

The Omar Bongo Academic Tournament University of Pittsburgh: March 23, 2002

Questions by Mike Baker, Heather Brown, Mike Davies, Beth Davis, Amie Dupin, Jonathan Misurda, Rich Nalichowski, Josh Sokoloski, Jennifer Sydeski, and Matt Weiner

PACKET D TOSSUPS

1. If one models the ground and clouds as a parallel-plate capacitor, this happens in an electric field of three million newtons per coulomb in the air. At this point, outer electrons are ripped free and travel through the material, discharging the capacitor. FTP, name this condition, occurring when the upper limit of dielectric strength is exceeded.

ANSWER: dielectric breakdown

2. A proponent of a stronger military for his nation in the years surrounding World War I, he wrote *Notturmo* while recovering from a flying accident, and he reacted to the fall of Fiume by leading his regiment against the town and ruling it with an iron fist for over a year. After finishing *The Intruder*, he wrote a novel about the sculptor Lucio Settagli, which was one of two works for Eleanora Duse. FTP, name this author of *Francesca da Rimini* and *La Gioconda* who fictionalized himself as Stelio Effrena in *The Flame of Life*.

ANSWER: Gabriele D'Annunzio

3. The survival of African rainforests depends largely on the nomadic dispersal of seeds by these animals. The Helmeted variety is the only species in which the casque is solid. Their lives are most noteworthy for their nesting habits, in which the female and the eggs are walled up with mud, where she molts and receives food from the male through a slit. FTP, name these tall, flat-billed birds with vestigial hollow chambers of bone above their bills.

ANSWER: hornbills [or bucerotidae]

4. Among this city's landmarks are the Stone Garden of Jamshidieh and the Carpet Museum. With almost seven million inhabitants, it is expanding into the northern Elburz Mountains. Built on the site of the destroyed city of Rayy, it receives water and power from the Karaj, Latian and Lar dams, and it is centered on Sepah and Ferdowsi Squares. FTP, name this capital city of Iran.

ANSWER: Tehran

5. In 1982, Kent © Norman (Kent Copyright-Symbol Norman) filed suit in U.S. District Court in Oregon, demanding that this agency investigate "White Line Fevers From Mars." Under the Mann-Elkins Act, it regulated telegraphs and telephones prior to the establishment of the FCC, and under the Hepburn Act it was authorized to fix certain prices. FTP, name this agency which regulated "common carriers" such as transportation, shipping, and public utilities beginning in 1887.

ANSWER: Interstate Commerce Commission

6. She once claimed that her crush, Richard Baseheart, is equal to two plus two. Built from a child's car seat, a drain hose, foam tubing, and a flashlight, this character has been voiced by Jim Mallon and Patrick Brantseg. The only movies which she's watched are *Hercules and the Captive Women*, *Untamed Youth*, and *The Wild Rebels*. FTP, name this robot responsible for maintaining life support functions on *Mystery Science Theater 3000's* Satellite of Love.

ANSWER: Gypsy

7. While at the Heritage Foundation, she contributed the article "Why the Flat Tax Will Boost Charitable Giving" to Jack Kemp's anthology *The IRS v. The People: Time for Real Tax Reform*. She should know about charity, as she's the former CEO of the United Way. Married to Senator Mitch McConnell, she has also directed the Peace Corps and served as Deputy Secretary of Transportation. FTP, name this current Secretary of Labor.

ANSWER: Elaine L. Chao

8. An electrically charged particle can create x-rays or gamma rays through this process. It is used in a Crooke's tube, where electrons are accelerated and smashed into a piece of metal. FTP, name this type of radiation, named for the German for "radiation from slowing down."

ANSWER: Bremsstrahlung radiation

9. Two of his works were subtitled Folklore of Industrial Man and The Making of Typographical Man. Those books, *The Mechanical Bride* and *The Gutenberg Galaxy*, were followed by a collaboration with Quentin Fiore and Jerome Agel. In later works, he coined the phrase "global village." FTP, name this author of *The Medium is the Message*.

