

Ebowla 2001
Carnegie Mellon University
Packet #1

10/5/01

TOSSUPS

1. Removing a methyl group from the exterior of a protein gives stability of about 5 kilojoules per mole. This is a result of simple entropy, as polar solvents are limited in their conformations about aliphatic groups. Also responsible for the stability of lipid bilayers, For 10 points, name this chemical effect which accounts for the immiscibility of oil and water.

Answer: hydrophobicity or hydrophobic effect

2. A common feature in the paintings of Karel Appel and Frank Auerbach, its first deliberate uses were as highlights. Impossible to do with tempera or watercolor, it is largely associated with Rembrandt and Van Gogh. For 10 points, name this technique in which paint is thickly applied to the canvas, usually leaving brush or knife marks.

Answer: impasto

3. Despite promises to support Henry I's daughter Matilda, the barony installed this grandson of William the Conqueror, causing a civil war. Captured by the Angevins, he was exchanged for Robert Gloucester and consolidated his power. Though he hoped his son would succeed him, the Treaty of Wallingford ensured that Matilda's son would become king. For 10 points, name this only Blois King of England.

Answer: King Stephen of Blois

4. The original manuscripts were destroyed by Alexander's armies – few of the original 21 books and commentaries survive. The Vendidad consists of 22 Fargards describing the creation of Yima and revelation of the laws. The Visperad consist of minor invocations, while the Khorda consists of daily prayers. Only the Gathas are directly attributed to Zarathustra. For 10 points, name this Pahlavi text, the sacred books of Zoroastrianism.

Answer: Zend-Avesta

5. He wrote the liner notes for both "Frampton Comes Alive" and "The Song Remains the Same" while working for Rolling Stone. He adapted his *Fast Times at Ridgemont High* for film and made his directorial debut with "Say Anything." For 10 points, name this writer/director of *Almost Famous* and *Jerry Maguire*.

Answer: Cameron Crowe

6. As a young man, the novel's main character is told to deliver a message to the backdoor due to his low social status. He then creates a "design" to become a wealthy man, which ends in his murder by Wash Jones and the destruction of Sutpen's Hundred. Narrated as a series of conversations, the ultimate mystery is why Henry Sutpen killed Charles Bon. For 10 points, name this Faulkner novel with a Biblical title.

Answer: Abasalom, Absalom!

7. The first one was initially cancelled because of fears of an influenza outbreak, but eventually took place in 1937 in Washington, DC. Valley Forge had it three times. Held in the same location since 1981, there were two locations in 1973 – Farragut Park, Idaho and Moraine Park, Pennsylvania. "Strong Values, Strong Leaders" was the 2001 theme of, for 10 points, this quadrennial event of the Boy Scouts of America.

Answer: Boy Scout National Jamboree

8. Common engineering parlance uses the term solely for those of second rank, and most scientifically relevant ones are the result of a dyadic product. Examples include stress, inertia, and momentum flux, while the metrical and curvature ones have important mathematical uses. Vectors have first rank, and scalars are zero rank. Easily represented as a matrix, for 10 points, name this general construct of a quantity with both magnitude and direction.

Answer: tensor

9. Various episodes involve the narrator's recording career, love affair with a wooden figure, and leadership of an anarchist group. Told in first person from the asylum he was sent to after his conviction for Dorthea Kongetter's murder, it is a metaphoric indictment of German society before, during, and after World War II. The story of Oskar Matzerath, who refused to grow after age 3, for 10 points, name this Günter Grass novel which takes its name from Oskar's favorite object.

Answer: The Tin Drum or Die Blechtrommel

10. It grew from the Cleveland operations of Maurice Clark and Samuel Andrews. Much of its success was through "harmony" rebate deals with railroads, and it quickly became a muckraker target, most notably for Ida Tarbell. For 10 points, name this company whose 1911 breakup gave John D. Rockefeller quarter shares in over 30 companies.

Answer: Standard Oil Company and Trust

11. Published between 1812 and 1818, the final installment generally ignores the title character's action to directly address the reader on the subjects of time and history, particularly Italy. It ends with a meditation on the sea, and follows the hero's travels through Spain, Portugal, and Albania in the first two cantos. For 10 points, name this semi-autobiographical Byron work.

