

## Minnesota Undergraduate Tournament 2013

Questions by Rob Carson, Mike Cheyne, Andrew Hart, Gaurav Kandlikar, Matt Menard, and Bernadette Spencer

### Finals Round 2: and the THERMIC EFFECT OF FOOD!

#### Tossups

1. **This man met with a younger political opponent to sign the Wye River Memorandum. In 1975, this man served as the best man at Idi Amin's wedding. His camp was destroyed in the Battle of Karameh, which resulted in a king praising him, saying "we are all fedayeen." This man died in Paris, and his wife Suha called for the exhumation of his body after rumors that he was (\*) poisoned with polonium. The exhumation of his body was approved in 2012 by one-time rival Mahmoud Abbas. Along with fellow Fatah leaders, this leader won the Nobel Prize for his work negotiating the Oslo Accords, which said Israel would recognize an interim self-government. For 10 points, name this longtime chairman of the Palestinian Liberation Organization from 1969 to 2004.**

ANSWER: Yasser Arafat [or Mohammed Yasser Abdel Rahman Abdel Raouf Arafat al-Qudwa al-Husseini]

2. **This author created Évariste Gamelin, a Parisian painter who falls in with Marat and Robespierre, in his fictionalization of the French Revolution. This author penned a novel in which the hermit Paphnuce converts the title character to Christianity; Paphnuce was later named Athanaël in an operatic adaptation by Jules Massenet. In another novel, this author created Kraken, who takes Orberosia as a mistress and stages a killing of a dragon. In that novel, this author wrote of (\*) Mael, a missionary whom the devil sent to the North Pole, where he mistook the native inhabitants for humans, thus forcing God to change a flock of birds into people who came to live off of the Breton coast. For 10 points, name this French author of *The Gods Are Athirst*, *Thais*, and *Penguin Island*.**

ANSWER: Anatole France [accept François-Anatole Thibault]

3. **One antagonist in this movie takes out what appears to be nunchuks to use in torture, but reveals that the item is merely a coat hanger, while another notes that if you bury a cheap ten dollar watch, it becomes priceless in a thousand years. The protagonist is saved after a monkey dies from eating poisoned dates. This movie's ending has a bureaucrat say the title object is being studied by (\*) "top men," but it is actually stored in a government warehouse. It features a famous scene in which the protagonist, when confronted with an expert swordsman in Cairo, merely shoots him. This film climaxes with Nazis melting when they look into the title object. For 10 points, name this first film to feature Indiana Jones, who searches for a relic that contained the Ten Commandments.**

ANSWER: Raiders of the Lost Ark [or Indiana Jones and the Raiders of the Lost Ark]

4. **The potential energy associated with the Zeeman effect is proportional to the Lande g-factor, one component of momentum, and a quantity named for this man. That quantity named for this man is equal to the magnetic dipole moment of an orbiting electron in the ground state. He is the namesake of a constant equal to the most probable distance between the proton and electron in a certain system, his namesake radius. While studying predictions of a model named for this man, (\*) Sommerfeld introduced the fine structure constant. This man developed a model which he used to derive the Rydberg formula for the spectral lines of hydrogen. For 10 points, name this Danish physicist whose namesake model of the hydrogen atom only allowed electrons to orbit at a discrete set of distances from the nucleus.**

ANSWER: Niels Bohr

5. **In a paper co-authored with Kim, Prince, and Prasada, this thinker explored why "no mere mortal has ever flown out to left field." This thinker, again with Alan Prince, published a critique of the connectionist model of past-tense acquisition that he expanded into his book *Words and Rules*. This author likened music to "auditory cheesecake" in a discussion of music's role language acquisition in his *How the (\*) Mind Works* and attacked those who deny the influence of human nature in another work. He compared a human's ability to acquire language to a spider's ability to weave webs or a beaver's ability to build dams in a 1994 work arguing that people are born with the capacity to learn language. For 10 points, name this Harvard linguist who penned *The Blank Slate* and *The Language Instinct*.**

