# 2002 Martin Luther King Jr. Memorial Tournament University of Michigan/Duke University <br> Tossups by Chicago C (Mike Altman, Paul Johnson, Will Baude, and Nick Poulos) 

1. Insulin has a low one, and so does salt. Dollar bills have an infinitely high one, at the price of a dollar. Luxuries have a high one; necessities have a lower one. It is calculated by taking the proportionate change in quantity demanded over the proportionate change in price. For 10 points - name this economic measure of consumer responsiveness to changes in price.

Answer: Price Elasticity of Demand
2. In 1984, he and Aafrika Bambaataa teamed up under the name Time Zone to release the single "World Destruction." Using his real last name, Lydon, he performed such songs as "This is Not A Love Song" and "Disappointed" while fronting Public Image Ltd. Name this punk pioneer who - for 10 points - may have earned his stage name from his attitude or aversion to hygiene before becoming lead singer of the Sex Pistols.
Answer: Johnny Rotten (Accept John Lydon before it is mentioned)
3. It tried to go national, nominating P.P. Christensen for president in 1920, but after 1923 it supported first Robert LaFollette and then Franklin Roosevelt. Its own candidates got seats in one state legislature from 1918 to 1944, when they merged with the state Democratic party. Floyd Olson served three terms as governor of Minnesota as the candidate of - for 10 points - what political party named for the constituencies whose votes it sought.
Answer: The Farmer-Labor Party

## MIME: MEE-muh

GUTRUNE: guh-TROO-nuh
4. He slays his treacherous dwarven fosterfather, after drinking the blood of a giant-turneddragon, which allows him to read Mime's thoughts. He drinks a potion and tries to marry Gutrune, forgetting about his first wife, who is also his aunt. Hagen gives him a potion to restore his memory, and then kills him with a spear, and Brunnhilde immolates herself. For 10 points name this Wagnerian hero, the title character of the third opera in The Ring of The Nibelungs.
Answer: Siegfried
5. The two mechanisms that allow this device to operate are called tunneling and avalanche. An avalanche breakdown results in a lower impedance across the device, while tunneling is used in reverse bias to create a Zener breakdown. Constructed from the junction of a p-type and a n type semiconductor, identify - for 10 points - this electric device that forces current to flow through it in only one direction.
Answer: diode
6. In 2001, these awards were given out in a ceremony that included an opera and a wedding. The prize in medicine went to Peter Brass for his paper "Injuries due to falling coconuts," while the prize in literature went to John Richards for founding the Apostrophe Protection Society. For 10 points - name these awards, sponsored by the Annals of Improbable Research, given for results that "cannot or should not be reproduced"
Answer: The Ig Nobel Awards
7. His form was studied by Disney animators to properly animate Tarzan in the 1999 film. A professional competitor since age 11 who never finished out of the medals at the $X$ Games Vert competition, this CEO of Birdhouse Projects, became, in 1998, the first man ever to execute the 900 twist in competition--for 10 points--name this skateboarder, name sake of a popular video game series by Activision.
Answer: Tony Hawk
8. Pablo Neruda's poem, "In My Sky at Twilight," is a paraphrase of one of this man's poems. For 51 years he produced poems, stories and plays, but achieved only middling fame until he began translating his work from Bengali to English. In 1912, a year after Yeats discovered him, he won the Nobel Prize in Literature. Composer of the national anthems of India and Bangladesh, name for 10 points - this author of "The Gardener" and "Gitanjali".
Answer: Rabindranath Tagore
9. The artificial variety of it is created by the Verneuil process which until 1940 was only performed in Switzerland, France, and Germany. With chemical formula $\mathrm{Al}_{2} \mathrm{O}_{3}$ this colorless mineral is hard enough to use for grinding optical glass and polishing metal. For 10 points name this mineral that becomes ruby with the induction of chromium impurities and sapphire with the induction of iron and titanium.
Answer: corundum
Prompt on: ruby or sapphire before "colorless"
10. A recent book, The Jew of Linz, blames the Holocaust on the fact that Adolf Hitler hated this man when they were in the same first-grade class. At various times he was a gardener in a monastery and a schoolteacher in Austria. He withdrew from academic life for years, returning to Cambridge in 1929 and writing Philosophical Investigations in 1953. For 10 points - name this author of 1920's Tractatus Logico-Philosophicus.
Answer: Ludwig Wittgenstein