ANSWER: Herbert Marshall McLuhan

10. Relationships are diamonds. Identifying relationships are double diamonds. Attributes are ellipses, the key attribute is underlined, and total participation is denoted by a double connecting line, whereas partial participation is denoted by a single connecting line and rectangles represent the entities. FTP, name this system for modeling a relational database.

ANSWER: Entity-Relation diagram

11. In the graphical representation of this market structure, the marginal revenue curve is vertical for a period. Marginal cost slopes downward at the low range of quantity, then moves upward before intersecting demand. The demand curve has a sharp kink reflecting price inflexibility. A concentration ratio of more than forty percent indicates this kind of market. FTP, name this structure in which a small number of interdependent firms control prices.

ANSWER: oligopoly

12. His compositions include *The Witches' Dance*, *Variations on a Theme of Rossini*, and six pieces for string quartet and guitar. Variations on his work comprise fifty caprices by Rochberg, twelve etudes by Schumann, and a rhapsody by Rachmaninov. Berlioz composed *Harold in Italy* for him, but he rejected it. FTP, name this virtuoso whose skill on the violin was so great that he was accused of having made a pact with the devil.

ANSWER: Niccoló Paganini

13. In Jean Giraudoux's novel *Bella*, the ghost of a dead soldier expresses only one regret about his life: that he never read this book. In it, Prince Ranuce-Erneste IV makes advances on Gina, the Duchess of Sanseverina, who is conspiring with Count Mosca to advance the position of a nephew, a soldier-turned-priest. Eventually, the Farnese Tower jailer's daughter Clelia helps Fabrice del Dongo escape. FTP, name this novel by Stendahl.

ANSWER: The Charterhouse of Parma [or La Chartreuse de Parme]

14. Shortly before his January 2002 death, his book *Invariances: The Structure of the Objective World* was published; another work of his in the past decade is *Socratic Puzzles*. He wrote on ethics in *Philosophical Explanations*, values in *The Examined Life*, and reason in *The Nature of Rationality*. FTP, name this man who reacted to the leftist justifications of his Harvard colleague John Rawls's *A Theory of Justice* by writing a philosophical defense of minimal government, *Anarchy, State, and Utopia*.

ANSWER: Robert Nozick

15. His second government ended disastrously when he lost his seat in the House of Commons to Emmanuel Shinwell. Under that government, the United Kingdom went off the gold standard and began re-arming. His first government passed the Wheatley Housing Act but fell after the publication of the Zinoviev letter. In 1900, he helped found the party which he intermittently led beginning in 1910. FTP, name this man, who served in 1924 and from 1929 to 1935 as the first Labour Party prime minister.

ANSWER: James Ramsay Macdonald

16. He championed the "responsible government" movement in his three newspapers—the *British Chronicle*, the *Banner*, and the *Toronto Globe*. A fired *Globe* employee shot him to death in 1880, years after this onetime prime minister of Upper Canada joined John A. Macdonald and George-Étienne Cartier to form the Great Coalition. FTP, name this Reform and Clear Grit Party leader who provided the liberal voice at the conference which created the Canadian Confederation in 1867.

ANSWER: George Brown

17. Her works in sculpture include a sleeping ram and a grazing sheep. The first female member of the French Legion of Honor, her rural paintings include *Plowing in Nivernais* and *Sheep by the Sea*. She received permission from the government to dress as a man in order to gather studies for her paintings. FTP, name this painter of *Weaning the Calves* and *The Horse Fair*.

ANSWER: Rosa Bonheur

18. He rose from the minor state of Kangaba and was eventually succeeded by his son Mansa Yerelenku. His conquering expeditions included the razing of Koumbi in battle with Ghana. His ascendancy began when he led the victorious forces in the Battle of Kirina against Sumanguru of Kaniaga in 1235. FTP, name this "Lion Prince," the Mandingo founder of the Mali empire.

