

Maryland Spring 2014 - Get Your Pencil and Paper Ready for Round 12

Packet 5

Questions by Dan Puma, Isaac Hirsch, Jordan Brownstein, Chris Manners, Brian McPeak, Sohan Vartak, Chris Ray, Eric Mukherjee, Daniel Galitsky, Jeff Amoros, Stephen Meyer, Victor Prieto, Stavros Greenbatcha, and Arun Chonai

Tossups

1. In this story, a woman is told “No, I certainly wouldn’t” after asking a child “would you like to come be my little girl?” Another of its characters asserts that Jesus had thrown “everything off balance” by raising the dead. After seeing a billboard about “the fat boy with the happy laugh,” characters in this story visit Red Sammy’s restaurant. The central event of this story is caused by the (*) cat Pitty Sing. After saying “you’re one of my own children,” one character in this story is shot in the ditch where Bailey’s car had wrecked. For 10 points, name this story in which the Misfit’s gang murders the Grandmother and her family by Flannery O’Connor.

ANSWER: “A Good Man is Hard to Find”

2. This figure slew Protesilaus, and Ajax killed himself using a sword given to him by this figure. This figure’s son was thrown from the walls of Troy by Neoptolemus, who also clubbed this figure’s father to death on a sacred altar. This father of Astyanax was killed after Athena appeared before him in the form of his brother Deiphobus. This husband of (*) Andromache was tied to a chariot and dragged around the walls of Troy upon his death as revenge for his killing of Patroclus. For 10 points, name this great Trojan warrior, the brother of Paris and son of Priam who was killed by Achilles.

ANSWER: Hector

3. One theorem about them states that even dimensional ones have no non-vanishing continuous vector fields. One conjecture about these objects states that simple connected three dimensional spaces are homeomorphic to these objects; that conjecture was proven by (*) Perelman and is named for Poincaré. The coordinate system named for this object has a Jacobian of $r^2 \sin \theta$. For 10 points, name these round objects with surface area equal to four pi r^2 and in which every point is equal distance from the center.

ANSWER: sphere (accept circle)

4. This group aided an ally in the Battle of Santander that led to the fall of the region of Cantabria. This group that was also known as the MVSN, and the lower ranking members of this group frequently wore a fez. Many members of this group made up the (*) M battalions. Members of this group were formerly members of the Arditi army group, and one action involving members of this group led to the overthrow of Luigi Facta and the appointment of a new prime minister by Victor Emmanuel III. For 10 points, name this group that led the March on Rome, a bunch of goons commanded by Benito Mussolini who wore clothing of a distinctive color.

ANSWER: Blackshirts (or MVSN)

5. One work of this artist depicts a battle-axe wielding woman tousling the hair of a centaur. He included three embracing couples in the foreground of a nativity scene featuring an orange hole in the sky. In another of his paintings, a flying man with blue skin grabs a woman; that painting also features Mercury pointing with a scepter at some wispy clouds. This artist included (*) peach trees and three dancing girls in translucent dresses in an allegory of springtime, and he also painted two personified winds and some falling rosebuds in a work that centers on a woman standing in improbable *contrapposto* on a seashell. For 10 points, name this artist of *Primavera* and *Birth of Venus*.

ANSWER: Sandro Botticelli

6. One of these places contained the Azekah inscription and was discovered by Austen Henry Layard in 1851. Marc Antony apparently emptied one of these locations as a wedding present for Cleopatra, and that place was constructed by a king of the Attalid dynasty. One of these places had a “daughter” site in the temple of Serapeum. In addition to the one in Pergamon and the one created by (*) Ashurbanipal, one of these places was allegedly destroyed after Omar noted that its objects were either unnecessary or evil, depending on whether they agreed with the Qur’an. For 10 points, name this type of institution located at Alexandria, repositories of knowledge in the ancient world.

ANSWER: libraries

7. In one poem, this author wrote of a desire that comes to him when he’s “weary of considerations and life is too much like a pathless wood.” That poem by him ends “one could do worse than be a swinger of” the title objects. The speaker of one poem by this author claims “he is all pine and I am all apple orchard” in reference to a man who he sees carrying (*) rocks like “an old-stone savage armed.” That poem also states “here there are no cows” and begins “something there is that doesn’t love” the titular structure. For 10 points, name this poet of “Birches” who criticized the notion that “good fences make good neighbors” in his “Mending Wall.”