## LEICESTER: LES-ter

11. The man who would win this battle came back from exile, landing at Milford Haven and advancing on the King's position at Leicester. The King was confident in his position until the Duke of Norfolk was killed and Lord Thomas Stanley and Henry Percy, failed to materialize. In fact, Stanley's brother had already deserted the Yorkist cause, and much of the army did the same at - for 10 points - what 1485 battle at which Richard III was killed and the Wars of the Roses ended.
Answer: Bosworth Field
12. It had to be shown separately to the owners of Macy's and Gimbel's and approved by both before release. Edmund Gwenn won an Oscar for his performance, but the film contained other standout performances, such as John Payne, Maureen O'Hara, and then nine-year-old Natalie Wood. For 10 points - name this Christmas favorite in which a lawyer tries to prove that a man claiming to be Santa Claus is the genuine article.
Answer: Miracle on 34th Street
13. Saddened that the chorus does not pity her, she sings a lament about how death is going to be her husband, instead of her cousin, the son of the king who is her nemesis. She rejects her sister Ismene, preferring her dead brother Polyneices, whom she insists on burying in spite of the decree of her uncle Creon. For 10 points - name this daughter of Oedipus and title heroine of a tragedy by Sophocles.
Answer: Antigone
14. The Cordillera de la Costa define the western border and the Cordillera Domeyko the eastern border of this region, which spans 600 to 700 miles north to south. It is named for a now-extinct Indian culture, and parts of it used to be in Peru and Bolivia before the War of the Pacific. Iquique and Antofagasta are the major cities around - for 10 points - what cold desert in northern Chile where, every hundred years or so, it rains.
Answer: Atacama Desert
15. Dated Dec 31, 1900, this poem begins by creating a grey, desolate setting that the speaker sees as "The Century's corpse." The landscape seems so depressed that the speaker claims that "every spirit upon earth / Seemed fervourless as I," until he hears "a voice arose among / the bleak twigs overhead," and this song leads the speaker to see that some did have hope still in the world. For 10 points - name this Thomas Hardy poem in which the depressed speaker finds some solace in the song of the title bird.
Answer: The Darkling Thrush
16. Its four faces are the visceral, renal, gastric, and diaphragmatic. Blood flows into this organ from the lienal artery and then passed through an intricate system of smaller vessels, which ultimately aid in this organ's task of helping to filter blood. For 10 points - name this organ, whose removal can cause sepsis, and which is usually associated with misanthropic rage.
Answer: Spleen
17. This word came about as a result of a failed experiment to determine the molecular structure of quinine in 1856. Instead of synthesizing a life-saving drug, chemistry student William Perkin created a powder with a striking purplish color. He went on to borrow this new name for the particular shade of purple from the French word referring to the mallow plant and the color of its leaves. For ten points, name this color, the hue of the first synthetic dye.
Answer: Mauve
18. This man took his battle with the New York Times to the airwaves recently, telling Don Imus that his case had been misrepresented. The Feds have also given up investigating him, so he can go on wearing the tailored suits and $\$ 8,000$ Rolex that he may or may not have been illegally given by one David Chang. For 10 points - name this senator from New Jersey who is running for governor in 2001.
Answer: Robert G. Torricelli
