# Johns Hopkins University A \& B 

Penn Bowl VIII:
ROUND 11 TOSSUPS
Johns Hopkins A \& B

1. He was born in 1761 and joined the Royal Artillery in 1779. In the 1804 attack on Surinam a warfare device he invented was first used with devastating effect. FTP, what British artillery officer thus lent his name to the metal fragments given off by exploding projectile shells still in use today?
ANSWER: Henry Shrapnel
2. The stories were first submitted to the publisher Grant Richards in 1905, and consisted of three stories of childhood, three of adolescence, three of mature life, and three on public life. "Two Gallants" and "A Little Cloud" were completed in 1906, but the manuscript was rejected and wasn't published until 1914. FTP, name this collection including "The Sisters", "Counterparts", and "The Dead", written by James Joyce.
ANSWER: Dubliners
3. Frequently used to model the number of random occurrences happening in a specified amount of time, such as the number of phone calls an operator receives in a given period, its results are most accurate when the number of samples is large but the probability of a random event is low. The product is then signified by a single parameter designated mu or lambda. FTP, name this distribution named for a French mathematician.
ANSWER: Poisson distribution or Poisson Law of Large Numbers
4. He imposed a universal tax system, halted inflation by coin reform, and ordered a nasty persecution of the Christians in year 20 of his reign. Born in Dalmatia in 245, he rose through the army to command the emperor's bodyguard. Chosen by his fellow soldiers to succeed Numerian as emperor, he divided Rome into four administrative districts. FTP, name this man who retired from politics in 305 to his palace in Salona.
ANSWER: Diocletian (Caius Aurelius Valerius Diocletianus)
5. This title has appeared on works by David Hubbard, Kirk Nelson, and Andrew Collins, among others. A version by Sam Smith is subtitled "The Strange Odyssey of Michael Jordan from Courtside to Home Plate and Back Again." The most famous use of this title is for a poem that inspired the title of Chinua Achebe's Things Fall Apart . FTP, name this William Butler Yeats poem, another name for the future return of Christ.
ANSWER: "The Second Coming "
6. A 260 page report by John Rabe was uncovered by Iris Chang while doing research for a book, over 50 years after it was submitted to Hitler. A German businessman and Nazi, Rabe chronicled this 1937 event which has been denied by many right-wing Japanese politicians. FTP, name the occupation during which between 100,000 and 300,000 people died in what was then the capital of China.
ANSWER: Rape of Nanking or Nanjing Massacre
7. Discovered in 1887 by Heinrich Hertz, he observed that UV light changes the lowest voltage at which sparking takes place between metallic electrodes. Ralph Fowler showed how it was affected by temperature, and Auger showed that high-energy gamma rays could liberate inner shell electrons whose ejection resulted in the emission of a second electron. FTP, name this effect explained by Albert Einstein.
ANSWER: photoelectric effect
8. The first non-Huang Ho valley province to be settled by the Chinese, it was first annexed by China during the Ch'in dynasty. It had a stint as the center of the independent Shu kingdom, and was home to Bertolt Brecht's Good Woman . During the Sino-Japanese war, Chungking here became the temporary capital for China's Nationalists. FTP, name this most populous of China's provinces, noted for its spicy foods.
ANSWER: Sichuan or Szechuan
9. The starting compound for the Kolbe reaction, it dissolves in aqueous sodium hydroxide but not in aqueous sodium bicarbonate. Adding a mixture of sulfuric acid and nitric acid to it will produce picric acid. Used in conjunction with chloroform in DNA extractions, dilute solutions can be useful as an antiseptic but stronger solutions are caustic and cause tissue scarring. FTP, name this simplest of the aromatic alcohols.
ANSWER: phenol or carbolic acid [prompt on "hydroxybenzene"]
10. The son of Ea and Damkina, his great weapon is the Deluge, his chariot is the Storm Demon, and his temple is named Esagila. After the other gods agree to his becoming their supreme leader, he fights and kills his grandmother, Tiamat. FTP, name this chief god of Babylon. ANSWER: Marduk
11. Sixteen years after first hitting the radio airwaves, this couple is described as going to the movies to see Richard Pryor, in "Eden Is Burning". In the original, self-titled song, one of them wants to be a football star, as well as trying to do his best "James Dean." He also says "Life goes on, long after the thrill of living is gone". FTP, name these two kids growin' up in the heartland, named in a "little ditty" by John Mellencamp.
ANSWER: Jack and Diane
12. Many believe Paracelsus, a Swiss alchemist, founded it, though Account of the Brotherhood chronicles the life and journeys of a man allegedly born in 1378 who lived for 106 years. Said to have acquired secret wisdom on trips to Egypt, Damascus and Fes, he imparted it
to three others after his return to Germany. FTP, name this fraternal order devoted to the pursuit of esoteric wisdom, named for Christian Rosenkreunz.
ANSWER: Rosicrucian ism or Order of the Rose and the Cross
13. A radioactive form of this molecule is frequently used to track the movement of mRNA from the nucleus to the ribosome. Its fluorinated form is an anti-tumor agent, while its triphosphate form acts as a coenzyme in the synthesis of sucrose. FTP, name this nucleotide which binds to adenine in RNA instead of thymine.

