1. With a fleet of over 62 ships, this commander led the largest naval force the world had ever seen. In his six voyages he visited many locations in Asia in the early to mid $15^{\text {th }}$ century, and explored the east coast of Africa as far as present-day Somalia. A change on the throne stopped his explorations in 1433; many believe his next voyage would have taken him around the Cape of Good Hope and changed the course of world history. FTP who was this eunuch admiral of the great Chinese Treasure Fleet?

Answer: Zheng He or Cheng Ho
2. A type of kinetic sculpture, it consists of a number of rods, from which weighted objects and other rods hang. One sculptor is well known for creating these objects, handing from the rods so that they balance each other and the rods remain more or less horizontal. Each rod hangs from only one string, which gives it freedom to rotate about the string. In the tradition of constructivism, FTP, what is this type of sculpture popularized by Alexander Calder?

Answer: Mobile
3. The center of this compound's large molecule features a single magnesium atom surrounded by a nitrogencontaining porphyrin ring of atoms. Its molecule absorbs light well, mostly in the red and violet ranges of the spectrum; hence it reflect greens wavelengths. Found in cells of plants, some algae and some bacteria, it is associated with the thylakoid membranes of the chloroplasts. FTP what is this main light gathering molecule in plants?

Answer:
Chlorophyll
4. In Oliver Goldsmith's She Stoops to Conquer, a character by this name is tongue-tied around high-born ladies. A detective with the first name Phillip is the main character in several Raymond Chandler novels, including The Big Sleep. Playwright Christopher produced such works as Edward II and Tamburlaine the Great, and a man who tells his story aboard the cruising yawl Nellie also goes by this name. FTP, give the shared name, perhaps most famously held by a character who meets the enigmatic Kurtz in Conrad's Heart of Darkness.

## Answer: <br> Marlow

5. In 1850, he inherited a large estate in California from his brother Ludwig, and made a great fortune until leaving for Russia in 1852. In October of that year, he married Ekaterina Lishin (LEE-sheen), but was soon dismayed at the coldness of the union. As a child he expressed a great deal of interest in Homer's Iliad. For ten points, identify this archaeologist, whom in the early 1870's during a dig at Hissarlik, purportedly found the remains of ancient Troy.

Answer: Heinrich Schliemann
6. Born in 1875, this author's first success was A Princess of Mars and his other popular series of books included prehistoric stories such as The Land that Time Forgot and further books set on Mars and Venus. He was an avid outdoorsman and tried to make a career in the military but could not due to a heart condition. He was present during the attack on Pearl Harbor and served as the oldest war correspondent in the pacific theater. However this man is best known for his Tarzan of the Apes, published in 1914. For ten points who was this prolific author?

Answer: Edgar Rice Burroughs
7. A fluid near it exhibits anomalously large light scattering because of large fluctuations in the refractive index. When attained experimentally, the conditions at this position yield equal densities for a liquid and a gas. FTP, identify this position on a phase diagram at which the liquid and gas phases become indistinguishable.

Answer: Critical point
8. He quit his dangerous job as a locomotive fireman at the behest of his mother and entered union work and politics in the 1870's. Disillusioned with political compromise, in 1892 he founded the American Railroad Union to include all skills and trades of railroad workers. Arrested for supporting the 1894 Pullman strike of 1894 , he emerged a national figure as hero of the American left. Sentenced to jail for publicly opposing World War I in 1918, he nevertheless ran for president under the socialist banner for a fifth time in 1920. FTP who was this labor leader who received a million votes while in jail?

Answer: Eugene V. Debs
9. Well over 500 , his age is unspecified and he can tell a sparrow from a finch a league off. While unafraid of the Dead Men, he fears deep caves. Yet he agrees to visit one with his great friend and later builds them a ship in Ithilien to sail to the Grey Havens. FTP, name Thranduil's son who slays 41 orcs at Helm's Deep and is a deadly Elvish marksman in The Lord of the Rings.