19. An orphan girl with a gift for embroidery rejects an offer to become a queen, made by an evil sorcerer. For this, he turns her into a magical creature. Maryusha, the orphan, then flies away, pursued by the sorcerer Kaschei in the form of a falcon. She sheds her magical feathers and dies as a result. For 10 points - name the title creature of this tale, made into a ballet by Stravinsky. Answer: The Firebird
20. As atomic number increases by one, the number of electrons in the $4 f$ orbital increases by one; however, the $4 f$ electrons imperfectly shield each other from the increasing nuclear charge. The result is the reduction of atomic nuclei with increasing atomic number, an effect which can be seen in 15 elements that form a series on the periodic table. For 10 points name this effect, named for element 57 , the subjects of which are usually placed in their own row below the periodic table.
Answer: Lanthanide Contraction
21. This explorer's ship was over four times the length of the Santa Maria, which would sail almost 90 years later. He traveled to Hormuz, in Persia, and Surabaya, on the island of Java, but by 1431, the Emperor had decided to turn the country's attention back in on itself, and so his voyages ceased. Name - for 10 points - this Chinese admiral.
Answer: Zheng $\underline{\mathrm{He}}$
Accept: Cheng Ho
Accept: Ma San-Pao
22. The manzello and stritch were his two signature instruments, though he also played tenor sax and flute, often using circular breathing or playing multiple saxophones at once. Undeterred by the stroke that left his right hand useless and by his blindness, he turned out albums including "We Free Kings," "Bright Moments," and "Kirkatron," having added "Rahsaan" to his name due to a dream. For 10 points - name this black activist jazz saxophonist.
Answer: Roland Kirk
23. He wrote The Perverts and Pluck the Flowers, Gun the Kids, but his most famous work tells the story of Bird, a man whose dream of going to Africa is shattered at the birth of his son. He first achieved fame when he won the Akutagawa prize for his novella, "The Catch." For 10 points - name this Japanese author, whose A Personal Matter draws upon his own experience as the father of a mentally handicapped son.
Answer: Kenzaburo Oe
24. His last act was to tell his people to choose once and for all between serving Jehovah or serving the gods of their neighbors. He was one of two men of his generation allowed to see the Promised Land, which he had spied out along with Caleb and others. Name this man who made the sun stop so he could kill more Amorites, and who - for 10 points - had trumpets blown to bring down the walls of Jericho in the book named for him that immediately follows the Pentateuch.
Answer: Joshua, son of Nun
25. She unsuccessfully ran for the Republican nomination for an open Senate seat from Ohio in 1994, after which she became Dean of the Ohio State College of Medicine. In 1991, she created the Women's Health Initiative while serving as the first female director of the National Institute of Health. For 10 points - identify this cardiologist, who in October 2001 resigned as president of the American Red Cross.
Answer: Bernardine Healy
26. Richard Hofstadter dubbed him the "Marx of the Master Class" for his insight into class relations, and he opposed the 1850 compromise in a speech that predicted the Civil War. His advocacy of another war, in 1812, had brought him to prominence and eventually to the vice presidency under Andrew Jackson. For 10 points - name this man who broke with Jackson over his opposition to the 1833 tariff and his conviction that South Carolina had the right to nullify it. Answer: John C. Calhoun