## ANSWER: uracil

14. His achievements include three radio documentaries, The Idea of North ,The Latecomers, and The Quited in the Land , which display his fascination with recording techniques. He gave up public performances in 1964; his catalog of recordings includes William Byrd, Arnold Schoenberg, and So You Want to Write a Fugue .FTP, name this Canadian pianist, known for his performance of the Goldberg Variations , the subject of 32 Short Films.
ANSWER: Glenn Gould
15. This studio got its first Oscar nomination for the short Luxo Jr. . It won its 11th Oscar for Geri's Game , which has an old man playing chess against himself. Its current CEO purchased it in 1986 from Lucasfilm. FTP, what company headed by Steve Jobs revolutionized computer animation with Toy Story and A Bug's Life?
ANSWER: Pixar , Inc.
16. Her adopted mother, a distant relative of Sir Arthur Sullivan, discovered her musical talent. Her roles have included the Countess in The Marriage of Figaro , Rosalinde in Die Fledermaus , Desdemona in Otello, as well as the title role in Arabella. She was made a Dame Commander in 1982, the year after her performance at Prince Charles' wedding. FTP, name this New Zealand-born operatic soprano.
ANSWER: Dame Kiri Te Kanawa
17. Timothy Dwight, Lemuel Hopkins, and David Humphries were among its members. Most, but not all, were Yale men; except for Joel Barlow, they were all Federalists and Calvinists. They attacked such things as French philosophy, paper money, and Shay's Rebellion in their collective publication The Anarchiad which appeared in 1786. Name this group of American poets that also included Richard Alsop and John Trumbull.
ANSWER: the Hartford Wits
18. Its title is the Greek form of the Hebrew word Koheleth , or "preacher." The author passes as Solomon but the book is known to have been written between 350 and 250 BC . The author rejects religious and ethical theories because they are contradicted by experience and the few religious consolations are offered by a pious commentator. FTP, name this book following Proverbs which inspired the song "Turn, Turn, Turn."

