: Lew _Wallace_
- 14. Known as the 'Indomitable Rhinoceros', he studied under Johannes Roscellinus and William of Champeaux, and wrote his most famous work for such students as John of Salisbury and Peter Lombard. The founder of the University of Paris, in his _The History of My Calamities_, he tells of the other famous part of his life in which he was castrated for fathering a child with one of his students. FTP, name this 12th century French theologian who wrote _Sic et Non_ and was the lover of Heloise.

 Answer: Peter _Abelard_
- 15. Claiming descent from Achilles, he arrived at the head of four ships fleeing from the Persian suppression of the Ionian revolt. Immediately prosecuted for having ruled over Greek colonists as a tyrant, he was acquitted through the influence of Themistocles and was accepted for service against the invading Persians, even though he had served under Darius in the past. FTP, name this man who devised the Athenian strategy at the battle of Marathon.

Answer: _Miltiades_

16. Garcin is a coward who brought a mistress into his house and who is shot 12 times in the chest, Inez is a 'damned bitch' who sleeps with her married cousin and then is killed by his wife, and Estelle drowns the baby she had during her affair with Roger. FTP, these three people are all forced to live together in a Second Empire style furnished room in hell in what play by Jean-Paul Sartre?

Answer: _No Exit_ or _Huis Clos_

- 17. In 1896, this scientist was summoned to South Africa to study rinderpest and other cattle plagues. Despite suffering from severe myopia, his work on wounds, septicaemia, and splenic fever gained him a seat on the Imperial Board of Health in 1880. Three years later, he was the leader of a German expedition sent to Egypt and India, and received a large gift for discovering the cholera bacillus. FTP, who is this bacteriologist who won the 1905 Nobel Prize in Medicine and developed a set of postulates for proving that a particular microorganism is the cause of a disease? Answer: Heinrich Hermann Robert Koch
- 18. This country has five main geographical regions: the Eastern Province; the Nejd, a vast, barren plateau in the center; the Hejaz and Asir along the Red Sea; and the Rub al-Khali occupying the entire south and southeast. Its principal port is Jidda, while most of its people adhere to the Wahhabi sect of Islam. FTP, name this country, ruled since 1982 by King Fahd. Answer: _Saudi Arabia_

- 19. When his 74-year old mother was accused of being a witch and carried away in a laundry chest to a dungeon in Wurttemberg, he investigated the charges and after proving most of them false, she was allowed to go into exile and further trials based on so little evidence were outlawed. In his 1596 _Mysterium Cosmographium_, he conjectured that the distances from the Sun of the first six planets could be related to the five regular solids of geometry. FTP, name the German astronomer who in his _Astronomia Nova_ and _Harmonica Mundi_ derived his the three laws of planetary motion. Answer: Johannes _Kepler_
- 20. This American artist was actually born in Florence while his wealthy parents were living abroad. He studied under the Parisian Emile Carolus-Duran, producing early works like _Luxembourg Gardens at Twilight_. While on a trip to Spain in 1879, he discovered the works of Velasquez and painted the popular _El Jaleo_ (Ha-lay-oh). FTP, who is this artist of works like _The Wyndham Sisters_ and a scandalous portait of Judith Gatreau, or _Madame X_? Answer: John Singer _Sargent_
- 21. Educated at Hamilton College and Harvard, this psychologist argued that mass conditioning was a proper form of social control in his book _Beyond Freedom and Dignity_. He developed a method of teaching known as programmed instruction where a student was fed bits of information and had to demonstrate knowledge of those facts before proceeding to the next level. Gaining a reputation while teaching at the Universities of Minnesota and Indiana, he joined the faculty of Harvard in 1948 and became the leading spokesman for behaviorism. FTP, name this author of _Walden Two_. Answer: Burrhus Frederic _Skinner_
- 22. This Baroque sculptor had a brooding introspective nature which was the opposite of his contemporary easygoing rival Bernini. He worked obsessively on the details for the tiniest objects, rejecting many before finally settling on one, and then supervising every aspect of their execution. FTP, name this sculptor and architect responsible for such works as the interior and facade of the churches of Sant'Ivo della Sapienza and San Carlo alle Quattro Fontane.