ANSWER: Steven Arthur Pinker

6. **Transcription factors that regulate this compound's synthesis recognize the sequence TCACNCCAC; those transcription factors are activated when high levels of this compound are detected by SCAPs. This compound is a precursor to glucocorticoids and estrogens, and the synthesis of this compound is regulated by SREBPs. A decrease in Coenzyme (\*) Q is a side effect of a class of drugs that reduces this compound's synthesis by inhibiting HMG Co-A Reductases; those drugs are called statins. This compound maintains fluidity of the plasma membrane at extreme temperatures. For 10 points, name this compound that is transported by the lipoproteins LDL and HDL, which are called its "bad" and "good" types.**

ANSWER: cholesterol

7. **A Thessalian contingent was led to the Trojan War by this figure's sons Podalirius and Machaon. His major cult center was at the Peloponnesian city of Epidaurus. This figure's mother was murdered alongside her lover Ischys while still pregnant with him, and his name derives from the fact that he was cut out of her body. He was placed in the sky as the constellation Ophiuchus after his death, an event which also prompted his father to revenge-kill the Cyclopes. His children with Epione include Aglaea, Hygieia, and (\*) Panacea. This figure carried a staff that, unlike the caduceus, is entwined by only one serpent and, like his father, this god bore the epithet "Paeon". This son of Coronis and Apollo was killed either due to Hades's complaints or because he accepted money for resurrecting Glaucus or Hippolytus. For 10 points, name this Greek god of medicine and healing.**

ANSWER: Asclepius [or Asklepios; or Aesculapius; accept "Paeon" until it is read]

8. **This place is the subject of the book *The Hell of the Living*, which has a cover showing dragons destroying it. It was the supposed residence of the mythical "Count de Lorges," an old nobleman who had written satires. The 1652 Battle of the Faubourg St. Antoine occurred partly beneath its walls during the Fronde Rebellion. Jacques Necker proposed (\*) closing it for economic reasons alone. Bernard-Rene du Launay, the hated governor of this place, was killed at the Hotel de Ville after his Swiss grenadiers were overwhelmed. The Marquis de Sade was transferred from here to an insane asylum shortly before the events of July 14, 1789. For 10 points, name this infamous prison stormed during the French Revolution.**

ANSWER: Bastille Saint-Antoine

9. **One author from this country documented four generations of women in *The River and the Source*. In a novel set in this country, District Officer Thomas Robson is murdered by the revolutionary Kihika, while the farmer Gikonyo is displaced from his home in Thabai. In another novel set in this country, Inspector Godfrey charges Munira with murder for burning down Wanja's house, causing flames that are the title deadly but beautiful phenomenon. An author from this home country of Margaret Ogola renounced (\*) English in *Decolonizing the Mind* and wrote 2006's *Wizard of the Crow* in this country's native Gikuyu language. For 10 points, *A Grain of Wheat* and *Petals of Blood* were set in what country by an author from that country, Ngugi Wa Thiong'o?**

ANSWER: Republic of Kenya

10. **After this man's wife was forced to ride through a city on a donkey, he responded by forcing the magistrates to remove a fig from a donkey's anus. This man gave Rainald of Dassel the relics of the Magi that he had plundered. A legend says he is sleeping in a mountain in Thuringia and will re-emerge. This man was crowned emperor by Pope Adrian IV after he helped overthrow reformer Arnold of Brescia and he became pissed at his cousin, Henry the (\*) Lion, for failing to support him in Italy. This ruler was presumed dead for some time after the Battle of Legnano, which he lost to the pro-Papacy Lombard League. He died after drowning in the Saleph River during the Third Crusade. For 10 points, name this Holy Roman Emperor whose nickname may refer to his red beard.**

ANSWER: Frederick I [or Frederick Barbarossa, or Rothbart]

11. One theme in this work consists of pizzicato eighth notes beginning with alternating A sharps and Bs played an octave apart. This work opens with a *cantabile* section marked piano that introduces a recurring 17-note theme. This work, which is dedicated to Franz Liszt, was intended as a *tableaux vivant* to commemorate the silver anniversary of Alexander II's reign. This piece, which opens with the recognizable (\*) "Russian theme," also contains an English horn "Eastern theme" and a "traveling theme" representing the plodding of horses and camels. For 10 points, name this tone poem that depicts an Eastern caravan interacting with Russians in the title plains region, written by Alexander Borodin.

