## Ohio Fall Kickoff Tournament 2011 Packet by Lei Fan, Steven Wellstead, et. al.

1. Naval skirmishes during this campaign off Cape Esperance and the Santa Cruz Islands were not decisive. Tulagi and Florida were also invaded during this campaign, and heavy fighting along the Matanikau River before Operation Ke evacuated all Japanese forces after this campaign. The Henderson Airfield was the center of the fighting, which the Japanese lost when the Allies first attacked the island and tried to take back until the final naval battle in November of 1942. For 10 points, identify this campaign centered on the namesake Solomon Island.

ANSWER: Battle of **Guadalcanal** or Campaign of **Guadalcanal** or equivalents

BONUS: Answer some questions about small, fuzzy balls of ice that have tails, for 10 points each. [10] Name those objects, exemplified by the Hale-Bopp and the Halley.

ANSWER: comets

[10] This comet notably collided with Jupiter in 1994, the first direct observation of an extraterrestrial collision of solar system objects. Before the collision, it was also the first comet observed orbiting a planet, that planet also being Jupiter.

ANSWER: Comet **Shoemaker-Levy 9** [or **D/1993 F2**; prompt on partial answer]

[10] Short-term comets come from this region of the solar system, whose largest known member is Pluto, if the scattered disc is included. It is home to two other planets, Haumea and Makemake. ANSWER: (Edgeworth-)Kuiper Belt

2. In one excerpt from this book the protagonist is told of "two witnesses" who will "prophesy for 1260 days" before being killed and resurrected. In one scene from this work trumpets are given to seven angels, and it begins with the protagonist addressing the seven churches of Asia. In the sixth chapter of this book a lamb begins opening seven seals, the first four of which contain the horseman of the apocalypse. A description of New Jerusalem is given at the conclusion of this work, which consists primarily of a prophetic vision seen by John of Patmos. For 10 points, name this final book of the Bible.

ANSWER: Book of **Revelation** [do not accept "Book of Revelations"]

BONUS: An empire with this name is actually located, not in the present-day country, but in Mauritania and Mali and had its capital at Koumbi Saleh. For 10 points each:

[10] Identify this modern-day nation with capital at Accra, the first sub-Saharan African country to gain independence.

ANSWER: Ghana

[10] Ghana gained independence from this European country, who also had colonies in Kenya, Nigeria, and Zimbabwe.

ANSWER: Great Britain or United Kingdom [prompt on England]

[10] Ghana gained its independence under this man, who became its first prime minister and first post-colonial president. He was a founding member of the Organization of African Unity.

ANSWER: Kwame Nkrumah

3. The first section of one work by this author begins by telling St. John to "leave all meaner things to low ambition, and the pride of kings." Another work by this author contains such lines as "a little learning is a dangerous thing" and "to err is human; to forgive, divine." This author of *An Essay on Criticism* and *An Essay on Man* attacked such contemporaries as Lewis Theobald and Colly Cibber in various versions of his satirical poem *The Dunciad*. In another work, several spirits fail to prevent Lord Petre from cutting off some of Belinda's hair. For 10 points, name this English poet who penned *The Rape of the Lock*.

ANSWER: Alexander **Pope** 

BONUS: Joe Pesci, Aretha Franklin, and Betty White have starred in recent commercials for this product, which claims that "you're not you when you're hungry." For 10 points each:

[10] Name this peanut-filled chocolate candy bar currently being marketed in peanut butter filled squares.

ANSWER: Snickers

[10] Snickers candy bars are sold by this food manufacturer perhaps best known for producing M&M's.

ANSWER: Mars, Incorporated

[10] Mars currently owns this subsidiary company that produces both Juicy Fruit and Doublemint chewing gum. Its namesake once owned the Chicago Cubs, who renamed their home stadium in his honor.

ANSWER: William Wrigley Jr. Company

4. The peak of Mt. Chimborazo in this mountain range is the farthest point on Earth's surface from the center of Earth, and Tupungato and Cotopaxi are volcanoes found in this mountain range. Ojos del Salado, the world's highest active volcano, is located here, and the Altiplano plateau is the world's second highest plateau. Cities such as Arequippa and Medellin can be found in other plateaus in this mountain range, and Mendoza is a frequent stop for climbers of Aconcagua. For 10 points, identify longest continental mountain range on Earth, stretching from Colombia and Venezuela to Chile and Argentina.