## 2002 Martin Luther King Jr. Memorial Tournament University of Michigan/Duke University Bonuses by Chicago C (Mike Altman, Paul Johnson, Will Baude, and Nick Poulos)

1. For the stated number of points, expand these acronyms for different medical imaging methods:
A. (5) MRI

Answer: Magnetic Resonance Imaging
B. (10) CT

Answer: Computed Tomography
Accept: Computerized Tomography
C. (15) PET (usually read as the word "pet")

Answer: Positron Emission Tomography
2. Name the following books from trilogies, for 10 points each:
A. (10) The second book of the U.S.A. trilogy by Dos Passos

Answer: 1919
B. (10) The third play of Aeschylus' Oresteia

Answer: The Eumenides
C. (10) The first book of Faulkner's Snopes trilogy

Answer: The Hamlet
3. Name the New Deal programs from clues, for 10 points each:
A. (10) It started with a plan to generate power at Muscle Shoals, Al., and still does so in Alabama and six other states
Answer: Tennessee Valley Authority
Accept: TVA
B. (10) The Supreme Court struck down this law that was designed to pay subsidies to farmers for not growing crops.
Answer: Agricultural Adjustment Act
Accept: AAA
C. (10) Herbert Hoover actually started this agency that provided financing for troubled banks and railroads. It was ended by Eisenhower after investigations revealed wide corruption.
Answer: Reconstruction Finance Corporation
Accept: RFC
4. Answer the following linking questions with the number twelve for 10 points.
A. (10) Bruce Willis enters a mental hospital claiming to have been sent from the future to stop a deadly virus, and catches the attention of rapper-psychologist Eminem. They form a rap group, release the album "Devil's Night" and meet Brad Pitt in this film from Terry Gilliam.
Answer: D12 Monkeys
B. (10) In this winter holiday show created in the late 60's by Jack Webb, a troupe of percussionists, birds and jewelry clean up the streets of L.A.
Answer: Adam-12 Days of Christmas
C. (10) Henry Fonda and Oklahoma duke it out in the jury room and on the court in this 1957 classic.
Answer: Big Twelve Angry Men
5. Given the other states and countries which border it, name the following German states for 10 points each:
A. (10) Baden Wurttemberg, Hessen, Thuringia, and Saxony, as well as the Czech Republic and Austria.
Answer: Bavaria
B. (10) Mecklenburg-West Pomerania, Saxony Anhalt, Saxony, Berlin, and Poland.

Answer: Brandenburg
C. (10) Lower Saxony, Hamburg, Mecklenburg-West Pomerania, and Denmark.

Answer: Schleswig-Holstein
6. Name the poem from lines, 30-20-10
(30) "An orphan's curse would drag to Hell a spirit from on high, but oh, more horrible than that is the curse in a dead man's eye."
(20) "All in a hot and copper sky, the bloody Sun at noon right up above the mast did stand, no bigger than the moon."
(10) "Why lookst thou so?' "With my cross-bow, I shot the albatross."

Answer: The Rime of the Ancient Mariner
7. Answer the following about a certain company 5-10-15
A. (5) In 1999, this company merged with Union Carbide, but kept its name and familiar diamondshaped logo.
Answer: Dow Chemical Company
B. (10) Name the trademark of Dow Chemical that is marketed today by the company mainly in home insulation products.
Answer: Styrofoam
C. (15) Herbert Henry Dow, the company's founder, discovered a method for extracting this element, used in his day in medicines and photography, from the brine underneath his town. Answer: Bromine
8. Identify sketchy economic practices from clues for 10 points each:
A. (10) The practice of selling the same product to different groups of people at different prices, such as student discounts.
Answer: Price Discrimination
B. (10) This alliteratively-named practice is best done by companies with large economies of scale who can cut prices to levels at which their competitors cannot make a profit.

## Answer: Predatory Pricing

C. (10) Many international trade disputes result from this practice of exporting a good to another country at excessively low prices.
Answer: Dumping
9. Name these things about what happened to you if you were a dead ancient Egyptian, for 10 points each:
A. (10) Your soul would be weighed in a balance by this jackal-headed god.

Answer: Anubis
B. (10) The whole trial would be presided over by this wife of Thoth, the goddess of truth, justice and harmony, to see if you had lived with her in your heart.
Answer: Maat
C. (10) If you had been excessively naughty, you would be eaten by this monster, which was part lion, part hippo, part crocodile.

## Answer: Ammut

10. Answer some questions about a British political crisis of 1886 , for 10 points each:
A. (10) What Liberal Prime Minister introduced a bill that year to grant Home Rule to Ireland? Answer: William Ewart Gladstone
B. (10) Ninety-three members of his own party defected over the measure to form what group that eventually joined the Conservatives?

