



# ACADEMIC COMPETITION FEDERATION

2015 ACF NATIONALS  
PACKET 6 BY THE EDITORS

## TOSSUPS

1. At the conclusion of this book, Paphnutius suggests to a character to suppress the narrative, since a “greater liar” will eventually tell it. Another character in this book is mortally wounded in the land of Abcasia, after which he looks in the mirror of the gymnosophists and sees his true love just before dying. In this book, a castle outfitted with the mirrors of Archimedes that contains seven gilded heads of John the Baptist belongs to the scholar Ardzrouni. The protagonist meets a skiapod named Gavagai and falls in love with a female satyr named Hypatia while in Pndapetzim (“pin-da-pet-zim”), long after his ability to learn languages enticed Frederick Barbarossa into adopting him. In this novel’s frame narrative, its title character meets Niketas Choniates (“cho-nye-ah-tees”) during the Fourth-Crusade sack of Constantinople and relates his life story, including his search for Prester John. For 10 points, name this novel about a medieval traveller by Umberto Eco.

ANSWER: Baudolino

2. This artist’s assistant claimed that he saturated his paintings with a layer of oil in between sessions, as seen in his illustration of Lord Byron that shows cannibals on a boat, *The Shipwreck of Don Juan*. Louis-Philippe commissioned a painting by this artist in which knights abandon their raid on Jerusalem and instead sack the title city. This artist of *Entry of the Crusaders in Constantinople* depicted the green and red cloth-wrapped arm and hand of a dead figure protruding from the foreground rubble in a painting in which a turbaned Turk triumphantly plants a standard. Another of his paintings depicts the smoldering city of Dis in the background, while showing the nude oarsman Phlegyas next to a poet. For 10 points, name this artist who showed a bare-bosomed woman kneeling in exhaustion on some rocks in *Greece Expiring on the Ruins of Missolonghi*, who also painted *The Barque of Dante* and *The Massacre of Chios*.

ANSWER: Eugène Delacroix [or Ferdinand Victor Eugène Delacroix]

3. A space that has this property locally will have it globally if it is paracompact and Hausdorff. The weak topology on a normed infinite dimensional space does not possess this property. Having a countably, locally finite basis is a necessary condition for having this property by the Nagata-Smirnov theorem. A theorem named for this property is proven by invoking a lemma which states that normality is equivalent to disjoint closed subsets being separable by continuous functions. That lemma is named for Pavel Urysohn and is used to show that a space being regular and countable is a sufficient criterion to have this property, a theorem that is also named for Pavel Urysohn. A space has this property, if, for any pair of points, the namesake function doesn’t violate the triangle inequality, is symmetric, and is non-negative. For 10 points, name this property of spaces that allows one to define a function that returns a distance value.

ANSWER: metrizable [or word forms; or the space has a metric; or the space is homeomorphic to a metric space]

4. A popular song named for this group tells them to “Come out and fight me like a man, show your wife how you won medals out in Flanders.” Formed at the suggestion of Henry Wilson, this group operated from its base at Gormanstown depot and at Beggar’s Bush, from which it moved to set fire to a hosiery factory during a raid in Balbriggan. It was formed at the same time as the Auxiliary Division, or “Auxies,” headed by Frank Crozier, and together both were involved in an incident at Croke Park where the soccer players Jim Egan and Michael Hogan were fired on in the midst of a crowd, on a day called Bloody Sunday. A pack of foxhounds inspired the name for this group, which was formed from army veterans who volunteered when the RIC ran short on troops. For 10 points, name this paramilitary unit of British soldiers used in 1920 to put down Irish independence, and named for their makeshift uniforms which appeared to be two colors.

ANSWER: Black and Tans [or Auxiliary Division or Auxies until “Auxiliary” is read; prompt on the “Royal Irish Constabulary Reserve Force” or “RIC” until “RIC” is read]

5. Joseph Greenberg's Universal 28 states that this process always follows its counterpart if they both follow the source. The West African language of Fula is unique in that diminutives are formed by this process. The Slavic language Sorbian is an unusual example since it features syncretism, in which this process is partially reversed. Unlike a related process, this process is not iterative and usually induces less allomorphy. The inherent type of this process does not depend on syntax and is contrasted with the contextual type. A type of this process that makes use of non-cognate words is suppletion and is exemplified by the Latin word *fero*. This process does not generate a new lexeme, unlike derivation. For 10 points, name this process of modifying a word to alter its aspect, mood or some other grammatical category, such as conjugating a verb or declining a noun.