ANSWER: Robert Frost

8. One work by this philosopher criticized the figure of the “redeemer type.” This non-Danish philosopher borrowed the term “*ressentiment*” for another work, and claimed that words and concepts are metaphors in his essay “On Truth and Lies in a Nonmoral Sense.” This author of *The Antichrist* wrote a work that contrasted the (*) Apollonian and Dionysian forms of the title discipline. This philosopher, who introduced the idea of “eternal recurrence,” declared that we “have killed” a certain figure in his *The Gay Science*. This philosopher also introduced the *ubermensch* in another work. For 10 points, name this German philosopher and author of *The Birth of Tragedy*, *Thus Spake Zarathustra*, and *Beyond Good and Evil*.

ANSWER: Friedrich Nietzsche

9. Scientific controversy exists over whether a caecum found in lancelets is analogous to this organ. Elevated levels of aspartate and alanine transaminase enzymes indicate damage to this organ, whose function is evaluated by the Child–Pugh score. Oxaloacetate is converted to PEP by PEP-CK in a process in this organ that synthesizes non-carbohydrates into glucose, gluconeogenesis. Lactate produced in glycolysis is sent to this organ in the (*) Cori cycle. The falciform ligament anchors this organ, which is covered by Glisson’s capsule and contains Ito and Kupffer cells. Fed by the portal vein, this organ produces bilirubin, stores glycogen, and can experience cirrhosis. For 10 points, name this largest organ in the human body, mainly responsible for detoxification and damaged in hepatitis.

ANSWER: liver

10. Early bumpers for this television network featured songs by the band Soul Coughing. One show on this network featured the red-headed Little Suzy and a character who would declare “Yeah, whatever” after being rejected by women. One current show on this network features bizarre characters like “Giant Realistic Flying Tiger” and the title Uncle Grandpa. This network, which aired Johnny (*) Bravo, also airs a show featuring the raccoon Rigby and blue jay named Mordecai. One show that airs on this network features characters like Lady Rainicorn, Jake the Dog, and Finn the Human. For 10 points, name this Nickelodeon competitor that airs *Regular Show* and *Adventure Time* and also has an Adult Swim programming block.

ANSWER: Cartoon Network or CN

11. This sculptor showed a man burying his face in the chest of a kneeling woman on a rock in his *The Eternal Idol*. This man depicted three naked man standing with their heads bowed and clasping their hands in the middle in his *The Three Shades*. That work by this man was included at the top of a larger work that shows

scenes from (*) Dante's *Inferno*, including *Ugolino and His Sons* and *Paolo and Francesca*. This sculptor of *The Gates of Hell* depicted a man sitting on a rock and resting his elbow on his knee and his chin on his fist in another work. For 10 points, name this French sculptor of *The Thinker*.

ANSWER: Auguste Rodin

12. The electromagnetic field has U(1) gauge symmetry which corresponds to a change in this value. This value can be changed for a particle travelling around a solenoid in the Aharonov–Bohm effect; that is called the “geometric” one of these. The type of velocity with this name is the angular frequency over the wavenumber and is able to be greater than the speed of light. Every possible configuration of position and momentum can be represented as points in this kind of (*) space, and in sinusoidal waves it is denoted phi and indicates the angle at t equals zero. For 10 points, name this word that describes certain “transitions” between different types of matter like liquid and gas.

ANSWER: phase (accept more specific things if they have phase in them)

13. In one story by this author, a lawyer becomes convinced that he is made of glass, and in another, a hospitalized man hears two dogs talking at the stroke of midnight. The protagonist of one of his novels is beaten by a madman named Cardenio shortly after freeing a group of galley slaves. This author of the *Exemplary Novels* also wrote about a man who (*) duels a student disguised as the Knight of the White Moon and loves an unseen peasant girl named Dulcinea. Best known for creating an “ingenious hidalgo” who travels with Sancho Panza and tilts at windmills, for 10 points, name this author of *Don Quixote*.