## ANSWER: Ecclesiastes

19. He studied in Paris with Jacques-Louis David, then moved to New Orleans, where he earned an income doing portraits and teaching drawing. Born in Haiti, his greatest work, a portfolio of over 400 color engravings, remains an unsurpassed model of nature study, except that many of the subjects ended up dead. FTP, name this author of The Viviparous Quadrupeds of North America, Ornithological Biography, and Birds of America.
ANSWER: John James Audobon
20. She was turned into a lion by the goddess Rhea, who yoked her to her car. This was the fate foretold by the fortune that told her not to marry, for marriage would be her ruin. Daughter of Iasius, king of Arcadia, she wounded the Calydonian boar; Meleager gave her its hide as a reward. FTP, name this maiden who promised to marry any suitor that could outrun her in a footrace, who was done in by her greed. ANSWER: Atalanta
21. Incorporated as a town in 1891, it grew as an outfitting point for prospectors after gold was found in the Yukon. Nicknamed "The Gateway to the North", it's the northernmost provincial capital in Canada. Its attractions include the John Walter site, Commonwealth stadium, home to the CFL Eskimos, and the largest shopping mall in North America. FTP, name this former home of Wayne Gretzky, the capital of Alberta.

## ANSWER: Edmonton

22. Illegitimate son of the viceroy of Peru and Isabel Riquelme, a prominent lady of Chillán, he spent his early life in England and Spain. There he was greatly influenced by Francisco Miranda, a Venezuelan champion of independence. In 1802, he returned to South America, and became commander of the patriot army of Jose Miguel Carrera in 1813. FTP, name this revolutionary leader who helped free Chile. ANSWER: Bernardo $O^{\prime}$ 'Higgins
23. Born Antonio Allegri in 1489, he is considered a link from Renaissance to Baroque painting. He produced his first known work in 1514, Madonna of St. Francis. In the next few years he frescoed the ceiling of the Church of San Giovanni Evangelista in Parma. Two of his most famous religious paintings are commonly known as Day and Night. FTP, name this painter of The Loves of Jupiter and The Mystic Marriages of St. Catherine.
ANSWER: Correggio
24. Though the steam engine became a necessity during the English Industrial Revolution, it did not catch on quickly. One of the first industrialists to recognize its potential used it in an industry not generally considered as heavy industry. FTP, name this 18th century craftsman and potter, the designer of dinnerware for the royal family, who used his factory to mass-produce affordable yet attractive crockery for the English middle class.
ANSWER: Josiah Wedgewood
25. The first overall pick in the 1985 NHL entry draft, he scored 30 goals in each of his first two seasons. A multitude of injuries, including a chronic back problem, limited his playing time over the next six seasons, but he still managed to score 46 goals during the 1993-94 season while leading his team to the Campbell Conference finals. Now playing for Tampa Bay, FTP, name this former Toronto Maple Leaf captain.
ANSWER: Wendel Clark
26. He started off as a "tea boy," serving cups of hot tea to staff at the London bureau of Life magazine. Snapping pictures of British dignitaries, he was later offered a post as a Life photographer. Over 20 years in the Congo, the Middle East and Vietnam, he established his reputation as a preeminent war photographer. FTP, name this winner of the Robert Capa Gold Medal, who died in a 1967 helicopter crash in Laos.

## ANSWER: Larry Burrows

27. Born in New York City in 1926, this free market advocate, educated at New York University, headed Gerald Ford's Council of Economic Advisors from 1974 to 1977. He warned against high federal deficits and believed the economic health of the US would be in peril without cooperation of the legislative and executive branches. FTP, name this man who on August 6,1987 became chairman of the Federal Reserve Board.

## ANSWER: Alan Greenspan

28. He returned home in May 1996, nearly 50 years after his exile at age 9 . He moved to Madrid with his mother, Ioanna, where he married a Spanish heiress and for 13 years ran the Spanish subsidiary of a French electronics firm. In December 1998, the country's chief prosecutor, Ivan Tatarchev, raised the possibility that the 1946 vote to abolish the monarchy was illegitimate. FTP, name this exiled ruler of Bulgaria.