Answer: Francesco Borromini Borromini rules!

The name is almost the same. The student of Daedalus also known as Perdix who was killed for his invention of the saw, the 'yron man' attendant to Sir Artegal in The Faerie Queen who was 'swift as a swallow and as lion strong', and the bronze giant of Greek myth which protected Crete and was destroyed by the magic of Medea. FTP, give the common name.

Answer: _Talus_ or _Talos_

Named in 1852 after the Earldom held by Sir Francis Egerton, its northernmost point, Cape Columbia, was finally reached by Charles Francis Hall in 1871 who passed through the Nares Strait which separates it from Greenland. FTP, name this northernmost of the Canadian islands, the ninth largest in the world and the second largest in Canada.

Answer: _Ellesmere_ Island

After losing all his money when the South Seas Bubble collapsed, he got a job as Secretary to the Duchess of Monmouth, but never was able to solve his financial difficulties, dying nearly penniless in 1732. Buried in Westmin-

ster Abbey, the epitaph he wrote reads, "Life is a jest, and all things show it, I thought it once and now I know it." FTP, name this British poet and playwright of Polly, the sequel to The Beggar's Opera.

Answer: John _Gay_

One of the most successful and influential members of the Utrecht school, he went to Rome when he was about 20 and soon became very successful with his night scenes. FTP, name this artist who executed works for King Charles such as Charles I and Henrietta Maria with Liberal Arts, for the decoration of Hampton court.

Answer: Gerard van Honthorst

The first man to climb Mount Kenya, this man served as first reader in geography at Oxford for more than twenty years, was a Member of Parliament from 1909 to 22 and was director of the London School of Economics from 1904-8. FTP, name this Father of Geopolitics who put forth his 'heartland theory' which said that north central Eurasia would become the eventual center of the world's political power in his work The Geographical Pivot of History.

Answer: Sir Halford John _MacKinder_

He considered freedom to be acting from self-determination according to universally valid rational principles and viewed history as a progression from The Oriental World where only the despot is free, to The Greek World where non-slaves are free, to The Germanic World where all are free. Both of these concepts are just small part of his overall philosophical system known as Absolute Idealism. FTP, name this German philosopher whose works include _The Philosophy of Right_ and _The Phenomenology of the Mind .

Answer: Georg Friedrich Wilhelm _Hegel_

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1. Answer the following questions about colloid science.

1. Including such examples as milk and mayonnaise, this is a stable dispersion of one immiscible liquid in another liquid.

Answer: Emulsion

2. First suggested by Freundlich, this is the term for a substance which will readily form a colloid when added to a solvent. Hydrophilicity is a specific example pertaining to water.

Answer: _Lyophilic_ or _Lyophilicity_

- 3. Coming in cylindrical, bilayer and spherical forms, this is an aggregation of molecules in which the molecule's hydrophobic ends group together to form regions from which the solvent is excluded. Answer: _Micelles_ or _Association colloids_
- 2. Identify the following French women writers from a description for the stated number of points.

1. 5) She wrote about her fifty-year relationship with Sartre in Adieux and about her affair with Algren in The Mandarins.

Answer: Simone de _Beauvoir_

2. 10) Sometimes called the 'pearl of pearls', the name which her brother King Francis I called her, this Queen of Navarre is best known for her work the Heptameron.

Answer: _Margaret [Marguerite] of Navarre_ or Margaret [Marguerite] de Valois

3. 15) Her 1678 _Le Princesse de Cleves_, is considered the first great French novel.

Answer: Marie de La Vergne, comtesse de La Fayette_

3. Identify the military officer on a 30-20-10 basis.

- 30) Supervisor for the construction of the U.S. Navy's first diesel ship engines, he finished his career as UN commissioner for Kashmir.
- 20) The chief of the Bureau of Navigation when World War Two started, it was aboard his flagship, the USS Missouri, that the peace treaty was signed.
- 10) On December 31, 1941, he succeeded Husband Kimmel as commander-in-chief of the Pacific Fleet.