ANSWER: Miguel de Cervantes

14. One man who historically performed this process conducted it by touching knees and performing “passes,” and he relied on the help of Charles d'Eslon. John Braid is often referred to as the “father” of this practice. Werner Herzog discussed this process in an interview where he continually discussed the “enormous stupidity” of chickens, who are extremely susceptible to it. A German who developed this practice referred to it as “animal (*) magnetism.” That man was Franz Mesmer. This process is often used onstage to make people think they're cold or that they're chickens. For 10 points, name this process which often results in a trance-like state.

ANSWER: hypnosis

15. A proposed amendment to the constitution introduced by Israel Foster addressed this class of people. A. J. McKelway was a notable supporter of this group, that was explored in photography by Lewis Hines. A law that dealt with this class of people was written by a Representative from Colorado and one of the original senators from Oklahoma, and was ruled unconstitutional in the court case (*) *Hammer v. Dagenhart*. That bill about this class of people was the Keating–Owen Act. For 10 points, name this group of young people that performed actions in mills and mines for wages.

ANSWER: child laborers (accept obvious equivalents)

16. Proponents of laws of this type like Kris Kobach frequently reference an incident involving JJ Rizzo and Somali immigrants. Lynn Adelman recently struck down a law with of this type called Act 23 that was signed by Scott Walker. Mike Turzai said a law of this type would “help Governor Romney win the state of Pennsylvania.” Minnesota is the only state to vote against this kind of law that has been (*) passed, but not yet implemented in North Carolina and Virginia. These laws often pass with restrictions on same-day registration. For 10 points, name these laws that require people to show things like drivers licenses before they vote.

ANSWER: voter identification laws (accept anything that mentions people having to show identification to vote)

17. This novel was inspired by a Victorian-era book by R. M. Ballantyne. One character in this novel collapses after having a vision in which the “voice of a schoolmaster” insists that “we're going to have fun.”

In one scene of this novel, the corpse of a parachuter comes to rest on top of a mountain. While attempting to retrieve his (*) glasses, another character is crushed by a boulder dropped on him from Castle Rock by Roger. Symbols in this novel include a conch shell and the pig's head which is placed on a stake as an offering to "the beastie." Featuring Piggy, Jack, and Ralph, for 10 points, name this novel about some stranded British boys by William Golding.

ANSWER: Lord of the Flies

18. These entities have one fewer radial node than their energy level, and a pair of occupants of these entities remains unreactive in the inert pair effect. The fact that gold is yellow colored is due to an effect that occurs when the principal quantum number of one of these entities reaches six or seven; that effect is relativistic contraction. Two of these combine to form a (*) sigma bond, and the alkali and alkaline earth metals form the "block" named for these entities. Plotting the electron density function of these entities shows them to be spherically symmetric. For 10 points, name this type of atomic orbital which holds two electrons.

ANSWER: s-orbital

19. This ruler's grandmother Anna was accused of using magic water to start a fire in his capital, and this man opened trade with England after meeting with Richard Chancellor. He oversaw the conquest of the Kazan Khanate but lost the Livonian War to Poland. This ruler allegedly blinded the architect who built him a (*) cathedral and kept nobles in line with his secret police force, the Oprichniki. This man beat his daughter-in-law for her immodest dress and killed his son in a subsequent argument, thus beginning a succession crisis that would result in his country's Time of Troubles. For 10 points, name this Russian czar famed for his fierceness.

ANSWER: Ivan the Terrible (accept Ivan IV; prompt on "Ivan")

20. A scholar from Caesarea established the major groups of these works, the most famous of which refused to accept accounts of the Murjites or others whose lives contradicts their beliefs. The most famous of the six great books of these works was compiled by Bukhari, and those known as "qudsi" have standing equal to the word of (*) God. They are evaluated based on their *isnad*, or chain of transmission, which determines their reliability. Along with the Sunnah and the Qur'an, they are the major source of Islamic law. For 10 points, name these collections of the sayings and deeds of Muhammad.

ANSWER: hadith

Bonuses

1. Answer the following about Japanese theater. For 10 points each:

[10] This playwright of the 18th century is the most famous author of *bunraku* puppet plays. He wrote *The Uprooted Pine* and *The Battles of Coxinga* but is probably best remembered for his works about “love suicides.”

ANSWER: Chikamatsu Monzaemon (or Sugimori Nobumori; accept names in either order)

[10] In the musical drama genre known as Noh, the main actor usually wears one of these objects. Actors in Greek tragedies and comedies usually wore items of this type with exaggerated features.