## ANSWER: Simeon II

29. In 1990, this Progressive Conservative, angry with the Meech Lake accord, formed an independent party with 6 other MPs. When they won 54 seats in the 1993 federal election, he became leader of the opposition. FTP, a year later he was diagnosed with necrotizing myositis, which resulted in the amputation of a leg. FTP, name this founder of the Bloc Québécois [kay-bay-kwah], recently re-elected premier of Québec.
ANSWER: Lucien Bouchard [BOO-char]
Penn Bowl VIII:
ROUND 11 BONI
Johns Hopkins A \& B
30. 30-20-10. Name the artist from works.
[30] Family of Charles IV, The Caprices
[20] The Naked Maja, The Clothed Maja
[10] Disasters of War, Third of May, 1808
ANSWER: Francisco Goya

## 25 POINT BONUS

2. Can you name these science terms, for the stated number of points? Hint: be specific.
[5] The amount of energy needed to raise the temperature of 1 gram of a substance 1 degree Celsius.
ANSWER: specific heat
[5] The ratio of the density of a substance to that of a standard substance.
ANSWER: specific gravity
[15] The thrust produced per unit rate of consumption of a propellant, it's a measure of a rocket's efficiency.
ANSWER: specific impulse

## 20 POINT BONUS

3. Ten points each, name these Negro League players.
a. Billed as the World's Greatest Pitcher, he won over 2,000 games, with over 40 no-hitters.

ANSWER: Satchel Paige
b. One of the fastest players ever, he stole 175 bases in under 200 games. He once circled the bases in an astonishing 12 seconds. ANSWER: Cool Papa Bell
4. Answer these questions about Yahoo!, 10 points each.
a. All or nothing, what does Yahoo! stand for?

## ANSWER: Yet Another Hierarchical Officious Oracle

b. Yahoo! was a collaboration between David Filo and Jerry Yang, who were at the time grad students at what university. ANSWER: The Leland Stanford , Jr. University
c. A third grad student at Stanford, Larry Augustin, left his friends to start VA Research, a company which builds workstations powered by this operating system.

## ANSWER: Linux

5. Ten points each, name the creators of these influential abolitionist newspapers.
a. The North Star ANSWER: Frederick Douglass
b. The Liberator ANSWER: William Lloyd Garrison
c. The Genius of Universal Emancipation ANSWER: Benjamin Lundy
6. On January 1, the euro came into being. Answer these questions, 10 each.
a. This is the number of nations that have adopted the Euro as of the beginning of 1999.

ANSWER: 11
b. This is the target date for active circulation of Euro notes and coins in all 11 countries.

ANSWER: January 1, 2002
c. When currency markets opened on January 1, within 3 cents, how much was one euro worth?

ANSWER: $\$ 1.14$ to $\$ 1.20$ [\$1.17]

## 20 POINT BONUS

7. Ten points each, name these economists.
a. Along with Malthus, he helped make economics the "dismal science". He argued for a "labor theory of value".

ANSWER: David Ricardo
b. Born in Moravia, this leader in econometrics, then a newly created branch of theory, authored Theory of Economic Development

ANSWER: Joseph Schumpeter
8. 30-20-10. Name the ancient city from clues.
[30] Its name means place of the rock and the nopal, and legend has it that the city was founded on the site where an eagle perched on a nopal cactus growing from a rock.
[20] Its chief temple platform was dedicated to the gods Tlaloc and Huizilopochtli [wee-zee-lo-POKE-tli].
[10] The city was built on Lake Texcoco, the site of which is now Mexico City.
ANSWER: Tenochtitlan
9. Name the following Canadian authors from works on a $15-5$ basis.
a. [15]Surfacing, Bodily Harm
[5] The Handmaid's Tale
ANSWER: Margaret Atwood
b. [15]Murther, Walking Spirits
[5] Fifth Business
ANSWER: Robertson Davies

## 25 POINT BONUS

10. Answer these questions related to the citric acid cycle, for the stated number of points.
[15] Succinate dehydrogenase converts succinate to this molecule, forming a molecule of FADH2.
ANSWER: malate or malic acid
[10] The energy to form the FADH2 comes from this stabilization of malate's delocalized _ electrons.
ANSWER: conjugation [do not accept or prompt on "aromaticity"]
11. 30-20-10. Name the dramatist from works.
[30] The plays The Dance of Death , Lucky Peter's Travels.
[20] The novel The Red Room , and the plays Creditor and Master Olof .
[10] This Swedish dramatist also wrote the play Miss Julie .
ANSWER: August Strindberg
12. Identify these relations of King Arthur, 10 points each.
a. He was Arthur's father.