Answer: Admiral Chester Nimitz

- Identify the man who has won the most Gold Gloves at each of the following positions. Five points each and a bonus five for all correct.
- 1. First base

Answer: Keith Hernandez

2. Third base

Answer: Brooks _Robinson_

3. Shortstop

Answer: Ozzie _Smith_

Catcher

Answer: Johnny Bench

5. Pitcher

Answer: Jim _Kaat_

5. FTP each, given characters, name the Willa Cather work.

1. Alexandra Bergson, Carl Linstrum

Answer: _O Pioneers!_

2. Claude Wheeler

Answer: _One of Ours_

3. Jean Latour, Joseph Vaillant

Answer: _Death Comes for the Archbishop_

Identify the scientist on a 30-20-10 basis.

- 1. Thirty points. He was the first man to attempt to calculate the age of the earth using the principle of uniformitarianism. He considered the saltiness of the sea and assumed the oceans were originally fresh water. Then by calculating how much salt the rivers washed into the ocean each year he arrived at the age of the earth as one billion years.
- 2. Twenty points. He discovered that stars move in space and are not fixed in place, and then calculated the distance to Sirius by assuming it to have the same luminosity as our sun.
- 3. Ten points. His famous comet appeared in the sky at Mark Twain's birth and death.

Answer: Edmund _Halley

- 7. For the stated number of points, answer the following concerning the War of the Austrian Succession.
- 1. 5 pts: The war was precipitated by her succession to the Hapsburg lands via the Pragmatic Sanction.

Answer: Maria Theresa

2. 10 pts: Name the king of Poland and elector of Saxony who was an unsuccessful claimant to the Hapsburg lands and opposed Maria Theresa in the war.

Answer: _Augustus III_ (accept Frederick Augustus II)

3. 10 pts: What king opened the hostilities by invading Silesia in 1740?

Answer: _Frederick II_ of Prussia (accept Frederick the Great)

4. 5 pts: You knew it was coming: name the 1748 treaty which ended the war.

Answer: Treaty of _Aix-la-Chapelle_

- 8. Identify the composers of the following ballets FTP each.
- 1. The Creatures of Prometheus

Answer: Ludwig van _Beethoven_

2. The Firebird

Answer: Igor _Stravinsky_

3. Coppelia

Answer: Leo Delibes

- 9. Identify the Shakespeare play from quotes on a 30-20-10 basis. 30) "The tiger now hath seized the gentle hind; Insulting tyranny begins to jut upon the innocent and aweless throne. Welcome destruction, blood and massacre! I see, as in a map, the end of all."
- 20) "God and your arms be praised, victorious friends! The day is ours; the bloody dog is dead."
- 10) "Now is the winter of our discontent made glorious summer by

this sun of York."
Answer: _Richard III_

- 10. In the late 1930's numerous scientists realized the possibilities in a nuclear chain reaction. Three Hungarian refugees feared that Germany would develop the bomb first and they persuaded Albert Einstein to sign a letter urging President Roosevelt to develop one first. For ten points each name these three scientists whose letter galvanized the US effort. Answer: Leo _Szilard_, Edward _Teller_ and Paul _Wigner_
- 11. Answer the following about the Dreyfus affair FTP each.

 1. This military list used to indict Dreyfus with references to artillery formation and the promised delivery of a firing manual was known by what name?

Answer: _bordereau_

2. Mathieu, Dreyfus' brother, determined that the bordereau was in this man's handwriting. His guilt was uncovered but supressed by the military. He was acquitted by a military tribunal.