ANSWER: *In the Steppes of Central Asia* [or *V srednyei Azii*; or *In Central Asia*]

12. This process is can be conducted in the presence of tin octoate, and some products of this process are being used by the RepRap project. A theory that explains the products of this process is derived by considering the occupation of a contiguous set of points in a lattice. When this process yields products which contain many carbamate linkages, it proceeds via a (\*) "step" mechanism. One form of this process results in the formation of "propagation centers" and occurs via a stepped mechanism. This process, whose products are the subject of the Flory-Huggins theory, is often conducted via a radical mechanism, and Ziegler-Natta catalysts perform this process on alkenes. For 10 points, name this process which is divided into initiation, elongation and termination phases, which yields products such as PVC and polystyrene.

ANSWER: polymerization

13. This book argues that our treatment of others is limited by Kantian "side-constraints" in a section that rebukes using other people as mere means to an end. Another part of this work argues that monopolies of force would and should organically develop without a government. This book claims that an ideal system would incorporate acquisition, transfer, and rectification varieties of entitlement justice. This work illustrates how free choices that create inequality are still fair through a thought experiment in which people choose to pay to see a (\*) basketball player. Another section of this work refutes utilitarianism through positing a pleasure-producing "experience machine". This book concludes that best government consists of a minimal night-watchman state that does not adhere to the "Difference Principle" brought about by adopting the "Original Position". For 10 points, name this book that opposes the theories of John Rawls, written by Robert Nozick.

ANSWER: *Anarchy, State, and Utopia*

14. Some of this author's debt problems stemmed from a failed civet cat-breeding venture. In one of his novels, the title character is talked out of both suicide and piracy by the Quaker doctor William Walters. Another of his novels was inspired by Hayy ibn Yaqdhan's *Philosophicus Autodidactus*. A punishment handed down by Salathiel Lovell prompted this author of *Captain Singleton* to write "Hymn to the Pillory", which gained him public support during his time spent in the stocks for writing *The* (\*) *Shortest Way with the Dissenters*. One of his title characters is sent to Virginia, where she reunites with her brother Humphrey, to whom she'd once been married. Another of his title characters escapes pirates with a boy named Xury, then later encounters the cannibal Friday on an island near the Orinoco. For 10 points, name this sometime spy who wrote the novels *Moll Flanders* and *Robinson Crusoe*.

ANSWER: Daniel Defoe [or Daniel Foe]

15. One of this man's paintings shows its subject being led by Mercury into an Ionic temple labeled "Securitati Augustae"; that same subject is presented with a burning candle on a heart inside a laurel wreath in this man's *The Triumph of Time*. His painting *The Honeysuckle Bower* is a double portrait of himself and his first wife, Isabella Brant. The 2001 sale of one of his works, which shows a soldier in a blue sash poised to smash a baby on the ground, set the record for (\*) Old Master paintings. One of his recurring subjects is depicted marrying Henry IV and reconciling with her son Louis XIII in a series commissioned for the Luxembourg Palace. For 10 points, name this Flemish Baroque painter of a famous *Descent from the Cross*, *The Massacre of the Innocents*, and the *Marie de Medici* cycle, known for his namesake voluptuous female figures.

ANSWER: Peter Paul Rubens [prompt on "Rubenesque" or similar answers]

16. **This is the only dimension for which there exist differential manifolds which are homeomorphic but not diffeomorphic to Euclidean space. This is the smallest number such that there are two nonisomorphic groups of this order, since the Klein group has this order but is not cyclic. A theorem of Lagrange states that any natural number can be written as a sum of this many (\*) squares of integers.** This number is the order of the largest complete planar graph, and Appel and Haken proved that this number is the maximum chromatic number for a planar graph. The Abel-Ruffini theorem states that this is the highest order of a polynomial equation that can be solved by radicals. For 10 points, a famous theorem states that any map coloring needs only how many colors?  
ANSWER: four