ANSWER: Uther Pendragon
b. Arthur's mother, Uther tricked her by having Merlin make him look like her husband.

ANSWER: Lady Ygraine [ee-GRAIN]
c. Lady Ygraine's husband, he was killed in a war Uther started so he could lay his hands on Ygraine.

ANSWER: Duke Gorlois
13. Answer these questions about Angola for the stated number of points. [2×10] Name the two factions that fought the Angolan civil war.

ANSWER: MPLA or Popular Movement for the Liberation of Angola
UNITA or National Union for the Total Independence of Angola
[10] The long-standing presence of troops from this country was instrumental to the MPLA's victory. ANSWER: Cuba
14. Given characters from an opera, name the opera for 10 , and the composer for 5 more.
a. Count Monterone, Gilda, and the bandit Sparafucile [spa-rah-FOO-see-lay].

ANSWER: Rigoletto [10] by Giuseppe Verdi [5]
b. A British officer named Gerald, and the Brahman priest named Nilakantha

ANSWER: Lakmé [10] by Leo Délibes [5]
15. The six counties that surround the city of London are called the "Home Counties". Five points each, name them.

ANSWER: Kent ,Surrey ,Berkshire ,Buckinghamshire ,Hertfordshire ,Essex
16. The center of medieval life, art, and architecture was the church. Name these parts of a church, 10 each.
a. The vaulted, semicircular, or semi-polygonal wall recess of a hall, such as on the sanctuary end.

ANSWER: apse
b. A processional passageway around a shrine, or flanking the apse.

ANSWER: ambulatory
c. A lateral division of the church parallel to the main central space of the nave, separated by arches.

ANSWER: aisle
17. Ten points each, identify the body of water which borders the city.
a. Chennai, India ANSWER: Bay of Bengal
b. Duluth, Minnesota ANSWER: Lake Superior
c. Bujumbura, Burundi ANSWER: Lake Tanganyika
18. How are you at juggling the books? Ten points each, expand these accounting acronyms.
a. FIFOANSWER: First in, first out
b. GAAP [spell out]ANSWER: Generally Accepted Accounting Principles
c. MACRS [spell out]ANSWER: Modified Accelerated Cost Recovery System

## 20 POINT BONUS

19. Given the Renaissance painting, name the artist who painted it, 10 points each.
a. Fortitude ANSWER: Sandro Botticelli
b. The Seven Sorrows of the Virgin ANSWER: Albrecht Dürer
20. Name these Hugo Award winning books from a brief plot summary, 10 points each.
a. Andrew Wiggin goes to Battle School. Eventually, he meets Mazer Rackhem and defeats the Buggers.

ANSWER: Ender's Game [prompt on "Ender's War "]
b. Louis Wu, Speaker-to-Animals, Teela Brown and the Puppeteer Nessus journey to a strange world, which they proceed to explore.

ANSWER: Ringworld
c. Case was the best interface cowboy who ever ran in Earth's computer matrix. Then he double crossed the wrong people.

ANSWER: Neuromancer
21. Ten points each, name the President from a brief description of his misfortune.
a. A stroke paralyzed his left arm and leg a year and half before he was to leave office.

ANSWER: Woodrow Wilson
b. He suffered a heart attack thirty-two months into his first term, but was re-elected.