Answer: Major Ferdinand Walsin-_Esterhazy_

3. Dreyfus' original sentence was life imprisonment. Where was he sent to prison?

Answer: _Devil's Island_

- 12. Identify the ancient Greek artists of the following works FTP each.
- 1. Discobolos

Answer: Myron

2. Apoxyomenos

Answer: _Lysippus_

3. Hermes with the Infant Dionysus

Answer: _Praxiteles_

13. Identify the island on a 30-20-10 basis.

1. Thirty points. Separated from Navarino Island by the Beagle Channel, its highest point is Mount Darwin and one of its two capitals is Ushuaia.

2. Twenty points. Receiving its name from the fact that Magellan saw many watchfires upon it when he sailed by, its other capital is Punta Arenas.

3. Ten points. This South American island is split between Argentina and Chile.

Answer: _Tierra del Fuego_ [Land of Fire]

- 14. Identify the British writers of the following works on a 10-5 basis.
- 1. 10 pts: The Progress of the Soul

5 pts: Valediction: Forbidden Mourning

Answer: John _Donne_

2. 10 pts: _Rites of Passage_ and _The Brass Butterfly_

5 pts: _Lord of the Flies Answer: William _Golding_

3. 10 pts: _The Ship of the Line_ and _Payment Deferred_

5 pts: Horatio Hornblower series

Answer: Cecil Scott _Forester_

15. Identify the disease caused by the following pathogens for the stated number of points.

1. 5 pts: Clostridium botulinum.

Answer: _Botulism_

2. 10 pts: Treponema pallidium. Answer: _Syphilis_

3. 15 pts: Borrelia burgdorferi. Answer: _Lyme's_ disease

16. Identify the president on a 30-20-10 basis.

- 1. Severely disappointed with his son George, when he announced that at the end of his presidency he would be returning home to take charge of his son's life, George drowned himself in Long Island Sound so that his father would not learn of the illegitimate child he had with a servant.
- 2. This man was also very bitter towards two of his grandsons, John who was expelled from Harvard, and Charles who became a noted statesman and scholar.
- 3. The only member of the family he was proud of was his son who also became president.

Answer: _J_ohn _Adams_

- 17. Identify the parents of the following mythological figures for five points each.
- 1. Artemis

Answer: _Zeus_ and _Leto_

2. Iphicles

Answer: _Amphitryon_ and _Alcmena_

3. Hel

Answer: Loki and Angerboda

- 18. Identify the American authors of the following works for ten points apiece.
- _The Confidence-Man: His Masquerade_ and _Israel Potter_ Answer: Herman _Melville_

"The Beast in the Jungle" and _Roderick Hudson_

Answer: Henry _James_

Mildred Pierce and _Double Indemnity_

Answer: James Cain

19. Identify the patron saint on a 30-20-10 basis.

1. He is the patron saint of pawnbrokers because he gave three golden balls to the daughters of a poor man so that they would not have to earn their dowries by prostitution.

2. He is the patron saint of young boys because he supposedly restored to life three little boys who had been cut up and pickled

in a salting tub to serve as bacon.

3. The patron saint of Greece, Sicily, and Russia, he became associated with Christmas because of his benevolence.

Answer: Saint Nicholas_

20. The Earth's geologic history is generally divided into three

eons. One extending from the present to 590 million years ago, another back to 2.5 billion years ago and the final one which covers the remaining time. Name them for ten points each. Answer: Phanerozoic, Proterozoic and Archaean Eons

21. Identify the architect of the following works for the stated number of points.

1. Five points. The interior of the St. Stephen Walbrook church, 1672.

Answer: Christopher _Wren_

2. Ten points. The Palazzo Medici-Riccardi in Florence, 1444.

Answer: _Michelozzo_ or Michelozzo _di Bartolommeo_

3. Fifteen points. The Smithsonian Institution building and St.

Patrick, s Cathedral in New York City

Answer: James Renwick

22. Identify the following effects in psychology relating to the influence the performer of the experiment has on the experiment.

1. Ten points. The best known example of the experimenter effect is this effect named after a Western Electric Company factory where it was realized that worker performance had been improved not because of changes in lighting conditions but because of the interest shown by the experimenters.