17. **The first bridge to span this river was constructed in 1934 near the town of Ava. In 2011, construction was suspended on a project that plans to build the Myitsone Dam on this river. A blunt, rounded head is characteristic of the dolphin native to, and named for, this river. The Chindwin and the Mu are two important tributaries of this river, which is the longest and most commercially vital river in a country that also contains the mouth of the Salween. The banks of this river are home to the city of (\*) Pagan. This river takes from a Rudyard Kipling poem its nickname of "The Road to Mandalay." The delta of this river is on the Andaman Sea just west of Yangon, the former Rangoon. For 10 points, name this principle river of the country alternately known as Myanmar or Burma.**  
ANSWER: Irrawaddy River [or Ayeyarwady River]

18. **A poet who worked primarily in this modern-day country asked "Who in this Bowling Alley bowled the sun?" in his "The Preface" and asked God to "make me...thy spinning wheel complete" in the poem "Huswifery". Another poet from this country asserted that poetry should be an "open field" and wrote a series of poems narrated by a philosopher from Tyre. That author of the "Maximus" poems, a member of this country's Black (\*) Mountain school, was heavily inspired by an epic poem by a native of this country that opens with the line "And then went down to the ship" and features sections labeled "Rock-Drill", "John Adams", and "Pisan". That poet from this country was imprisoned for treason after supporting fascism in Italy. For 10 points, name this country, home to Edward Taylor, Charles Olson, and the author of the *Cantos*, Ezra Pound.**  
ANSWER: The United States of America [accept either underlined portion, accept "the USA"; accept "this one" or equivalents if the question is in fact being played in the United States]

19. **Carlo Albacini made additions to a beardless sculpture of this figure that was found in Hadrian's Villa and is now held in the Getty Villa. That sculpture of this man is named for the first Marquess of Lansdowne. One artist depicted him with a foot perched on a horned skull in a bronze statue held in the Frick Collection and showed him grasping a screaming man around the waist and lifting him into the air in another sculpture. Perhaps the most famous sculptural depiction of this man shows him holding some fruit behind his back, was produced by Glycon for the Baths of Caracalla from an original by (\*) Lysippos, and takes its name from its 16th-century owners, the Farnese family. Antonio Pollaiuolo's aforementioned depiction shows him killing Antaeus. For 10 points, identify this Greek hero, often sculpted holding a club and the skin of the Nemean lion.**  
ANSWER: Heracles [or Hercules]

20. **A controversial item related to this issue was developed by Gregory Pincus, with funding from Katharine McCormick. It was the subject of Augustus Hand's *One Package* decision. In a Supreme Court case about a law regulating this issue, Potter Stewart called the law "uncommonly silly," while another law was struck down in *Eisenstadt v. Baird*. Those laws were holdovers from the (\*) Comstock law era. Discussing this issue, one man offered to buy "as much aspirin" as needed for Georgetown students. The newspaper *The Woman Rebel* supported this issue and was created by Margaret Sanger. Rush Limbaugh labeled Sandra Fluke a "prostitute" for testifying about it being covered by insurance. For 10 points, name this controversy centering on things like condoms.**  
ANSWER: birth control [or contraception, or equivalents such as specific forms of it like condoms or the pill, prompt on stuff like reproductive rights, do not accept "abortion"]

21. **One protein that is located within these structures binds intracellularly to the Gt GPCR, which causes hyperpolarization of the cell. The activity of that protein in these structures is attenuated by arrestin when it has been activated for too long, and that protein in these structures has a molecule of 11-cis retinol, which is derived from Vitamin A. These structures house the (\*) purple protein rhodopsin. The ganglia of these structures are affected in Leber's Hereditary Neuropathy, and Tay-Sachs disease causes the development of a "cherry red spot" on these structures. These structures contain especially sensitive macula and fovea regions. For 10 points, name this layer which contains rod and cone cells and is located at the back of the eye.**

ANSWER: **retina**

## Bonuses

1. This character loses his virginity to Maria Truczinski and sees his second love Roswitha die during the Normandy invasion, while his father dies after swallowing a Nazi party pin For 10 points each:

[10] Identify this character from a 1959 novel, who receives a certain instrument on his third birthday, which prompts him to voluntarily stop growing.

ANSWER: Oskar Matzerath [accept either underlined portion]

[10] Oskar Matzerath is the protagonist of *The Tin Drum*, which is the first part of this German author's *Danzig Trilogy*.