ANSWER: masks

[10] This author updated plays of the Noh genre such as *The Damask Drum*. He also wrote *The Temple of the Golden Pavillion* before committing seppuku after a failed coup d’etat.

ANSWER: Yukio Mishima (or Kimitake Hiraoka; accept names in either order)

2. This man fled from Nazi Germany before allying himself with the Japanese and founding the INA. For 10 points each:

[10] Name this man, a leader of the Forward Bloc and Swaraj movement, whose nickname was Netaji.

ANSWER: Subhas Chandra Bose

[10] Bose led the Swaraj, or Indian Home Rule movement, along with this other dude who would be assassinated by Nathuram Godse, led the Salt March, and was called Mahatma.

ANSWER: Mohandas Karamchand Gandhi (or Mahatma Gandhi)

[10] Bose’s Forward Bloc was a part of this political party that has controlled India virtually unopposed since independence and was also led by Rajiv and Indira Gandhi.

ANSWER: Indian National Congress (or INC)

3. Participants in this experiment were repeatedly told “the experiment requires that you continue.” For 10 points each:

[10] Name this experiment in psychology where participants were made to think they were shocking a fellow participant, who was actually an actor. It was conducted by a namesake Yale psychologist.

ANSWER: the Milgram Experiment [or obedience to authority experiment]

[10] Milgram is also famous for this experiment, which popularized the idea of “six degrees of separation.” It involved trying to get a letter from somewhere in the midwest to Boston using contacts in social networks.

ANSWER: small world experiment

[10] Carney Landis inadvertently conducted a miniature obedience to authority experiment in 1924 when he asked people to behead these animals to measure their facial expressions. These animals were also part of the Kerplunk experiment.

ANSWER: rats

4. This spectral line and that of hydroxyl bound the wavelengths that might be used to communicate with extraterrestrials, a region that SETI researchers call the “water hole.” For 10 points each:

[10] Name this line found in spectra of the interstellar medium. Its frequency is about 1420 megahertz.

ANSWER: 21-centimeter line (prompt on “hydrogen line”)

[10] The majority of ISM is made of this lightest element. The 21-centimeter line comes from hyperfine splitting of its neutral ground state.

ANSWER: hydrogen

[10] Another important spectral feature is the Lyman-alpha line, which are produced by these objects. These extremely energetic objects are at higher redshifts than most other objects we observe.

ANSWER: quasars

5. This artist's *People in the Sun* shows men and women in lawn chairs face some blue mountains. For 10 points each:

[10] Name this artist who depicted a white-clad boy who appears to be trapped behind a restaurant counter in *Nighthawks*.

ANSWER: Edward Hopper

[10] Hopper included a woman in a tight blue dress in his painting of one of these places "at night." A man is seen through the window of a white building in his depiction of one of these places "in a Small City."

ANSWER: offices

[10] Above the diner in *Nighthawks*, an advertisement for this product is visible. This product is made by "Phillies" and only costs 5 cents.

ANSWER: a cigar

6. This author asked "O he is dead then?" in his poem about a man killed by "fatal four disorders," "Felix Randal." For 10 points each:

[10] Name this Jesuit poet who coined the term "sprung rhythm" and wrote poems like "God's Grandeur" and "The Windhover."

ANSWER: Gerard Manley Hopkins

[10] Hopkins praised "All things counter, original, spare, and strange" in this poem, which begins "Glory be to God for dappled things."

ANSWER: "Pied Beauty"

[10] Another Hopkins poem is dedicated to the "happy memory of five Franciscan Nuns" who died in one of these events. Thomas Hardy's poem "Convergence of the Twain" references one of these events that involved the *Titanic*.

ANSWER: shipwrecks (accept anything indicating the sinking of a boat; accept "Wreck of the Deutschland")

7. This work sees the forging of the Sampo, an object that brings fortune to its holder, for the Mistress of Pohjola. For 10 points each:

[10] Name this national epic of Finland, compiled in the 19th century by Elias Lönnrot.

ANSWER: Kalevala

[10] This hero of the Kalevala is the son of Ilmatar. He hilariously defeats Joukahainen by singing a song that makes him sink into a bog, and later forges a kantele from the bones of a giant pike he slays.