Answer: Childe Harold's Pilgrimage

12. Currently led by Kathleen Hawk Sawyer, this agency has recently begun administering the District of Columbia's equivalent system. Its facilities include locations at Allenwood, Pennsylvania; Marion, Illinois; Terre Haute, Indiana; and Leavenworth, Kansas. For 10 points, name this Federal agency that employed intern Chandra Levy.

Answer: Bureau of Prisons

13. He changed the name of the empire to reflect his name. Believing he was an incarnation of Hercules, official depictions show him as such. He consolidated power after an abortive senatorial assassination attempt in 182AD inspired by his sister. A fan of the Games, he often appeared in the Coliseum to kill beasts and execute prisoners, eventually appearing as a gladiator. For 10 points, name this Aurelian Roman emperor, whose portrayal in "Gladiator" wasn't that far off base.

Answer: Lucius Aelius Aurelius Commodus

14. Their American imposition was authorized by the Banking Act of 1935 as a means to ensure solvency, but its use in monetary policy was largely given up after 1951 and the increased use of open market operations. Currently at 10% for transaction deposits, most western nations exempt time deposits. Its inverse is the money multiplier. For 10 points, name this restriction on a bank's liquid assets.

Answer: reserve requirement or ratio

15. Eaten as gut sweetbread, it is an unusual source of vitamin C. Its acinar cells produce digestive enzymes like trypsin and lipase, which empty through the duct of Wirsung into the duodenum. Its endocrine function is centered in the islets of Langerhans. For 10 points, name this organ that produces glucagon and insulin.

Answer: pancreas

16. A doctor by trade, he was forced to flee his native Cordoba, eventually settling in Cairo, where he acted as personal physician to Saladin. A student of Aristotlean philosophy, he wrote extensively, including a multi-volume commentary on the Mishnahs. Believing that prophets were philosophers who reveal the logic of God's perfection, for 10 points, name this author of "A Guide to the Perplexed."

Answer: Moses ben Maimonides

17. Dedicated to Theodore Ave-Lallement, the third movement is not a scherzo, but a waltz. The first movement, *Allegro con anima*, introduces the "Impending Fate" motif which reappears throughout the work. The sonata-structured finale returns the fate theme from E minor to E major, signifying a victory of human will. For 10 points, name this orchestral work by Pyotr Tchaikovsky.

Answer: Symphony No. 5 in E Minor, Opus 64

18. Its major use is to actuate switches or relays through the motion of a central plunger, as in some circuit breakers, while its use as a "rail gun" is largely theoretical. When activated, its radius may decrease due to the internal forces it generates. Its inductance is a function of its length, area, and the square of its number of turns. For 10 points, name this coiled electrical device that generates a strong magnetic field parallel to its axis.

Answer: solenoid

19. His first volume of poetry, "Forest Moon" was published when he was 19. "A Tree Within" was largely influenced by the art of Marcel Duchamp, and other works include "East Slope" and "Blanco." He entered diplomatic service in 1945, eventually as ambassador to India. For 10 points, name this Mexican poet and essayist, winner of the 1990 Nobel Prize and creator of "The Labyrinth of Solitude."

Answer: Octavio Paz

20. He chaired the 1861 Washington Peace Conference, and was later elected to the Confederate House of Representatives. Most of his cabinet resigned after he vetoed efforts to restore a national bank, and his veto of a tariff bill was the first to be overridden by Congress. Dubbed "His Accidency" by political opponents, for 10 points, name this US president who assumed office upon President Harrison's death.

Answer: John Tyler

BONI

1. He was the grandson of Sundiata, founder of his dynasty, and eventually ruled much of west Africa. For 10 points each –

[10] Name this king of Mali, whose pilgrimage to Mecca enjoyed much fame.

Answer: Mansa Musa

[10] Mansa Musa conquered this kingdom with capital at Gao during his travel to Mecca.