ANSWER: Gunter Wilhelm Grass

[10] Grass's novel *Crab Walk* focuses on the murder of this man by David Frankfurter in 1936 and the sinking of his namesake Strength Through Joy pleasure ship in 1945.

ANSWER: Wilhelm Gustloff [accept MV Wilhelm Gustloff]

2. The characters in this opera include the Drum Major and Marie, who is murdered by the title character under a blood-red moon. For 10 points each:

[10] Name this opera, the first by the composer of *Lulu*, which was based on a play by Georg Büchner.

ANSWER: Wozzeck

[10] This member of the Second Viennese School composed *Lulu* and *Wozzeck*.

ANSWER: Alban Maria Johannes Berg

[10] This member of the Second Viennese School wrote his Opus 28 String Quartet and Opus 24 Concerto for Nine Instruments before he was shot while violating curfew by an American soldier during World War II.

ANSWER: Anton Friedrich Wilhelm von Webern

3. The Duke of Cumberland earned the nickname "butcher" for his actions after this battle. For 10 points each:

[10] Name this April 1746 battle which ended the Jacobite Rising of 1745. It was a loss for Bonnie Prince Charlie's Scottish Highlanders.

ANSWER: Battle of Culloden Moor

[10] The Jacobite rising was an attempt by the House of Stuart to regain the throne. The Stuarts had fled the throne in the Glorious Revolution in which a ruler with this name and his wife Mary took the throne.

ANSWER: William III [or William II, or William of Orange, number is not needed]

[10] During the Jacobite rising, this September 1745 victory was a solid victory for the Jacobites over Sir John Cope's forces. Ended by a highland charge, it took less than 10 minutes and resulted in a court-martial in which Cope was exonerated.

ANSWER: Battle of Prestonpans

4. These landforms often have characteristic "limestone pavements," and blue holes and other sinkholes can form in these landscapes. For 10 points each:

[10] Name this type of topography found in regions dominated by limestone and other carbonate-rich rocks, which are highly water soluble.

ANSWER: karst topography [or karst processes]

[10] A high concentrations of sinkholes called Cenotes ["sey-no-tays"] are located near this country's Chicxulub Crater site.

ANSWER: Mexico [or the United Mexican States; or Estados Unidos Mexicanos]

[10] The Tsingy of Bamaraha is a karst-derived "mineral forest" on this island nation. This African island has a high degree of endemism, as Traveller's Palms and Lemurs only live on this island.

ANSWER: the Republic of Madagascar [or the Malagasy Republic]

5. One member of this family wrote the words to the Christmas carol "In the Bleak Midwinter", while another asked "Where are the snows of yester-year" in his translation of Francois Villon's "Ballad of Dead Ladies". For 10 points each:

[10] Identify this English literary family which counts among its members the author of "The Blessed Damozel", Dante Gabriel, and his sister Christina.

ANSWER: the **Rossetti** family

[10] Christina Rossetti's most famous poem is this one, in which the title creatures tempt Lizzie and Laura with cries of "come buy, come buy". Laura nearly dies after buying and eating their fruit, but Lizzie saves her.

ANSWER: "**Goblin Market**"

[10] The Rossetti siblings and other members of the Pre-Raphaelite Brotherhood were caricatured in this author's collection *Rossetti and his Circle*. This author of *Zuleika Dobson* also wrote the short story "Enoch Soames".

ANSWER: Max **Beerbohm** [or Henry Maximilian **Beerbohm**]

6. Name some things from the Books of Kings, for 10 points each.

[10] This wise third king of Israel took over the temple project after his father, David, died.

ANSWER: **Solomon** [or **Shlomo**; or **Sulayman**]

[10] This righteous 14th king of Judah ruled during Sennacherib's siege of Jerusalem restored the worship of Yahweh. He is also mentioned in Matthew's genealogy of Jesus.

ANSWER: **Hezekiah** [or **Yezikiyyahu**; or **Ezekias**]

[10] This man prophesied the rise of the "rod of Jesse" during the reign of Hezekiah. His namesake book foretold a "new Exodus" of Israelites returning to Jerusalem and contains the "servant songs".