ANSWER: Väinämöinen

[10] Another hero from the Kalevala, Lemminkäinen, drowned in the river Tuonela while visiting this place. In Greek myth, the Styx and Lethe Rivers are in this place that is visited by Orpheus while trying to recover Eurydice.

ANSWER: underworld (or Manala)

8. Joseph Brant was a leader of this specific tribe that names a river that flows into the Hudson. For 10 points each:

[10] Name this specific tribe of New York that was forced to move to Canada after allying with the British during the American Revolution.

ANSWER: Mohawk Tribe (or Kanien'kehá:ka)

[10] The Mohawk were one tribe in this larger confederacy of tribes that included the Oneida and Seneca and were led by sachems.

ANSWER: Iroquois Confederacy (or Six Nations; or Haudenosaunee)

[10] The Iroquois engaged in this series of conflicts in the seventeenth century with the Huron and the French that were named after creatures with valuable pelts.

ANSWER: Beaver War(s)

9. Name some contemporary American sculptors and works. For 10 points each:

[10] This prolific artist created mobiles and stabiles, including *Lobster Trap and Fish Tail* and a work outside the Kluczynski Federal Building in Chicago, his *Flamingo*.

ANSWER: Alexander **Calder**

[10] Louise Bourgeois is known for her sculptural depictions of these animals. The largest one, *Maman* is over 30 feet tall.

ANSWER: **spiders**

[10] The artist who created *Wave Field* submitted the winning design for a sculpture that honors of the veterans of this war and consists of large black walls.

ANSWER: **Vietnam** War

10. Identify some things relating to light and laboratory procedures. For 10 points each:

[10] Spectrophotometry is based on this law, which relates the extinction coefficient, path length and concentration of a sample to the absorbance of the sample.

ANSWER: **Beer**-Lambert Law

[10] The Woodward-Fieser rules are helpful in studying a spectroscopy partially named for this kind of light and visible light. The frequency for this range of light lies between 100 and 400 nanometers.

ANSWER: **ultraviolet** light (or **uv**-vis spectroscopy)

[10] This advanced technique improves on IR spectroscopy by aiming a laser at a sample and measuring the Stokes shift in frequency of emitted light. It relies on a type of inelastic scattering named for an Indian scientist.

ANSWER: **Raman** spectroscopy

11. This nation's army made up the majority of troops that assaulted Juno Beach on D-Day. For 10 points each:

[10] Name this nation that sent many troops to join the US invasion of Afghanistan and whose army is currently headed by Marquis Hainse.

ANSWER: **Canada**

[10] Canadian troops also participated in this unsuccessful operation during World War II that was planned by Bernard Montgomery. This operation failed to take bridges near Arnhem and Oosterbeek.

ANSWER: Operation **Market Garden**

[10] A small number of men in this Canadian police force served in World War II. Their name and nickname stems from the fact that they are normally on horseback.

ANSWER: **R**oyal **C**anadian **M**ounted **P**olice (or **M**ounties)

12. This force is several orders of magnitude more powerful than electromagnetism, and it is mediated by gluons. For 10 points each:

[10] Name this physical force that holds nuclei together.

ANSWER: **strong** force

[10] The strong force exhibits this phenomenon, in which the force holding things together drops off extremely quickly as the distance between them goes to zero.

ANSWER: **asymptotic freedom**

[10] There are this many gluons, each corresponding to different color charges. This number is two more the number of leptons, and two less than the number of *spatial* dimensions in M-theory.

ANSWER: **eight**

13. This first and most famous of these pieces is known by the title "Dance in the Village Inn." For 10 points each:

[10] Name this group of pieces written in 3/4 time. The score for their composer's *Bagatelle sans tonalité* indicates that it was meant to be the fourth of these pieces, as the original fourth of them was left unfinished.

ANSWER: **Mephisto waltzes**

[10] The Mephisto waltzes are compositions by this Hungarian composer who also wrote a set of *Transcendental Études*.

ANSWER: Franz **Liszt**

[10] Liszt's piano etude *La campanella* is included in a set of works named for this Italian violin virtuoso, known for creating a set of 24 Caprices for Solo Violin.

ANSWER: Niccolò **Paganini**

14. The protagonist of this novel watches the Mechanical Hound murder a random person on TV after joining a group led by Granger. For 10 points each:

[10] Identify this dystopian novel featuring the "fireman" Guy Montag. Its title apparently refers to the burning temperature of paper.