Answer: Songhai

[10] Mansa Musa built the great mosque of Sankore in this Songhai city.

Answer: Timbuktu

2. 30-20-10, name the city.

[30] Devastated by an 1886 fire, its economy did not fully recover until the opening of the Panama Canal.

[20] Notable downtown features include the 1880s-era Gastown and Stanley Park.

[10] Situated on the Burrard inlet, this Canadian city lies across from its namesake island.

Answer: Vancouver, British Columbia

3. Identify the physical constants from values for 10 points each.

[10] 2.998×10^8 meters per second

Answer: speed of light

[10] 1.38×10^{-23} Joules per Kelvin

Answer: Boltzmann constant

[10] 6.67×10^{-11} Newton-square meters per square kilograms

Answer: gravitational constant

4. Identify the following Shakespeare plays from the first line for 10 points each.

[10] “Now is the winter of our discontent.”

Answer: The Tragedy of King Richard III

[10] “If music be the food of love, play on.”

Answer: Twelfth Night, or What You Will

[10] “In sooth; I know not why I am so sad.”

Answer: The Merchant of Venice

5. Identify the following physical features of Mars for 10 points each.

[10] This Martian canyon is the longest and deepest in the solar system.

Answer: Valles Marineris

[10] This southern hemisphere feature is the largest Martian impact crater.
Answer: Hellas Basin

[10] A large rise (or possible uplift) of land, this northern hemisphere feature is home to Olympus Mons, Ascræus Mons, and Pavonis Mons.
Answer: Tharsis Bulge

6. Answer the following about "Rigoletto" for 10 points each.

[10] Rigoletto is adapted from this French author's play "Le roi s'amuse" ("The King Amuses Himself").
Answer: Victor Hugo

[10] What is Rigoletto's profession?
Answer: jester or joker (accept equivalents)

[10] Appearing twice in the opera, this tune's title translates as "Woman is fickle."
Answer: La donne è mobile

7. Answer the following related questions for the stated number of points.

[10] When the 101st Airborne was asked to surrender this position to German troops, General MacAullife replied, "nuts!"
Answer: Bastogne

[5] This general's Third Army relieved Bastogne.
Answer: George S. Patton

[10] The North Vietnamese laid seige to this remote outpost in 1968.
Answer: Khe Sanh

[5] The retaking of Route 9 in this Operation allowed Khe Sanh to be evacuated and destroyed.
Answer: Operation Pegasus

8. Identify the following things Dick Cheney may have in his medical history for 10 points each.

[10] Also called PTCA, a catheter is inserted into a blocked artery and a small balloon is inflated, compressing the blockage and stretching the artery.
Answer: balloon angioplasty

[10] Often inserted during an angioplasty, it is a wire mesh that provides support for the healing artery.
Answer: stent

[10] Similar to angioplasty, a catheter is inserted into a blocked artery and a tiny rotating blade removes plaque from the artery walls.
Answer: atherectomy

9. Get your head out of the oven and identify the following works of Sylvia Plath for 10 points each.

[10] Plath's only novel, it is a semi-autobiographical account of a young woman's attempted suicide and recovery.
Answer: The Bell Jar

[10] Also the title of her short story collection, the narrator works as a receptionist for the title character, creating the title object – she later endures electroshock treatment!
 Answer: Johnny Panic and the Bible of Dreams

[10] Her first posthumous volume of poetry, it is named for her horse, and includes several parallels of her life to the Holocaust, as in “Lady Lazarus.”
 Answer: Ariel

10. Answer the following about the death of Balder for the stated number of points.

[5] Name Balder’s mother, who asked that everything on earth take an oath never to hurt Balder.
 Answer: Frigg

[10] Balder was killed by a dart made from this tree, which did not take the oath.
 Answer: mistletoe

[15] Five points for one, 15 for both – name Balder’s blind brother who threw the dart, and the son of Odin and Rind, who was born specifically to avenge him.
 Answer: Hod (or Hodur) and Vali

11. Formed in 1838 in Manchester, its express purpose was to affect the repeal of a series of British laws taxing grains. Answer the following about this group for 10 points each.