ANSWER: Sundiata Keita

19. In this play, Viluppo makes the false claim that Alexandro has killed the prince of Portugal, who is actually a prisoner. Horatio is killed by Lorenzo, who frames Pedringano for the crime. Belimperia and Hieronimo plot revenge, which takes the form of a play about Erasto in which all including Balthazar are killed. Don Andrea and the spirit of Revenge comment on the action throughout the play. FTP, name this first-ever revenge play, written by Thomas Kyd.

ANSWER: "The Spanish Tragedy"

20. He wrote a novel, *One Way to Heaven*, but he is chiefly known for such lines as "Make plain the reason tortured Tantalus/Is baited by the fickle fruit, declare/If merely brute caprice dooms Sisypheus/To struggle up a never-ending stair." His poems, such as

"Youth Sings a Song of Rosebuds" and "Simon the Cyrenian Speaks," were collected in *Color, Copper Sun*, and *The Black Christ*. FTP, name this Harlem Renaissance author of "Ballad of the Brown Girl" and "Yet Do I Marvel."

ANSWER: Countée Cullen

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PACKET D BONI

1. Name the painters of these works involving flags for 15 points each, 10 if you need a further clue.

•15: 1959's *Die Fahne Hoch!* or *Hoist the Flag!*

10: A leader of Post-Painterly Abstraction, his other works include *Six Mile Bottom*, *Avicenna*, and *Bermuda Petrel*.

ANSWER: Frank Philip **Stella**

•15: 1958's *Three Flags*

10: This pop artist has also created sculptures of beer cans in *Painted Bronze* and painted *False Start*, in which every object has an irrelevant word written over it.

ANSWER: Jasper **Johns**

2. Name these relatives of Balder for 10 points each.

•Balder's brother, the god of winter and darkness, he accidentally killed Balder with a mistletoe and was then killed by Vali.

ANSWER: **Hoder**

•Balder married this daughter of Nep.

ANSWER: **Nanna**

•Hoder and Nanna produced this son, the god of justice, who settled disputes from his hall at Glitnir.

ANSWER: **Forseti**

3. Answer the following about colloids for 10 points each.

•Homogenized milk, mayonnaise, and cold crème are examples of this type of colloid.

ANSWER: **emulsion**

•In this effect, a beam of light passing through a colloid is scattered.

ANSWER: **Tyndall** effect

•This metal was used in colloidal form in medications such as nose drops until it was found that it caused argyria. Spam e-mails to the contrary, it has no power against anthrax.

ANSWER: colloidal **silver**

4. Answer the following about an uprising for 10 points per part.

•In 1358, French peasants revolted at Compiègne, then moved throughout the country destroying castles. This name, derived from a name for a generic Frenchman, was given to the event.

ANSWER: **Jacquerie**

•At this city on the Marne, also the home of Bossuet's tomb, the Jacquerie was defeated by Gaston Phoebus and Jean de Grailly, and many participants were killed.

ANSWER: **Meaux**

•The leader of the Jacquerie was this sympathetic nobleman, who joined with urban rebel leader Étienne Marcel. Charles II of Navarre captured him at Clermont-en-Beauvaisis and executed him.

ANSWER: Guillaume **Karle** [accept Guillaume **Cale**]

5. Name these guitarists for 10 points each.

- This onetime member of Steeler drove the albums *Rising Force*, *Trilogy*, and *Fire and Ice*, which contains a guitar-focused version of Bach's second orchestral suite.

ANSWER: Yngwie Malmsteen [or Lars Johann Yngwie Lannerback]

- A bandmate of Malmsteen in Alcatraz, his solo albums include *Flexi-Able*, *Passion and Warfare*, and *Fire Garden*. He briefly played with David Lee Roth and Whitesnake.