ANSWER: **Isaiah** [or **Yeshayahu**; or **Ishya**]

7. This man's favorite pastime was falconry. For 10 points each:

[10] Name this victor at the Battle of Sekigahara, who signed the Christian Expulsion Edict in 1614. His forces successfully besieged Osaka to kill Toyotomi Hideyori.

ANSWER: **Tokugawa** Ieyasu [or **Matsudaira Takechiyo**, either part, or **Motonobu** or **Motoyasu**]

[10] The Tokugawa shogunate ruled Japan until this 1868 restoration of imperial rule. The government created after this event expressed its goals in the Charter Oath.

ANSWER: **Meiji** Restoration

[10] The Tokugawa shogunate sent out these trading ships to Southeast Asian ports. These ships featured international crews, were slightly larger than galleons, and were named for the permits issued by the government.

ANSWER: **red seal** ships [or **shuinsen**]

8. Arvo Part's setting of this hymn was commissioned by the Alban Berg Foundation in 1985. For 10 points each:

[10] Identify this hymn named for Mary standing at the cross.

ANSWER: "**Stabat Mater**" [accept "**Stabat Mater Dolorosa**"]

[10] This eighteenth-century Italian composer of the comic operatic intermezzo *La Serva Padrona* wrote a 1736 *Stabat Mater*.

ANSWER: Giovanni Battista **Pergolesi**

[10] This later Italian operatic composer wrote a *Stabat Mater* in addition to the operas *William Tell* and *The Barber of Seville*.

ANSWER: Gioachino Antonio **Rossini**

9. A prominent civil engineer guides a carriage through Fairmount Park in his *The Fairman Rogers Four-in-Hand*, while he asked Weda Cook to sing from Mendelssohn's *Elijah* in order to paint her as *The Concert Singer*. For 10 points each:

[10] Identify this Philadelphia-born painter whose medical scenes include *The Agnew Clinic* and *The Gross Clinic*.

ANSWER: Thomas Cowperthwaite **Eakins**

[10] A rowing competition won by one of Eakins's friends is the subject of this 1871 painting. Eakins himself appears in a boat in the background.

ANSWER: **Max Schmitt in a Single Scull** [or *The Champion, Single Sculls*]

[10] Several Eakins paintings depict a model posing for this American sculptor's woodcarving *Water Nymph and Bittern*, an allegorical depiction of the Schuylkill River.

ANSWER: William **Rush** [accept *William Rush and his Model* or *William Rush Carving His Allegorical Figure of the Schuylkill River*]

10. Bose-Einstein condensates are so dull. Answer the following about other unusual states of matter, for 10 points each.

[10] This fourth fundamental state of matter occurs when a gas is heated to the point that it becomes ionized. This is the state of matter that makes up the sun.

ANSWER: **plasma**

[10] Quantum chromodynamics predicts that the cores of dense neutron stars, as well as other high-density, high-temperature situations, may produce a soupy plasma consisting of asymptotically free examples of these two classes of particles, produced by the decomposition of hadrons.

ANSWER: **quarks** and **gluons** [accept parts in either order; accept **quark-gluon** plasma and prompt on "QGP"]

[10] The thermotropic form of this state of matter, which usually only exists for a narrow range of temperatures, can be divided into the nematic and smectic phases.

ANSWER: **liquid crystals** [or **LCs**]

11. As a child, he singlehandedly defeated 150 boys in a game of hurling and killed the three sons of Nechtan Scéne, who had boasted of their prowess in killing Ulstermen. For 10 points each:

[10] Identify this Celtic hero of the Ulster cycle, who was born Setanta but got a new name after accidentally killing the guard dog of Culann. In battle, he was feared for his *ríastrad*, or killing frenzy.

ANSWER: **Cú Chulainn** [or **Cuhullin**]

[10] Cú Chulainn learns that his father is the god Lugh during this event, in which he singlehandedly defends Ulster against the invading forces of Ailill and Medb ("mayv"), who attempt to steal a creature named Donn.

ANSWER: the **Cattle Raid of Cooley** [or the **Táin Bó Cúailnge**]

[10] This hard-skinned warrior of Connacht is Cú Chulainn's foster brother and best friend. The two fought a three-day-long battle in a ford during the Cattle Raid of Cooley, which ended when Cú Chulainn impaled him on the Gae Bulg.