ANSWER: the **Andes** 

BONUS: BONUS: It was so named because it is the temperature at which books burn. For ten points each:

[10] Name this novel whose protagonist, Guy Montag, returns to his city with Granger and others at the end of the work to rebuild it.

ANSWER: Fahrenheit 451

[10] This is Guy Montag's boss in the work; he was the one who explained to Montag why books should be burned and was burned to death by Montag.

ANSWER: Captain **Beatty** 

[10] Name this author of Fahrenheit 451, who wrote The Martian Chronicles in 1950 and Farewell Summer in 2006.

ANSWER: Ray Bradbury

5. It was formed by the union of Chincasuyu, Antisuyu, Kuntisuyu, and Qullasuyu to form the Tahuantinsuyu, or *The Four United Provinces*, under the rule of Pachacuti. A later leader, Huayna Capac, divided this empire after his death among his two successors, one of whom was captured and executed by Pizarro despite paying a room full of gold as ransom. That last leader was Atahualpa. For 10 points, identify this empire in South America with capital at Cusco.

ANSWER: <u>Inca</u> Empire [accept <u>Tahuantinsuyu</u> before mentioned]

BONUS: For 10 points each, name these prominent 20th century paintings.

[10] An advertisement for Phillies cigars sits atop the diner portrayed in this best known work by Edward Hopper.

ANSWER: *Nighthawks* 

[10] Dr. Byron McKeeby and the artist's sister Nan were used as models for the two figures depicted in this 1930 painting that is set in front of an Eldon, Iowa home.

ANSWER: American Gothic

[10] A house owned by the Olson family is shown in the background of this work that depicts its title figure wearing a pink dress.

ANSWER: Christina's World

6. This man's students composed and posthumously published his *General Economic History*, and a work in which he distinguished three ideal types of religious activity, *Economy and Society*, was published earlier. Early in his career he made the Freiburg Address, and later he wrote four works on the sociology of religion, the first of which discussed a certain group's concept of "calling" and a link between the need for worldly success and predestination. For 10 points, identify this German social economist, author of *The Protestant Ethic and the Spirit of Capitalism*. ANSWER: Karl Emil Max(imilian) **Weber** 

BONUS: Identify some parts in the human thorax, for 10 points each.

[10] This T-shaped bone supports the clavicles at the top portion, which is called the manubrium. It forms the rib cage with the rib bones.

#### ANSWER: sternum or breastbone

[10] This sheet of skeletal muscle separates the thorax from the abdomen and contracts during inhalation, aiding breathing by drawing air into the lungs.

# ANSWER: (thoracic) diaphragm

[10] This endocrine gland's only known function is to produce T-cells, which are part of the immune system. IT is located behind the sternum.

ANSWER: thymus

7. This ruler wrote of his support of witch hunts in his *Daemonologie*. The Main Plot led to the arrest of Sir Walter Raleigh during this man's rule. The son of Mary, Queen of Scots, this monarch was said to have had a homosexual relationship with the Duke of Buckingham, while he faced an assassination attempt led by Robert Catesby and Guy Fawkes. The Gunpowder Plot occurred during this man's reign, which also saw a translation of the Bible named after him. For 10 points, name the first Stuart king of England, who succeeded Elizabeth I.

ANSWER: James I [prompt on James]

BONUS: This series includes such characters as Chingachgook, whose son, Uncas, was the last member of a certain tribe. For 10 points each:

[10] Identify this series of works whose protagonist, Natty Bumppo, is raised by Native Americans and is accompanied by Chingachgook.

#### ANSWER: The Leatherstocking Tales

[10] *The Leatherstocking Tales* were written by this American writer, who also wrote many sea stories such as *The Red Rover* and *The Water Witch*.

#### ANSWER: James Fenimore Cooper

[10] This work, the last of the *Leatherstocking Tales* to be written but the first installment chronologically, in which Tom Hutter is killed and Henry March is captured while ambushing an Indian tribe. The title refers to Natty Bumppo's nickname.