## Answer: Liberal Unionists

C. (10) What Radical Liberal MP, who was a leading Liberal Unionist, later encouraged the start of the Boer War as a member of Salisbury's Conservative government?
Answer: Joseph Chamberlain
11. Answer the following questions about the different ways in which photons interact with matter for 10 points each.
A. (10) At low incident photon energy, this effect dominates, mostly because the incident photons are not energetic enough to dislodge electrons from their atomic orbits and are instead absorbed. Answer: Photoelectric effect
B. (10) This type of scattering, also called coherent scattering, causes no change in energy of the incident photon but rather a slight alternation in the photon's direction.
Answer: Rayleigh scattering
C. (10) At high energies, this interaction dominates. It results in the production of an electron and a positron.
Answer: Pair Production
12. For 10 points each, identify the following novels from duels:
A. (10) The Gascon hero challenges all of the title characters to duels upon first meeting them, although the cardinal's guards break them up.
Answer: Les Trois Mousquetaires
Answer: The Three Musketeers
B. (10) The title character of this novel, shortly after entering Parliament, pursues the Lady Violet Effingham, which forces him to duel Lady Standish's brother, Lord Chiltern.

## Answer: Phineas Finn

C. (10) In this American novel, Abe North and Mr. McKisco get into a pistol duel over Tommy Barban's treatment of McKisco's wife.

## Answer: Tender is The Night

## MUSEE D'ORSAY: myoo-SAY dor-SAY

13. Name the painters of the following paintings from the Musée d'Orsay in Paris, for 10 points each:
A. (10) The Luncheon on the Grass

Answer: Edouard Manet
B. (10) The Floorscrapers

Answer: Gustave Caillebotte
C. (10) The Turkeys at Montgeron

Answer: Claude Monet
14. While many NHL players will play for the "Big Six" hockey nations at the Olympics, some NHL goalies will dress for other nations. For 10 points each:
A. (10) The Carolina Hurricanes have granted this Latvian goaltender permission to play for his nation during the Olympic qualifying round.
Answer: Arturs Irbe
B. (10) This San Jose Sharks goalie will not be allowed to play for Russia after a ruling by the IIHF that he had played for Kazakhstan as an 18-year old.
Answer: Evgeni Nabokov
C. (10) Though born in South Africa and raised in Canada, this Washington netminder will once again be suiting up for Germany as he did in 1998.
Answer: Olaf Kolzig
15. Answer the following questions about the Crusades for 10 points each.
A. (10) This pope called the First Crusade in 1095 at the Council of Clermont.

Answer: Urban II
B. (10) This monk was infuriated at the fall of Edessa in 1144 and asked, "what are you doing, you servants of the cross?" managing to help garner support for the Second Crusade.
Answer: Saint Bernard of Clairvaux
C. (10) The death of this man prompted Pope Innocent III to call the Fourth Crusade.

Answer: Saladin
16. Answer the following math questions for the stated number of points.
A. (5) This name is given to the pairing of a set J with a binary operator such that the operator defined on J satisfies the associative, identity, and inverse laws.

## Answer: Group

B. (10) This man's law states that if $R$ is a finite group and $S$ is a subgroup of $R$, then the order of $S$ divides the order of $R$. His name also is given to a method of interpolation, among other things.
Answer: Joseph Louis Lagrange
C. (15) This ten-letter name is given to the most common group that is defined by the set $\{1,-1, \mathrm{i}$, $-i, j,-j, k,-k\}$ (given, of course, the corresponding definition for multiplication).
Answer: Quaternion
17. 30-20-10. Identify the painter from works.
(30) Summer Interior, Office at Night
(20) Cape Cod Evening Rooms by the Sea
(10) Chop Suey, Nighthawks

Answer: Edward Hopper
18. Name these geographical features of the Red Sea for the stated number of points:
A. (5) The Gulf of Suez, an arm of the Red Sea, and the Suez canal separate mainland Egypt from this peninsula.
Answer: Sinai
B. (10) This inlet connects the Red Sea to Israel.

Answer: Gulf of Agaba
C. (15) Israel's biggest port on the Red Sea is this city 4 miles from Aqaba itself.