ANSWER: Dwight D. Eisenhower
c. Before his inauguration, his bodyguard, Thomas Hick, in conspiracy with the Governor of New York and the Mayor of New York City, tried to kidnap him. Hick was hanged before 20,000 spectators.
ANSWER: George Washington
22. Four natural isotopes have odd numbers of both protons and neutrons. Five points each for the element and mass number.
a. It's the most abundant isotope in the earth's atmosphere.

ANSWER: nitrogen-14 or 14 N
b. This isotope forms a compound that moderates neutrons in nuclear reactions. It was discovered by Harold Urey.

ANSWER: hydrogen-2 or deuterium-2 or 2D
c. This isotope is one of two used to make nuclear control rods and shields.

ANSWER: boron-10 or 10B
23. Answer these questions about men's tennis for the stated number of points.
[5] This player finished 1998 as the \#1 player in the world for the sixth straight year.
ANSWER: Pete(r) Sampras
[15] Sampras is still one Grand Slam title short of tying this man for the most by a male tennis player.

## ANSWER: Roy Emerson

[10] The biggest challenge to Sampras' top ranking came from this Chilean, who reached number one twice last year, without ever winning a Grand Slam tournament.
ANSWER: Marcelo Rios
24. Answer these questions about coffee commercials, for the stated number of points.
[5] This brand of coffee was advertised in the US by Sharon and Michael's romance over coffee.
ANSWER: Taster's Choice
[15] In 1993, this novelization of the commercial serial was published. It takes its name from the British name for Taster's Choice.
ANSWER: Love over Gold
[10] This mystery writer of King of Hearts, Death Takes a Hand, and Grand Slam penned Love over Gold.
ANSWER: Susan Moody or Susannah James.
25 . Answer these questions about phase equilibrium for the stated number of points.
[5] This is the temperature at which the vapor pressure of a liquid equals the atmospheric pressure.
ANSWER: boiling point
[10] For a pure fluid at constant temperature and pressure, this energy must be equal in both the gas and liquid phases for phase equilibrium to occur.
ANSWER: Gibbs' free energy [prompt on G]
[15] Related to Gibbs free energy, this quantity must also be equal in both the gas and liquid phases at equilibrium. With units of pressure, it's a measure of the tendency of a component to vaporize.

## ANSWER: fugacity

26. For the stated number of points, identify the owners of these famous tombstone epitaphs.
[5] "Quoth the Raven--nevermore."
ANSWER: Edgar Allen Poe
[10] "Blessed be the man that spares these stones and cursed be he that moves my bones."
ANSWER: William Shakespeare
[15] "Sleep after toyle, port after stormie seas, ease after warre, death after life, does greatly please."
ANSWER: Joseph Conrad
27. Pinochet may have fallen, but for 10 points each, given another Latin American dictator, name the country he still rules.
a. Ernesto Geisel ANSWER: Brazil
b. Hector Trujillo ANSWER: Dominican Republic
c. Jorge Videl ANSWER: Argentina
28. Given the last line from a Robert Frost poem, name the poem, 10 points each.
a. "He says again, 'Good fences make good neighbors'."

ANSWER: "Mending Wall"
b. "Such as she was, such as she would become."

ANSWER: "The Gift Outright "
c. "And miles to go before I sleep."

ANSWER: "Stopping by Woods on a Snowy Evening"
29. Given a work by an early medieval philosopher, name him for the stated number of points.
[5] City of God ANSWER: St. Augustine of Hippo
[10] Why Did God Become Man? ANSWER: St. Anselm
[15] Consolation of Philosophy ANSWER: Anicius Mantius Severinus Boethius
30. Ten points each, name the German chancellor given a description.
a. He was the chancellor immediately before Hitler.

ANSWER: Fritz von Papen
b. As economics minister, he was responsible for the "economic miracle" of the 1950's, but was not very successful as chancellor.

ANSWER: Ludwig Erhard
c. A figure with a Nazi past, he led the "Grand Coalition" of the late 1960's.

ANSWER: Kurt Georg Kiesinger