ANSWER: The **Deerslayer** 

8. Luciana briefly dates the protagonist of this work, who replaces Giuseppe when his parents visit him in the ward and was later investigated by a group of C.I.D. investigators. Lieutenant Scheisskopf was promoted and wants everybody to march later in this work, in which Nately falls in love with a prostitute and Milo tries and fails to sell his Egyptian cotton. This work also sees the death of Snowden and the promotion of Major Major due to a machine error. For 10 points, identify this work that centers around Yossarian's bomb squadron, a novel by Joseph Heller.

ANSWER: Catch-22

BONUS: Identify some concepts in mechanics, for 10 points each.

[10] Kinetic energy is not conserved in this type of collision, the perfect type of which sees two colliding objects stick together.

ANSWER: inelastic collisions

[10] Also called the barycenter, this is the mean location of all the mass in a system. It can be calculated as the average of position weighted by mass and is equivalent to the center of gravity in a uniform gravitational field.

ANSWER: center of mass or mass center

[10] This problem is often seen in astronomy, such as in star systems, to determine the motion of the namesake number of point particles with respect to the barycenter.

ANSWER: <u>two-body problem</u> [if answered "n-body problem", ask for the value of n; do not accept any other values of n, as the barycenter is not center of rotation for any n greater than 2]

9. The relativistic four-vector version of this physical quantity is proposed under Lorentzian translation, and Euler's first law relates this quantity with the velocity of a frame of reference. Change in this quantity is called impulse, and its conservation leads directly to the law of reciprocal actions and can be observed in Newton's cradle. According to Newton's second law, force is the derivative of this quantity. For 10 points, identify this physical quantity, the product of mass and velocity of an object.

ANSWER: (linear) **momentum** [do not accept "angular momentum"]

BONUS: Its lyrics are written by Friedrich Schiller. For 10 points each:

[10] Identify this piece of music whose choral section starts with "Oh friends, not these tones! / Rather, let us raise our voices in more pleasing / And more joyful sounds!"

ANSWER: <u>Symphony No. 9</u> in D minor, Op. <u>125</u> or <u>Choral Symphony</u> by Ludwig van Beethoven [accept any underlined part, do not reveal composer]

[10] The Choral Symphony was written by this composer, who also wrote the *Eroica* and *Pastoral* symphonies.

ANSWER: Ludwig van Beethoven

[10] This is Beethoven's only opera; it tells the story of how Leonore rescues her husband Florestan from death in a political prison by disguising as the titular prison guard.

ANSWER: *Fidelio*, op. 72 [accept either]

10. This work was slightly damaged in the Black Tom explosion, and Richard Morris Hunt designed the pedestal on which this work currently sits. A plaque at the foot of this work quotes from Emma Lazarus' "The New Colossus" and reads "give me your tired, your poor, your huddled masses longing to be free." A broken chain lies at the foot of this work's lone figure, whose left hand holds a tablet inscribed "July 4, 1776." A torch is extended upwards by the title figure of, for 10 points, what Frederic Bartholdi sculpture housed in New York Harbor? ANSWER: Statue of Liberty [accept Liberty Enlightening the World] or La Liberte eclairant le monde]

BONUS: It saw the execution of King Louis XVI (16) and the establishment of the 1st Republic. For 10 points each:

[10] Name this event which began with the storming of the Bastille.

ANSWER: French Revolution [prompt on clear knowledge equivalents]

[10] This leader of the French Revolution dominated the Committee of Public Safety and led during the Reign of Terror until he was executed in 1794.

ANSWER: Maximilien (Francois Marie Isidore de) Robespierre

[10] This radical group of the French Revolution was at its most powerful during the Terror. It was founded by a group of Breton deputies and fell from power after the fall of Robespierre.

ANSWER: Jacobins or the Jacobin club

11. During his reign, a military campaign to retake western Slavic lands in the Livonian War ended badly. He created a secret police organization called the *oprichnina*, and he held the first *zemsky sobor*, or parliament. His successor was the simple-minded Feodor I, since he had earlier killed his heir-to-be Ivan Ivanovich, essentially bringing about the downfall of the Ruriks, and his title may have come from his terrible treatment of the boyars, or the landed elite. For 10 points, identify this first tsar of Russia, who is probably best known for his rampant acts of cruelty.

ANSWER: **Ivan IV** Vasilyevich or **Ivan the Terrible** or **Ivan Grozny** 

BONUS: BONUS: The title character of this work is presented with the sword Hrunting by the warrior Unferth. For ten points each,

[10] Identify this Old English epic poem about the title hero of the Geats.