ANSWER: **Ferdiad** [or **Ferdia**; or **Fear Diadh**]

12. Answer the following about General Nelson Miles' relations with American Indians for 10 points each:

[10] Miles was critical of the commanding officer present at this 1890 massacre of the Lakota Sioux that occurred at the namesake creek in South Dakota.

ANSWER: **Wounded Knee** Massacre

[10] Miles is sometimes not credited for it, but he accepted the surrender of this Nez Perce chief in October 1877. This man proclaimed "I will fight no more forever" during the surrender.

ANSWER: Chief **Joseph** [or **Hin-mah-too-yah-leet-kekt**]

[10] The other general credited for taking Joseph's surrender was this man, who was Commissioner of the Freedmen's Bureau from 1865 to 1874. He had commanded the XI Corps to humiliating losses at Chancellorsville and Gettysburg.

ANSWER: Oliver Otis **Howard**



13. This technique's namesake curve has a high slope around its equivalence point. For 10 points each:  
[10] Name this basic chemistry technique that can be used to determine the concentrations of acids or bases. An indicator like phenolphthalein (fee-nol-thay-leen) is generally used when conducting this process.

ANSWER: acid-base **titration**

[10] Fischer titration can be used to quantize the presence of this compound in a solution. Setting up a Grignard apparatus is a pain in the ass because Grignard reagents quickly react with this molecule to form alkanes.

ANSWER: **water** [or **H2O**]

[10] Catalysts based on this element are avoided in Fischer-Tropsch process because that results in a lot of methane production. An aluminum alloy of this element is a commonly use catalyst for hydrogenations.

ANSWER: **nickel** [or **Ni**]

14. This thinker used the Greek word *doxa* to describe what a society takes for granted in his *Outline of a Theory of Practice*. For 10 points each:

[10] Name this French sociologist who wrote a "social critique of the judgment of taste" called *Distinction*.

ANSWER: Pierre **Bourdieu**

[10] Bourdieu discussed the economic, symbolic, cultural, and social forms of this concept, the German name of which titles a Karl Marx "critique of political economy" that introduced commodity fetishism.

ANSWER: **capital** [accept *Das Kapital*]

[10] Bourdieu's concept of *habitus* is also found in the work of this French post-structuralist, who co-authored the two-volume *Capitalism and Schizophrenia* with Felix Guattari.

ANSWER: Gilles **Deleuze**

15. One novelist from this country documented his spiritual journey after a false cancer diagnosis in *Soul Mountain*. For 10 points each:

[10] Name this country, the birthplace of Gao Xingjian.

ANSWER: People's Republic of **China** [or **PRC**; or **Zhongguo**]

[10] This Chinese author of *The Republic of Wine* and *Red Sorghum Clan* won the 2012 Nobel in Literature.

ANSWER: **Mo** Yan [or **Guan** Moye]

[10] Lu Xun, the founder of modern Chinese literature, penned this anti-Confucian story, the first in the volume *Call to Arms*. Its narrator begins seeing the words "eat people" between the lines of classic texts, and it ends with the line "Save the children..."

ANSWER: "A **Madman's Diary**" [or "**Diary of a Madman**"; or "**Kuáng rén Rìjì**"]

16. One of this character's enemies is the health inspector Hugo Habercore. For 10 points each:

[10] Name this restaurant owner voiced by H. Jon Benjamin. He is married to Linda and has three children. While fairly unlucky, he is a "beef artist" who has a signature dish called the "Meatsiah."

ANSWER: **Bob Belcher** [accept either, accept **Bob's Burgers**]

[10] Benjamin also voices this super-spy who works for ISIS and stars in his namesake FX series. This character's surname is another name for the constellation Sagittarius.

ANSWER: **Sterling Archer** [accept either]

[10] A far less popular animated show was this short-lived Fox series about the title pretentious 7-year-old, voiced by Jonah Hill. The title character was in love with his elderly principal and disliked his adopted Cambodian sister.