Answer: Legolas
10. Charles Darwin and Benjamin Franklin held to this religious view, as did Voltaire and Thomas Jefferson. Often characterized by a non-personal god, it holds that there is a god, but that he does not reveal himself to man. Knowledge of god can be increased, but this knowledge is based upon facts of nature. FTP what is this belief, that there is a god, but that he has little dealings with the workings of the world?

Answer: Deism
11. Nicknamed "Il Prete Rosso", this prolific musician left his position as a priest to try and make a living as a composer and performer. His works include Juditha Triumphans and Gloria in D. For ten points who was this Baroque composer whose most famous work was The Four Seasons?

Answer: Antonio Vivaldi
12. Born in a suburb of Montreal, he was raised in Chicago and attended the University of Chicago before graduating from Northwestern in 1937. His first novel, Dangling Man, was published in 1944 while he served in the US Merchant Marine. After being awarded a Guggenheim Fellowship in 1948, he traveled through Europe, and began The Adventures of Augie March. For ten points, identify this winner of the 1976 Nobel Prize in Literature, the author of Ravelstein, Humboldt's Gift, and Herzog.

Answer:
Saul Bellow
13. The first person to climb it may have been either Lhotsky or Count Strzelecki (STRUH-lek-EE). Its nearest convenient population center is Chalet, and it is located in the extreme southeastern corner of its continent. For ten points, identify this peak found in the Snowy Mountain sub range of the Great Dividing Range, the tallest peak in Australia.

Answer:
Mount Kosciusko (KAW-see-OOS-koh)
14. The 3rd law of this set can be arrived at by taking the definition of angular momentum and then using the differential value _r squared d theta integrated over the full orbit to determine that the square of the period is proportional to the cube of the area of the ellipse. FTP identify this set of three laws, which also state that the radius from the sun to a planet sweeps out equal area in equal times and that planet orbits are elliptical, derived by the assistant to Tycho Brahe.

Answer: Kepler's Laws of Planetary Motion
15. As an infant he kicked the glasses off the face of his admiring great-grandmother Queen Victoria. Later in life he would become the governor-general of the area which added the empress to her name. He was never thoroughly loved by the British press until he was murdered by an IRA bomb on his boat in 1979. For ten points name this war hero who served as supreme allied commander for Southeast Asia in World War II.

Answer: Louis Mountbatten (or Earl Mountbatten of Burma)
16. After graduating from Army in 1969 , he went into the military until 1974. When he finished his service, he went to work as an assistant coach under Bobby Knight at Indiana - the same man who had coached him during his collegiate playing days. He spent just one year as an assistant before going back to coach his alma mater from 1975-1980. After that, he took his present job, where he has coached players like Danny Ferry, Trajan Langdon and Bobby Hurley. FTP, who is this man who had led Duke to 3 NCAA Championships?

Answer: Mike Krzyzewski (pron. SHUH-SHEF-SKEE, Prompt on "Coach K")
17. It started with a shot across the bow delivered by the sloop-of-war "San Jacinto." The October 1861 action revolved around two passengers, who were in fact agents of the Confederate agents charged with drawing up commercial treaties in Europe on behalf of the confederacy. The removal of two passengers from a ship flying the British flag was in fact illegal. FTP, identify this event named after the British ship from which John Slidell and James Mason were forcibly removed.

Answer: the Trent Affair
18. Compiled by Elias Lönnrot and first published in 1835, this collection of mythology and poems was organized into 35 cantos and later grew to 50 cantos. Comparable in scope to the Icelandic Edda, it follows the exploits of Vainamoinen, Ilmarinen, and Lemminkainen. For 10 points what is this Finnish national epic?

Answer: The Kalevala
19. Both Modula-2 and Oberon belong to the same class of languages as this one, and indeed all were created by the same man. A direct descendent of Algol-60, its creator designed it to be a good language to teach the concepts of computer programming, which explains why (until 1999) it was the official language of the Advanced Placement Computer Science exam. FTP name this language created by Niklaus Wirth and named for a French mathematician.