ANSWER: Beowulf

[10] Beowulf leaves his homeland to help defeat this monster, whose arm Beowulf rips off before beheading this monster's mother at the bottom of a lake.

ANSWER: Grendel

[10] Grendel had attacked Hereot, the great hall of this Danish king whom Beowulf assists by defeating Grendel.

ANSWER: Hrothgar [accept Hroogar, Hroarr, or King Hropgar] <DJ>

12. One book by this author sees Max Ophuls, a United States ambassador to India murdered by the title character, who is skilled at the tightrope, *Shalimar the Clown*. Another book by this author features Saleem, who is telepathic and was born at the exact time of India's independence. In addition to writing *Midnight's Children*, a fatwa was issued against this man for writing a book concerning Gibreel and Saladin, who find themselves on a hijacked airplane. For 10 points, name this British-Indian author of *The Satanic Verses*.

ANSWER: (Sir Ahmed) Salman Rushdie

BONUS: Identify some large islands in Asia, for 10 points each.

[10] The largest of the four main islands of Japan, this island is the world's second most populous and is home to cities such as Tokyo, Kyoto, and Osaka.

ANSWER: Honshu

[10] This island is separated from India by the Palk Strait and the Gulf of Mannar; its namesake country's largest city and former capital is located at Colombo.

ANSWER: Sri Lanka

[10] This island, the main island of the Philippines and north of Visayas and Mindanao, is home to its capital. It also has several volcanoes, such as the Taal and the Mayon.

ANSWER: **Luzon** 

13. He wrote a suite for solo piano titled *Le tombeau de Couperin* commemorating his friends who died during WWI, and another suite for solo piano titled *Miroirs*. He wrote eight *Noble and Sentimental Waltzes*, expanded the piano duet *Mother Goose* into a ballet, and wrote another ballet titled *Daphnis and Chloe*. One of his early solo piano works was a *Pavane for a Dead Princess*, and his most famous piece sees snare drums starting the piece and a grand crescendo at the end as more instruments join in. For 10 points, identify this composer of *Bolero*.

ANSWER: (Joseph-)Maurice Ravel

BONUS: Identify some 19th century British Prime Ministers, for 10 points each.

[10] This Jewish Conservative prime minister passed the Reform Bill of 1867 and brought India under the rule of Queen Victoria with the 1876 Royal Titles Act.

ANSWER: Benjamin **Disraeli**, First Earl of **Beaconsfield** [accept either]

[10] Disraeli was a rival of this Liberal prime minister, who served as PM four times, introduced secret voting, passed the Third Reform Act and the Disestablishment of the Church of Ireland. ANSWER: William Ewart **Gladstone** 

[10] Gladstone had earlier served in the cabinet of this Conservative prime minister, who repealed the Corn Laws and issued the Tamworth Manifesto, which established the Conservative Party from the Tories.

ANSWER: Sir Robert Peel, Second Baronet

14. Members of one phylum in this kingdom have axopods and are known as radiolarians, and kinetoplasts are used to contain the mitochondrial genome in members of another phylum in this kingdom. Laver and other types of seaweed are part of this kingdom, which also includes other red algae and ciliates. Slime molds are considered part of this kingdom, and so are the agents of malaria. Amoebas and paramecia are, for 10 points, members of what kingdom of eukaryotic microorganisms that are mostly unicellular, whose best known members are the protozoa?

ANSWER: Protists or Protista

BONUS: Isaac Harris and Max Blanck were fined \$75 for each victim of this event. For 10 points each:

[10] Name this 1911 disaster that resulted in the death of 146 garment workers for a namesake clothing company.

ANSWER: <u>Triangle</u> Shirt<u>waist</u> Company Factory <u>fire</u> [prompt on partial answers]

[10] The Triangle Shirtwaist Factory fire was the deadliest 20th century disaster in this American city that was home to notable draft riots during the Civil War and once governed by mayor Fiorello LaGuardia.

ANSWER: **New York** City, New York

[10] The Trinagle Shirtwaist Factory fire was witnessed by Francis Perkins, who became the first female Cabinet member during the presidency of this man whose presidency saw the establishment of the TVA and the SEC.