[10] First, name that group.
 Answer: Anti-Corn Law League

[10] The Anti-Corn Law League was led by John Bright and this man.
 Answer: Robert Cobden

[10] The Corn Laws were finally repealed in 1846 under this Conservative PM in response to Cobden’s pressure and the potato blight.
 Answer: Sir Robert Peel

12. Answer the following about an important event in language for 15 points each.

[15] First, name this phonological event, happening over about 2 centuries, that saw a major change in the pronunciation of English words.
 Answer: Great Vowel Shift

[15] The term “Great Vowel Shift” was coined by this linguist in his 1905 work “Growth and Structure of the English Language.”
 Answer: Otto Jespersen

13. 30-20-10, name the novel from characters.

[30] Boris Max; Gus and Jack

[20] Mary Dalton; Jan Erlone

[10] Bigger Thomas

Answer: Native Son

14. Answer the following about non-ideal gases for the stated number of points.

[10] The first non-ideal equation of state, it includes corrective terms for pressure and volume denoted "a" and "b" that vary with the substance.

Answer: van der Waals' equation

[5,5] For 5 points each, the van der Waals' equation accounts for these two factors of real gases.

Answer: atomic or molecular volume, and intermolecular forces

[10] Usually denoted as "Z", this corrective constant is equal to the ratio of the pressure-volume product to the gas constant-temperature product.

Answer: compressibility factor

15. Identify the following things from Shinto for 10 points each.

[10] The major objects of worship in Shinto, they generally represent awesome powers of nature.

Answer: kami

[10] The supreme Shinto kami, this sun goddess was considered the ancestor of the emperors.

Answer: Amaterasu

[10] This state-sponsored branch of Shinto was based on the divinity of the emperors, and handed down from Amaterasu.

Answer: Kokutai Shinto

16. Name these Nobel Prize winners in Literature from works for 15 points each. If you need their country of birth, you will receive only 5.

[15] "Under the Holy Mountain," "Salka Valka," and "The Light of the World"

[5] Iceland

Answer: Halldor Laxness (or Halldor Gudjonsson)

[15] "Baltasar and Blimunda" and "The Stone Raft"

[5] Portugal

Answer: Jose Saramago

17. Identify the following Russian internal security organizations for 10 points each.

[10] Founded in 1954, former leaders include Yuri Andropov and Vladimir Putin.

Answer: KGB or Komitet Gosudarstvennoy Bezopasnosti

[10] The first Soviet security agency, it was charged with investigating anti-Bolsheviks, but lost support due to its brutality.

Answer: Cheka or VECHEKA

[10] Led for most of its existence by Lavrenty Beria, this organization's secret police were responsible for the Stalinist purges and gulags.

Answer: NKVD or Narodniy Kommissariat Vnytreniy Del

18. With Jeff George's recent departure from the Washington Redskins, answer the following about his career for the stated number of points.

[10] Where did George play college football?

Answer: University of Illinois

[20] Washington was the fifth team of his 12-year career. Name the other four teams for 5 points each.

Answer: Indianapolis Colts, Atlanta Falcons, Oakland Raiders, Minnesota Vikings

[MOD: Team or city acceptable]

19. Identify the following works of Thomas Gainsborough for 10 points each.

[10] A portrait of a couple and their dog, the right half of the painting is totally devoted to a country landscape.

Answer: Mr. and Mrs. Andrews

[10] Perhaps his best known work, this portrait of a well dressed young man reflects Gainsborough's study of Van Dyck.

Answer: The Blue Boy or Portrait of Master Jonathan Buttall

[10] One of his "fancy pictures" it depicts a rustic group with a team of horses bringing goods through the woods.

Answer: The Harvest Wagon

20. Answer the following about the Euro for 10 points each.

[10] Authorization for a common European currency came with the ratification of this treaty, which also created the EU.

Answer: Treaty of Maastricht

[10] This was the original name for the Euro, rejected as it offended German sensibilities for sounding like their word for "cow."

Answer: ecu [EE-koo]

[10] The Euro's paper form will feature styles of this structure on each denomination.

Answer: bridge