Answer: Pascal
20. The oldest example Arkarua is found in the fossil record of the early Cambrian. Examples include Blastoids, which exhibit a vertical plan, and echinoids, which demonstrate a horizontal plan. FTP name this phylum whose members exhibit pentameral symmetry and have water vascular systems., and whose members include sea urchins and starfish.

Answer: Echinodermata or echinoderms
21. Possibly invented in China, where the earliest ones just looped the big toe, their most likely entrance into Europe came via the crusades in Arab lands. Developed to loop around a horseman's whole foot, their usage won William's much smaller army the victory at the 1066 Battle of Hastings by giving mounted riders the foot support necessary for a lance charge. FTP what are these straps, usually leather, which hold a horseback rider's feet?

Answer:
Stirrups
22. This term first appeared in print in a March 1983 newspaper column by Bob Greene. Once described as the emblem of the 80 's, they followed Malcolm Forbes' dictum, " He who dies with the most toys wins." They were portrayed on film by Albert Brooks in Lost in America and by Charlie Sheen in Wall Street. FTP, identify this label applied to materialistic young professionals in the 1980s.

Answer: Yuppies (accept Young Urban Professional)
23. This 19th century statesman's home, Ashland, in Lexington, Kentucky, still stands. A prominent War Hawk during the War of 1812, his "American system" included such features as tariff protection and internal improvement. Although his ambition was the White House, he is better known as the impetus behind the Missouri Compromise, and the Compromise of 1850. FTP who was this Great Compromiser in American history?

Answer: Henry Clay

## BONI - ROUND 9 (CWRU 4)

## DENNIS HASKINS OPEN 2003 -- UTC

1. Name these boats in literature 10 points each.
A. "Call me Ishmael." begins a tale aboard this boat, captained by one-legged Ahab.

Answer: Pequod
B. Jim Hawkins is among the passengers on this boat; the ship's one-legged cook is Long John Silver.

Answer: Hispaniola
C. The two-legged anthropologist Thor Heyerdahl wrote of his experience crossing the Pacific Ocean in this raft.

Answer: Kon Tiki
2. Although March Madness is upon us, let's look back and FTPE answer the following about the 2003 BCS bowls a. This bowl used to feature the Big 10 and Pac-10 conference champions until Big XII champ Oklahoma went in and beat Washington State in this year's edition.

Answer: Rose Bowl
b. The ideal Rose Bowl pairing, Iowa and USC, was played out in this game instead.

Answer: Orange Bowl
c. The University of Georgia won this bowl game, played in New Orleans.

Answer: Sugar Bowl
3. Given the units of a chemical measure, name the measure FTPE. 1. moles of solute per kilograms of solvent

Answer: molality
2. moles of solute per liters of solution

Answer: molarity
3. the number of equivalents of a substance per liter

Answer: normality
4. Identify these initialed agencies or organizations from American history FTPE. You need only provide their initials.
(10) This organization served as the main intelligence gathering apparatus during WWII. It was replaced by the CIA.

Answer: $\quad \underline{\text { Office }}$ of $\underline{\text { Strategic }} \underline{\text { Services }}$
(10) Formed in 1960 in Ann Arbor, this radical youth group went on to protest the Vietnam War. Their manifesto was the Port Huron Statement.

Answer: $\quad \underline{\text { Students }}$ for a Democratic Society
(10) Its current president is Martin Luther King III.

Answer: $\quad \underline{\text { Southern Christian Leadership Conference }}$
5. Given some musical performers, name the common instrument FTPE.
(10) Jaqueline Dupree, Yo-Yo Ma

Answer: cello
(10) James Galway, Jean-Pierre Rampal

Answer: flute
(10) Artur Rubinstein, David Helfgott

Answer: piano
6. For 10 points each name the following Roman emperors.
(10) Becoming emperor in AD 98, this adopted son of Nerva ruled for 19 years and saw Rome's borders reach their greatest limit. Upon his death he was buried in the column that bears his name.