ANSWER: Franklin Delano **Roosevelt** [accept **FDR**; prompt on "Roosevelt"]

15. One of the major characters in this novel visits her friend, Lucy, in England where she learns that Lucy has received three separate marriage proposals. Meanwhile, that character's fiancé, Jonathan, is confined within a castle that he went to in order to conclude a real estate transaction with the title character. During the story, Mina once again finds Lucy in the town cemetery sleepwalking with two red marks on her neck. This begins the plot of, for ten points, what novel in which the titular character is pursued and killed by a team led by Professor Van Helsing, a work of Bram Stoker?

ANSWER: Dracula

BONUS: Identify these gods and goddesses from Greek myth with something in common for ten points each,

[10] The daughters of Nyx or Atlas, these three Greek goddesses are the goddesses of the evening and sunset.

### ANSWER: **Hesperides**

[10] This sun God became angry after Odysseus's men ate some of his sacred cattle. He is known for appearing each day in a horse-drawn chariot.

ANSWER: Helios

[10] This Titan goddess of the dawn is the sister of Helios and lover of Tithinus, who was turned into a grasshopper after this goddess forgot to ask Zeus to grant him eternal youth.

ANSWER: Eos <DJ>

16. In one episode of this TV series one protagonist accidentally burns down the house of his girlfriend, Lyndsey MacElroy. One character in this series is married to pediatrician Herb Melnick, who is portrayed by Ryan Stiles. The protagonist of this series is constantly stalked by an ex-girlfriend named Rose and employs a wise-cracking housekeeper named Berta. This show's pilot features the protagonist opening up his home to his divorced brother Alan and nephew Jake. For 10 points, name this wildly popular CBS comedy that recently saw the addition of Ashton Kutcher after the firing of Charlie Sheen.

ANSWER: Two and a Half Men

BONUS: Answer some questions about some strong acids, for 10 points each.

[10] This acid, also known as the oil of vitriol, is used in lead-acid batteries for cars and often produced via the contact process with a vanadium catalyst. Its chemical formula is H-2-S-O-4.

ANSWER: sulfuric acid

[10] This other acid can cause deep, severe burns as well as cardiac arrest by reacting with calcium and magnesium ions in the blood. In industry, it is used to etch glass.

ANSWER: **hydrofluoric** acid or **HF** 

[10] The strongest acid known to man - 20 quintillion times stronger than pure sulfuric acid - is a mixture of hydrogen fluoride and the pentafluoride of this other element with symbol Sb; this element's trioxide is used in making flame-proofing compounds and forms alloys with lead in lead-acid batteries.

ANSWER: antimony

17. This philosopher discussed a Confederacy of Deceivers in one work, causing a debate between him and John Bramhall. This man wrote a trilogy of works including *De Corpore*, *De Homine*, and *De Cive*. His most famous work sees him discuss three types of commonwealth and claim that "the war of all against all" will only be averted by strong central government; that work centers around the legitimate representative government and claim that life is "solitary, poor, nasty, brutish, and short." For 10 points, identify this author of *Leviathan*.

ANSWER: Thomas **Hobbes** (of Malmesbury)

BONUS: For 10 points each, identify these Confederate generals.

[10] This final commander of the Army of Northern Virginia declined to lead the Union side at the beginning of the Civil War and ultimately surrendered the Confederate Army at Appomattox Courthouse.

ANSWER: Robert Edward Lee

[10] R.E. Lee noted that "I have lost my right arm" upon learning of the death of this general who was shot by friendly fire near the conclusion of the Battle of Chancellorsville

ANSWER: Thomas Jonathan "Stonewall" Jackson

[10] This man became the highest ranked casualty of the Civil War when he was killed while leading the Army of Mississippi during the Battle of Shiloh.

ANSWER: Albert Sidney Johnston

18. Its namesake counting function, pi of n, is approximately given by n over the natural logarithm of n. 1024 bit versions of these are used in Diffie-Hellman key exchange, and its distribution is linked to the zeros of the Riemann zeta function. The sieve of Erastosthenes is used to find small ones of these, and there are 47 known Mersenne ones of these. Goldbach's conjecture states that all even integers greater than 2 can be expressed as sum of two of these numbers. For 10 points, identify these numbers that can be used to factor larger numbers and have no divisors other than 1 and itself.