Answer: _Hawthorne_ effect

2. Twenty points. In parapsychology this is the effect where those who accept the possibilities of paranormal abilities tend to produce better results in laboratory tests than those who do not. Answer: Sheep-goat effect

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

1. Five points. Sneaky Pete and the Wolf.

Answer: Sergei _Prokofiev_

2. Ten points. Royal Firewater Music.

Answer: George _Handel_
3. Fifteen points. The Preachers of Crimetheus.

Answer: Ludwig van _Beethoven_

Identify the politician on a 30-20-10 basis.

- 1. Thirty points. Sited as a respondent in a divorce suit by William O'Shea in 1890, he was ostracized by his party and forced to retire.
- 2. Twenty points. He had previously survived another scandal and was awarded 500 pounds in damages when as leader of the Irish nationalists, he was accused by the London Times of participating in the Phoenix Park murders.
- 3. Ten points. Elected president of the Irish National Land League, this Irish Member of Parliament became noted for his obstructionist tactics in trying to bring Home Rule bills before the House of Commons.

Answer: Charles Stewart _Parnell_

The world of financial derivatives has seen an explosion of growth in the past ten years. Identify these types of options from a

description.

1. For five points what type of option cannot be exercised before the expiration date.

Answer: _European_ option

2. For five points what type of option can be exercised at any point during the life of the option.

Answer: _American_ option

3. For ten points name the type of option whose final payoff is based not on the underlying asset price at expiration but rather the average asset price over the life of the option.

Answer: _Asian_ option

4. For ten points what is the name give to options that are options contracts for other options.

Answer: _Compound_ options

Identify the number on a 30-20-10 basis.

- 1. Thirty points. This Haydn symphony was known as the Lamentation symphony.
- 2. Twenty points. This American bomber was known as the Marauder.

3. Ten points. This is the atomic number of iron.

Answer: Twenty-six

For five points each and a five point bonus for all correct, identify the following men associated with the idea of ancient elements.

1. This Greek from Miletos suggested that the basic element of the universe was water.

Answer: Thales

2. This Greek also from Miletos felt that Thales had the right idea, but that air was the primary form of matter, not water.

Answer: _Anaximenes_

3. This philosopher from Ephesus held that fire was the primary element of the universe.

Answer: _Heraclitus_

4. This Greek from Sicily unified the thoughts of the previous philosophers in his book On Nature and held that water, air and fire were all basic elements and added earth to the list.

Answer: Empedocles

5. This famous teacher of Alexander the Great added ether to the list which after that remained unchanged for two thousand years. Answer: _Aristotle_

Identify the following characters created by Nathaniel Hawthorne from a description for the stated number of points.

1. 5) He is the discoverer of the fountain of youth, whose waters he administers to four friends in an effort to cheat time. He is said to be "a very strange old gentleman whose eccentricity had become the nucleus for a thousand fables."

Answer: _Dr. Heidegger_

2. 10) Said to look like the Faun of Praxiteles, he longs after Miriam and kills her lover Antonio. His act of murder is said to be his introduction to the human condition.

Answer: _Donatello_

3. 15) This man who tended to a limekiln in his native villagere

turns and destroys himself in the kiln. His successor finds a whitened human skeleton with a marble heart.

Answer: Ethan _Brand_

After the War of the Austrian Succession cavalry was essentially divided into three different types. Identify them from a description.

1. Riding the largest type of horse, hence the name heavy cavalry, this group was only meant to deliver charges, thus they usually only carried swords. They received their name from the breast armor they wore.

Answer: _Cuirassier_ or _Horse_ cavalry

2. Also known as the medium cavalry, this group received its name from the type of musket it carried. Riding on smaller steeds than the Cuirassiers, their job was to fight either on horseback or upon the ground.

Answer: _Dragoons_

3. Devised by the Hungarians and Croatians, this group also known as the light cavalry was primarily responsible for harassing the enemy while they were foraging and scouting.

Answer: _Hussars_