## Answer: <br> Trajan

(10) Nicknamed "Little Boot", this emperor ruled from 37 to 41 AD. His reign began well and was famous for great spectacles such as a bridge of boats built across the bay of Naples. Unfortunately his reign sank into tyranny and he was assassinated along with his wife Caesonia and his daughter Drusilla.

Answer: $\quad$ Caligula or Gaius Germanicus
(10) Ruling from 14 to 37 AD , this stepson of Augustus disliked public life and earned the enmity of his people. He spent many of his last years on the island of Capri but died at age 77 when he was smothered by the Praetorian commander.

Answer:
Tiberius
7. FTPE, given the former name of a nation, give the current name:
10) British Honduras

Answer: Belize
10) Rhodesia

Answer: Zimbabwe
10) Dahomey

Answer: Benin
8. For 10 points each identify the following Beat writers.
(10) A Harvard Graduate, this author of "Junky" and "Naked Lunch" lived for a time in Tangiers after accidentally killing his wife in an imitation of William Tell.

Answer: William S. Burroughs
(10) Son of an insane-communist-nudist mother, this Beat wrote "Howl" and "Kaddish".

Answer: Allen Ginsberg
(10) This Beat attended Columbia University on a football scholarship and wrote "On the Road" and "Big Sur".

Answer: Jack Kerouac
9. Answer the following about DNA FTPE.

This is the process by which DNA copies itself
Answer: Replication
This is the process by which DNA is read to produce an mRNA template
Answer: Transcription
This is the process by which the mRNA binds to tRNA to produce protein chains.
Answer: Translation
10. For 10 points each name the Greek god or goddess.
A. The blacksmith of the gods, the Romans called him Vulcan.

Answer: Hephaestus
B. The goddess of storms and marriage, the Romans called her Juno.

Answer: Hera
C. The goddess of fire and hearth, the Romans called her Vestia.

Answer: Hestia
11. Identify these chemicals of the human body FTPE.
(10) This neurotransmitter is manufactured in the body using tryptophan. It helps maintain a "happy feeling".

Answer: Serotonin
(10) Menopause begins to set in when ovaries cease to produce this hormone.

Answer: Estrogen
(10) This hormone produces ova in females and sperm in males.

Answer: $\quad$ Follicle $\underline{\text { Stimulating Hormone }}$
12. FTPE, given plays on a $10-5$ basis, name the author.
10) Sea Gull, Three Sisters
5) The Cherry Orchard, Uncle Vanya

Answer: Anton Chekhov
10) The Blunderer, The School for Husbands, The School for Wives
5) Tartuffe, The Misanthrope

Answer: Moliere (or Jean-Baptiste Poquelin)
10) An Enemy of the People, When We Dead Awaken
5) Hedda Gabler, A Doll House

Answer: Henrik Ibsen
13. Identify these African leaders in the post-colonial period FTPE.
(10) In 1960, he became the first president of an independent Ghana.

Answer: Kwame Nkrumah
(10) After deposing Milton Obote in 1971, he was the head of state in Uganda until 1979.

Answer: Idi Amin
(10) In 1969, he deposed Idris I to become dictator of Libya, a post he still occupies.

Answer: Mohmarr Qadaffi (spellings vary)
14. It seems like cell shading is all the rage in video games today, replacing the venerable lens flare. Answer these questions about games that use cell-shading, for the stated number of points.
A. For 5 pionts, the latest version of this venerable Nintendo series uses cell shading. Fans argued over whether a cell shaded Link was a good or bad thing but Miyamoto has never let fans down.