ANSWER: prime numbers

BONUS: Name these national epics, for 10 points each.

[10] Virgil wrote this national epic of Rome about a survivor of the Trojan War who meets Dido and enters the underworld by using the Golden Bough

ANSWER: The **Aeneid** 

[10] This national epic of France tells the story of the titular paladin of Charlemagne who is ambushed by Saracens and "bursts both the temples of his brain" by blowing his horn Oliphant.

ANSWER: The **Song of Roland** (or La **Chanson De Roland**)

[10] One of the national epics of England is *The Faerie Queen*, a lengthy allegorical poem by this author.

ANSWER: Edmund Spenser

19. In one self-portrait this artist depicted himself holding a large, half-filled glass while his left hand rests on the back of a woman named Saskia. In a better known work this artist depicted eight doctors viewing the dissected arm of criminal Aris Kindt, while another work shows an ancient philosopher looking over a statue depicting the author of the *Iliad*. In addition to *Aristotle Contemplating a Bust of Homer* and *The Anatomy Lesson of Dr. Tulp*, this artist is probably best remembered for a work depicting the shooting company of Frans Banning Cocq. For 10 points, name this Dutch painter of *Night Watch*.

ANSWER: Rembrandt Harmenszoon van Rijn

BONUS: This man's novels include *Bel-Ami* and *Pierre et Jean*. For 10 points each:

[10] Name this author best known for a short story focusing on Mathilde Loisel.

ANSWER: Henri Rene Albert Guy de Maupassant

[10] Name that aforementioned short story, which sees Loisel lose the title piece of jewelry at a party, then spend a decade working to replace it before finding out it was a fake.

ANSWER: "The Necklace" [accept "La Parure"]

[10] Maupassant is one author native to this European nation that was also the home of Jules Verne of *Around the World in Eighty Days* and Marcel Proust of *Remembrance of Things Past*.

ANSWER: France or Republique francaise

20. Deviations from this law tend to zero at a temperature named for Boyle, and one form of this law relates pressure to the atomic mass constant and mass density. First stated by Emile Clapeyron in 1834, August Kronig and Rudolf Clausius derived this law by assuming that molecules are point masses undergoing only elastic collisions, and the van der Waals law provides a more general version of this law by correcting for these assumptions. For 10 points, identify this equation of state for a hypothetical one of the namesake type of gas, in which P V equals n R T.

ANSWER: ideal gas law

BONUS: This is the mathematical function that describes the wave-like behavior of electrons in an atom. For 10 points each:

[10] Identify these entities that can be modeled as electron clouds. They include the s, p, d, and f types at various energy levels.

ANSWER: atomic **orbital**s or electron **orbital**s

[10] This principle states that electrons fill orbitals start at the lowest available energy state before filling higher states. Its German name means "building-up."

ANSWER: Aufbau principle or Aufbau rule

[10] This rule states that a greater total spin state usually makes the atom more stable and constrains the way orbitals are filled using the Aufbau principle: instead of putting two electrons both in one p orbital, they are put in two separate p orbitals.

ANSWER: **Hund's Rule** (of Maximum Multiplicity)

#### **Tiebreaker Questions**

TB1. The title character of one novel by this writer was based on a sailor named Alex MacLean. Another of his novels introduces the fictional Yeehat Native American tribe and begins at the residence of Judge Miller. His best known short story concludes with a man dying in the Yukon after failing to perform the title action. This author of "To Build a Fire" wrote about shipwreck survivor Humphrey van Weyden in *The Sea-Wolf*, but he is best remembered for a novel featuring Klondike gold prospector John Thornton. For 10 points, name this American author who wrote about the sled dog Buck in *The Call of the Wild*.

ANSWER: Jack **London** [or John Griffith **Chaney**]

TB2. This historical period was ushered in by the passage of the Volstead Act and was enforced by agents such as Izzie Einstein and Mo Smith, who dressed up as husband and wife to infiltrate certain businesses and shut them down. Originally a war measure, it lasted throughout the nineteen-twenties, leading to the opening of many speakeasies. The namesake policy was opposed by so-called "wets" and advocated by the Temperance Society and Anti-Saloon League. For 10 points, name the period of American history when the sale and transport of alcohol was made illegal.

**ANSWER: Prohibition**