ANSWER: Steve Vai

- Vai's guitar teacher, his albums include *Not of This Earth*, *Surfing With the Alien*, and *Crystal Planet*.

ANSWER: Joe Satriani

6. For 10 points each, name these things related to speciation.

- This type of speciation is caused by intrinsic changes. Populations become genetically isolated even though their ranges overlap.

ANSWER: sympatric speciation

- Sympatric speciation can be caused in plants by this condition in which an organism has extra sets of chromosomes.

ANSWER: polyploidy

- This type of polyploid has more than two chromosomal sets, all from the same species.

ANSWER: autopolyploid

7. Name these works of William Blake for 10 points each.

- Over one hundred engravings accompanied this poem, which promises that "I will not cease from mental fight,/Nor shall my sword sleep in my hand/Till we have built" the title place "In England's green and pleasant land."

ANSWER: "Jerusalem"

- This 1795 collection, a sequel to a 1789 work, includes "The Tyger."

ANSWER: Songs of Experience [do not accept "Songs of Innocence and Experience"]

- Named for the Zoa of reason in Blake's theology, it forms a cycle with the Book of Ahania and the Book of Los.

ANSWER: *The First* Book of Urizen

8. Identify the following about matrices for 10 points each.

- This is the operation of swapping rows and columns.

ANSWER: transpose [accept transposition]

- This can be computed by writing down all permutations of 1 to n, taking each permutation as the subscripts of the letters a, b, ..., and summing with signs determined by $(-1)^{i(p)}$, where $i(p)$ is the number of permutation inversions in permutation p.

ANSWER: determinant

- This is the result of taking a square matrix to the zero-th power.

ANSWER: identity matrix

9. Name these leaders in the American Revolution for 10 points each.

- After replacing Guy Carleton in 1777, he invaded from Canada, capturing Fort Ticonderoga and leading the British forces at Saratoga. After the war he became a playwright, writing such works as "The Heiress."

ANSWER: John "Gentleman Johnny" Burgoyne

- Burgoyne surrendered Saratoga to this Northern Department commander, who also won at Stillwater and lost at Camden.

ANSWER: Horatio Gates

•This aide-de-camp to Washington joined with Thomas Conway in a failed attempt to elevate Gates to commander-in-chief. He was later governor of Pennsylvania throughout the 1790s.

ANSWER: Thomas Mifflin

10. Answer the following about Diocletian's division of the Roman empire into a tetrarchy for 10 points each.

•Diocletian appointed this man augustus of the west at Milan.

ANSWER: Marcus Aurelius Valerius Maximianus

•Two men were chosen as "caesars," second in command only to the augusti. Name either.

ANSWER: Constantius Chlorus or Gaius Galerius Valerius Maximianus

•Maximian moved the western capital from Rome to Milan, while Diocletian established the eastern capital in this Bithynian city.

ANSWER: Nicomedia [or Izmit]

11. Name these laws from linguistics for 15 points each.

•It states that the Indo-European consonants p, t, and k shifted to Germanic f, th, and h; b, d, and g became p, t, and k; and bh, dh, and gh became b, d, and g.

ANSWER: Grimm's Law

•This law modifies Grimm's Law, saying that "proto-Germanic noninitial voiceless fricatives in voiced environments became voiced when the previous syllable was unstressed in Proto-Indo-European."

ANSWER: Verner's Law

12. For 10 points per part, answer the following about two novels and their author.

•This novel about exclusion and family sees George Fairchild marry the lower-class Robbie Reid.

ANSWER: Delta Wedding

•During a visit to her father, a judge, during a botched eye operation which leads to his death, Laurel McKelva Hand recalls her dead husband Phillip and argues with her stepmother Fay over a breadboard, in this novel.

ANSWER: *The* Optimist's Daughter

•*Delta Wedding* and *The Optimist's Daughter*, along with *A Curtain of Green*, *The Ponder Heart*, and *The Golden Apples*, were written by this Mississippian, who died in 2001.