Answer: The Legend of Zelda (accept the latest version, The Legend of Zelda: Wind Waker)
B. For 10 points, this X-Box game is actually the sequel to an older Dreamcast game. It features characters such as Beat, Jet, Korn, Cube, and Gum, among others. The gave involves skating around on futuristic rollerblades while tagging graffiti.

Answer: Jet Set Radio Future
C. For 15 points, this Playsation 2 RPG concerns a team of drifters: Virgina Maxwell, Jet Enduro, Clive Winslet, and Gallows Caradine. Together, the four traverse the Wasteland in hopes of finding out what disaster befell the world of Filgaia. The game has a western theme, complete with guns and horses.

Answer: Wild Arms 3
15. Geometric optics is a very important subject (scoff, chuckle). FTPE identify the following from it.
(a) This law relates the indices of refraction to the sines of the angle from the normal when a ray of light passes from one medium to another.
Answer: Snell's Law
(b) This is the distance from a lens at which light from infinity is focused to form an image.

Answer: focal length
(c) The study of the propagation of this through various elements defines the field of optics.

Answer: light or, for the smarty-pants out there, accept photons
16. Answer the following about a particular short story FTPE:

10: After coming home from a Christmas dance, Gabriel Conroy discovering his wife's past love and realizes that his love cannot compare to the passion that she experienced with "poor Michael Furey." FTP name the story.

Answer: "The Dead"
10: "The Dead," as well as "A Painful Case" "and Grace," can be found in this 1914 collection of short stories, each depicting people who wish to escape the confines of their lives in some way, but never seem to succeed.

Answer: Dubliners [accept if they say The Dubliners]
10: Name the author of Dubliners
Answer: James Joyce.
17. Given a Supreme Court case, identify the chief justice who presided over the case.

Brown v Topeka Board of Education
Answer: Earl Warren
McCulloch v. Maryland
Answer: John Marshall
Plessy v. Ferguson
Answer: Melville Fuller
18. Given fresco locations, name the artist best associated with them

Stanza della Signatura
Answer: Rafael Sanzio
Sistine Chapel
Answer: Michelangelo Buonarotti
Arena Chapel
Answer: Giotto di Bondone
19. Convert the following from radians to degrees FTPE:

1. $5 \mathrm{pi} / 3$ radians

Answer: 300 degrees.
2. $9 \mathrm{pi} / 10$ radians

Answer: 162 degrees.
3. $13 \mathrm{pi} / 18$ radians

Answer: 130 degrees.
20. For 10 points each answer these questions about branches of philosophy.
A. It is concerned with the question `what is right?'

Answer: Ethics
B. It is concerned with the question 'what is beauty?'

Answer: Aesthetics
C It is concerned with the question `what is knowledge?'
Answer: Epistemology
21. Answer the following about standing waves FTPE.
(10) This is the name given to a point or region of virtually zero amplitude.

Answer:
Node
(10) Located halfway between the nodes are these points whose vibration amplitude is maximal.

Answer:
Antinodes
(10) Standing waves can only be produced on a length of rope by wiggling the free end at certain frequencies. What is the name for these frequencies?

Answer: resonant frequencies (accept harmonic frequencies)
22. Identify these Roman magistrates, none of which are dictator or consul, FTPE:
A. Which magistrate served as judge or as governor of a province?

Answer: praetor
B. Which optional office had as duties circus games, keeping the streets clean, and fair trade enforcement in the markets? Answer: aedile
C. Which office open only to plebeians could protect the plebs from oppression and could exercise the veto?

Answer: tribune plebis
23. Name the philosopher from works, 5-10-15

5 pts: Principia philosophia and Meditationes de prima philosophia
Answer: Rene Descartes
10 pts: The Birth of Tragedy, Beyond Good and Evil
Answer: Friederich Nietzsche
15 pts: Opera Posthuma (1677) including Political Treatise, Treatise on the Improvement of Understanding, Letters, and Hebrew Grammar,

Answer: Baruch Spinoza