ANSWER: **Allen Gregory**

17. This work argues that the goal of the state is to maintain the balance between *vivere securo* and *vivere libero*. For 10 points each:

[10] Name this book of commentary on *Ab Urbe Condita* that states that rulers who exhibit *virtu* [ver-TOO] resist despotism in favor of a free and open society.

ANSWER: **Discourses on Livy** [or **Discourses on the First Ten Books of Livy**; or **Discourses on the First Decade of Titus Livy**; or **Discorsi sopra la prima Deca di Titus Livius**; accept synonyms like “first ten books” etc...]

[10] This other book by the author of *Discourses on Livy* examines the various origins of states and the qualities needed to rule them. It holds up Cesare Borgia as an example of how the best rulers succeed by backing their rule with appropriate force.

ANSWER: **The Prince** [or **Il Principe**]

[10] Both *The Prince* and *Discourses on Livy* were written by this Italian political philosopher from Florence.

ANSWER: Niccolò **Machiavelli** [or Niccolò di Bernardo dei **Machiavelli**]

18. The lids of these devices is typically heated to avoid condensation, and these devices are usually programmed to hold their contents at 4 degrees upon completion. For 10 points each:

[10] Name these devices which are used to perform PCR. Their name refers to the fact that they switch between the various temperatures of the denaturing, annealing and amplification stages.

ANSWER: **thermal cyclers** [or **thermocyclers**; prompt on **PRC machines** or such nonsense]

[10] Amplification of PCR products can be confirmed by this procedure, in which DNA is placed in an electric field and drawn through an agarose matrix.

ANSWER: **gel electrophoresis** [prompt on **electrophoresis**]

[10] DNA gels are often run in TAE buffer. The “E” in TAE stands for this compound, which slows down the degradation of DNA by chelating metal ions.

ANSWER: **EDTA** [or **ethylene-diamine-tetra-acetic acid**]

19. This man was trained at a school owned by Batiatus. For 10 points each:

[10] Name this former gladiator who led a slave uprising against the Roman Republic before dying in 71 BC. Many of his followers were crucified along the Appian Way.

ANSWER: **Spartacus**

[10] In the Battle of the Siler River, this Roman defeated Spartacus even though his nemesis took credit for winning the war. This man died fighting the Parthians at Carrhae.

ANSWER: Marcus Licinius **Crassus**

[10] This traditionalist majority within the Republic opposed extension of citizenship and wished to rein in the power of the popular assemblies. Crassus was a supporter of one of the major leaders of this group, Lucius Cornelius Sulla, although he later went against them as part of the First Triumvirate.

ANSWER: **optimates** [or **Best Men** or **optimas** or **boni** or **Good Men**]

20. This novel’s narrator has affairs with the “Plunder-bird lady” and Valeska, a woman he meets while working for the “Cosmodemonic Telegraph Company”, a parody of Western Union. For 10 points each:

[10] Identify this 1938 novel which, like the 1934 novel to which it is a sequel, fictionalizes its author’s wife June as “Mona”. Also like that 1934 novel, this novel was banned for obscenity in the United States until 1961.

ANSWER: **Tropic of Capricorn**

[10] *Tropic of Capricorn* and the earlier *Tropic of Cancer* were both written by this American author, who considered his own best work to be the travelogue *The Colossus of Maroussi*.

ANSWER: Henry Valentine **Miller**

[10] June Miller also appears as Mona in this later trilogy by Miller, which is set primarily in Brooklyn and consists of the novels *Sexus*, *Plexus*, and *Nexus*.

ANSWER: *The* **Rosy Crucifixion** trilogy

21. This ruler was forced by his dickhead father to witness the execution of his friend Hans Hermann von Katte. For 10 points each:

[10] Name this monarch noted for his military genius and usage of the oblique order in battles. He led the *Furstenbund* of Protestant princes and was a skilled musician and composer for the flute.

ANSWER: **Frederick the Great** [or **Frederick II**]

[10] Frederick the Great engineered the first partition of this modern-day country, which was at the time part of a commonwealth with Lithuania.

ANSWER: **Poland** [or Republic of **Poland**]

[10] Frederick the Great is buried at his estate of Sanssouci in this German city in Brandenburg. Frederick's dad employed a special regiment known as the "Giants" from this city.

ANSWER: **Potsdam**