ANSWER: Eudora Welty

13. Name these Sikh gurus for 10 points each.

•In 1500, he declared "There is no Hindu, there is no Muslim" and set about founding Sikhism.

ANSWER: Nanak Dev Ji

•This successor of Nanak created the Gurmukhi script in order to establish Sikh identity out of the Hindu-linked tradition of Sanskrit literature.

ANSWER: Angad

•He organized the Panth to defend against persecution by Muslims and ended the line of human gurus in favor of the Granth Sahib.

ANSWER: Gobind Singh

14. Name these Gabriel García Márquez novels for 15 points each.

•It follows the faked and real deaths of the General of the Universe, who drowns children for knowing that he rigs the lottery and sells the Caribbean Sea to the United States.

ANSWER: The *Autumn of the Patriarch* [or El *otoño del patriarca*]

•The fact that Santiago Nasar is to be murdered by Pedro Vicario and his brothers for sleeping with Pedro's new bride is known to the whole town, but life goes on.

ANSWER: *Chronicle of a Death Foretold* [or *Crónica de una muerte anunciada*]

15. Given its English nickname, name the southern constellation for 10 points each.

•Air Pump

ANSWER: Antila

•Southern Cross

ANSWER: Crux

•Clock

ANSWER: Horologium

16. Given a U.S. river, name the body of water in which it terminates for 10 points each.

•Saranac River

ANSWER: Lake Champlain

•Maine's St. Croix River

ANSWER: Passamaquoddy Bay [prompt on Bay of Fundy; prompt on Atlantic Ocean but don't be nice about it]

•Detroit River

ANSWER: Lake Erie

17. Answer the following about a Supreme Court case for 10 points per part.

•In this 1937 holding, the Court declined to overturn a state court which allowed a defendant convicted of second degree murder to be retried and sentenced to death.

ANSWER: *Palko v. Connecticut*

•The Court found that the right against double jeopardy, guaranteed by this amendment to the Constitution, need not be incorporated to the states.

ANSWER: Fifth Amendment

•The majority opinion was written by this justice, appointed by Hoover at the death of Oliver Wendell Holmes Jr and known for his historically-based, concise opinions.

ANSWER: Benjamin Nathan Cardozo

18. Answer the following about a person in Chinese history for 10 points per part.

•Once a concubine of emperor Xianfeng, she ruled as regent for her son Tongzhi from 1862 to 1874, then temporarily ceded the throne to her nephew Guangxu.

ANSWER: Cixi [prompt on Dowager Empress]

•Cixi seized power from Guangxu, ending the Hundred Days reforms, in this year.

ANSWER: 1898

•This author of *One World Philosophy* led the modernization campaign under Guangxu but was exiled upon Cixi's return.

ANSWER: Kang Youwei

19. Answer the following about the works of Alexander Pushkin for 10 points per part.

•This novella is set during the Pugachev revolt. It follows a soldier who sympathizes with the rebels while romancing a member of his commander's family.

ANSWER: The *Captain's Daughter* [or *Kapitanskaya Dochka*]

•In this short story, a German named Hermann pressures an old woman to reveal a method for cheating at cards, killing her. Her ghost returns to mock him after he loses everything gambling.

ANSWER: "The Queen of Spades" [or "Pikovaya Dama"]

•This collection is framed as the work of a fictional collector of stories. It includes "The Shot," "The Snowstorm," "The Undertaker," "The Postmaster," and "Mistress Into Maid."

ANSWER: *The Tales of the Late Ivan Petrovich Belkin* [or *Povesti Pokoyного Ivana Petrovicha Belkina*]

20. Answer the following about current politics in Ireland for 10 points per part.

•He is the current Prime Minister of Ireland.

ANSWER: Bertie Ahern

•Ahern is the leader of this party.

ANSWER: Fianna Fáil [or Soldiers of Destiny]

•She is the current Irish President.

ANSWER: Mary McAleese