ANSWER: **Fahrenheit 451**

[10] This American author of *The Martian Chronicles* wrote *Fahrenheit 451*.

ANSWER: Ray Douglas **Bradbury**

[10] Bradbury fictionalized himself as a twelve-year-old named Douglas in this novel that takes its title from a drink made by Douglas's grandfather. Its more interesting characters include a serial killer called "The Lonely One."

ANSWER: **Dandelion Wine**

15. Answer some questions about the Paraná River. For 10 points each:

[10] The Paraná is the second longest in South America to this river, which runs 4,345 miles from Nevado Mismi in Peru to the Atlantic Ocean.

ANSWER: **Amazon** River

[10] This estuary on the border of Argentina and Uruguay is formed by the confluence of the Uruguay and Paraná Rivers. The cities of Montevideo and Buenos Aires lie on either side of this estuary.

ANSWER: **Río de la Plata**

[10] The Paraná River originates in this second most populous Brazilian state with capital at Belo Horizonte.

ANSWER: **Minas Gerais**

16. This document allowed teachers to be fired indiscriminately and banned secret or unauthorized student groups. For 10 points each:

[10] Name these decrees that were issued following the murder of August von Kotzebue by Karl Sand.

ANSWER: **Carlsbad** Decrees

[10] The Carlsbad Decrees were the brainchild of this statesman who resigned following one of the 1848 revolutions and was succeeded by Prince Felix of Schwarzenberg.

ANSWER: Prince Klemens Wenzel von **Metternich**

[10] Metternich was a statesman for the empire of this nation. This nation would later join with Hungary in the Compromise of 1867.

ANSWER: **Austria** (or Republic of **Austria**)

17. Identify these muscles of the human body. For 10 points each:

[10] This large chest muscle overlays a triangular, "minor" counterpart.

ANSWER: **pectoralis** major (prompt on "pecs")

[10] This muscle bounds the triangle of auscultation with the trapezius. This large, broad muscle extends from the vertebrae around the side and anchors at the base of the humerus.

ANSWER: **latissimus dorsi** (prompt on "lats")

[10] This muscle forms the triceps surae with the soleus, and anchors to the medial condyle of the femur and the Achilles tendon. It is often known as the "calf muscle."

ANSWER: **gastrocnemius**

18. Mustapha Matura wrote a version of this play set in the West Indies. For 10 points each:

[10] Name this play in which Christy Mahon shows up in an Irish village and claims to have murdered his father with a skillet. In its last line, Pegeen refers to Christy with the title phrase.

ANSWER: The **Playboy of the Western World**

[10] This playwright wrote *Playboy of the Western World*. Maurya's son Bartley falls off his horse and drowns in his *Riders to the Sea*.

ANSWER: John Millington **Synge**

[10] Synge, a resident of this country, sparked riots for his unfavorable portrayal of this country's peasants in *Playboy*. Other playwrights from here include Sean O'Casey.

ANSWER: **Ireland**

19. Name some stand-up comedians. For 10 points each:

[10] This very successful comedian is known for his observational comedy that asks "what's the deal" with various things. He's perhaps better known for his self-titled sitcom that featured the characters George, Elaine, and Kramer.

ANSWER: Jerry **Seinfeld**

[10] This female comedian is known for her raunchy humor concerning her Jewish ancestry, as well as having her own "program" on Comedy Central and her self titled movie subtitled "Jesus is Magic".

ANSWER: Sarah **Silverman**

[10] This writer for SNL created the Bill Hader-portrayed "Stephon" and his namesake sitcom has already been cancelled by NBC. His most recent special is *New in Town*, and he has several jokes about Law and Order.

ANSWER: John **Mulaney**

20. The founder of this branch of Protestantism argued against female rulers of his day in his *The First Blast of the Trumpet Against the Monstrous Regiment of Women*. For 10 points each:

[10] Name this branch of Protestantism founded by John Knox.

ANSWER: **Presbyterianism**

[10] Knox was a religious reformer from this nation. His *First Blast of the Trumpet* targeted its queen Mary I, the daughter of James V.

ANSWER: **Scotland**

[10] Knox's motto "Spare no arrows" was taken from this book of the Old Testament. This book includes a series of "laments" by its author, who warns of the destruction of Judah.

ANSWER: Book of **Jeremiah**