Answer: Elat
19. Give the next word in the Emily Dickinson poems, for 10 points each
A. (10) " 'Hope' is the thing with ..."

Answer: Feathers
B. (10) "I like to see it lap the ... "

Answer: Miles
C. (10) " The carriage held but just Ourselves - / And ... "

Answer: Immortality
20. For 10 points each name the following about the classic Clinton scandal, Whitewater.
A. (10) The White House counsel who committed suicide in 1993, the focus of one of Ken Starr's reports.
Answer: Vincent Foster
B. (10) This savings-and-loan owner who joined with the Clintons to purchase land in the 70's, died while in prison for his involvement.
Answer: James McDougal
C. (10) Name the original Whitewater prosecutor, a moderate Republican, whom Janet Reno picked in 1994.
Answer: Robert B. Fiske Jr.
21. Identify the following choreographers from works for 10 points each,
A. (10) Fancy Free, West Side Story

Answer: Jerome Robbins
B. (10) Appalachian Spring, Cave of the Heart

Answer: Martha Graham
C. (10) Stars and Stripes, The Nutcracker

Answer: George Balanchine
22. Although the Euro is a single currency for several countries, each of those countries gets to put its own design on the back. Name, for 10 points each:
A. (10) The Botticelli work that Italy put on the back of its 10 -cent piece.

Answer: Nascita di Venere
English: The Birth of Venus
B. (10) The country that has put a harp on the back of all denominations

Answer: Ireland
Accept: Eire
C. (10) Most countries that put famous citizens on the coins chose politicians, but Austria chose this composer for the 1-Euro coin.
Answer: Wolfgang Amadeus Mozart
23. Name these contemporaries of Caesar, for 10 points each:
A. (10) This former general in Sulla's army lost in the consular elections of 64 and started a rebellion that was crushed, largely thanks to Cicero.
Answer:Lucius Sergius Catilina

## Accept: Catiline

B. (10) Cicero was subsequently chased into exile by this ally of Caesar, a radical tribune of the plebs who was murdered in 52.
Answer: Publius Clodius Pulcher
C. (10) Clodius was done in by this aristocratic thug, who had to go into exile when Cicero
flubbed his defense speech.
Answer: Titus Annius Milo
24. Identify the following rules from organic chemistry for 10 points each.
A. (10) An elimination usually results in the most highly substituted product.

Answer: Saytzeff Rule
B. (10) Addition to an unsymmetric alkene results in the placement of the hydrogen atom on the least-substituted carbon.
Answer: Markovnikov's Rule
C. (10) A cyclic molecule with a continuous ring of overlapping $p$ orbitals will be aromatic if there are $4 \mathrm{~N}+2$ pi electrons, and antiaromatic if there are 4 N pi electrons.
Answer: Hückel's Rule
25. Name some saints, for 10 points each:
A. (10) This apostle is portrayed in art carrying his skin, since he was martyred by being flayed.

Answer: Bartholemew
B. (10) When this saint was being roasted to death on a gridiron, he quipped to the Roman emperor that he should be turned over, as he was done on that side.

## Answer: Lawrence

C. (10) This martyr under the Romans is usually portrayed being martyred by being shot to pieces with arrows.

## Answer: Sebastian

26. Give numbers from the 1948 Kinsey report, for the stated number of points:
A. $(5 / 5)$ Within 10 , give the percentage of 1948 married couples who have had sex with the man on top, and the percentage who have done it with the woman on top.
Answer: Man on top: 100\% (accept 90100). Woman on top: 45\% (Accept: 3555)
B. $(5 / 5)$ Within 10 , give the percentage of males and the percentage of females who prefer to have sex with the lights on.
Answer: Males: $\mathbf{4 0}$ (30-50 acceptable) females: 19 (9-29 acceptable)
C. (10) For a final ten points, give Kinsey's reported percentage of married men who have an orgasm within the first two minutes of coitus.
Answer: 75\%. (Accept: 65-85)