ANSWER: inflection [or word forms]

6. One member of this group avoided having his son married into a rival clan by staying drunk for 60 straight days, so he couldn't give his consent to the wedding; he also rebuked the northern Ruan family by taking his underwear off in public. That group by this name was led by the alchemist Ji Kang, a master of the zither instrument who supported the Xuanxue movement, or the Dark Learning, popular among scholars in the south during the Six Dynasties. The earliest reference to a group by this name is probably the Apkallu in Sumerian legend, which are half-fish creatures that emerged from the primordial Abzu water to teach humans. In addition to a neo-Taoist group named for meeting at the "Bamboo Grove," this name is shared by another group that gets recreated during every Manvantara. That group includes a man whose wives Aditi and Diti gave birth to the Asuras and the Devas. For 10 points, Kashyapa is a member of what group, which consists of a certain number of enlightened men?

ANSWER: Seven Sages [or Seven Worthies; or Seven Wise Men; or Saptarishi; or Septarishi; or Seven Rishi; or Zhulingixian; or Chu-lin ch'i-hsien; or Seven Sages of the Bamboo Grove; or obvious equivalents implying seven wise men; prompt for a number, if not given by the player]

7. The stage directions for this play indicate that an autotype of the main figure of Titian's *Assumption* should hang above the fireplace. After learning that the woman he loves fills dirty lamps daily, a character in this play promises her a chariot to carry them into the stars, comparing those stars to lamps that "don't need to be filled with paraffin oil every day." The title character of this play stares at the tip of a poker while becoming intensely bored by a poetry reading. At the opening of this play, the secretary Proserpine "Prossy" Garnett berates the low-class curate Lexy and lets in Mr. Burgess to speak with his son-in-law, a Christian socialist lecturer who later gives a speech at the Guild of St. Matthew. This entry in *Plays Peasant* is subtitled "A Mystery," and ends with the title "pure" woman choosing her husband James Morrell over the poet Eugene Marchbanks. For 10 points, name this comedy by George Bernard Shaw named for a woman.

ANSWER: Candida, *A Mystery*

8. MIDA can be used as a protecting group for one example of this type of reaction. One reaction of this type is typically carried out using an inorganic base such as cesium carbonate or potassium carbonate alongside a tetrakis-triphenylphosphine complex. Secondary and tertiary amines can be synthesized using one of these reactions named for Buchwald and Hartwig. One of these reactions replaces the usual central step with a migratory insertion followed by a beta-hydride elimination. A Grignard reagent is used in one of these reactions named for Kumada, while other examples using tin and zinc catalysts are named for Stille and Negishi. The catalytic cycle of these reactions consists of a reductive elimination, an oxidative addition, and a transmetalation. For 10 points, name these reactions, one example of which uses a palladium catalyst to make a carbon-carbon bond between a boronic acid and a halide, which is named for Suzuki.

ANSWER: palladium-catalyzed cross-coupling reactions [or more specific answers, such as Suzuki / Heck / Negishi / Kumada / Stille coupling]

9. This institution was allegedly founded at a spot where a hunter saw a family of bears climb down from a tree, since the bears could have attacked John Jay Shipherd and Philo Stewart, but instead let them live by walking away. This institution sponsored a group including Charles Tenney and Martin Stimson to travel to Shanxi Province in 1882 as missionaries; all 15 original members of that so-called band were executed in the wake of the Boxer Rebellion. A group of people from this place traveled to Wellington to rescue the fugitive John Price. The first president of this institution, Asa Mahan, was originally one of the "Lane Rebels" who defected to this place at the invitation of men like Arthur Tappan and Charles Finney, who became a professor of theology here, after it voted to accept people of any color as students. For 10 points, name this historical college founded in 1833 in Ohio.

ANSWER: Oberlin College

10. This text warns against frivolously speculating about the nature of Being due to the double meaning of the verb “to be” by comparing a steam engine and Milo of Crotona. A portion of this book argues that unexplained phenomena are partly the result of chance, and that so-called “residual phenomena” may be discovered if chance is eliminated. Its last section, which largely concerns the social sciences, proposes a “physical” or “concrete” method that is applicable to political economy, but not sociology or history. The second of its six books contains a chapter divided into “five canons” on the four methods of experimental inquiry, such as agreement, elimination and difference. The author’s view that the value of names is solely that of its referent is presented in this text. For 10 points, name this treatise on ratiocinative and inductive methods, which was written by John Stuart Mill.

ANSWER: A System of Logic, Ratiocinative and Inductive

11. The Ashman phenomenon is a specific type of this condition. A potentially lethal form of this condition occurs in Brugada syndrome. Drugs used to treat this condition are categorized using the Vaughn-Williams classification. This condition can be caused in Lown-Ganong-Levine syndrome by the creation of an accessory conduction pathway. A similar accessory pathway called the bundle of Kent also leads to this condition in a pre-excitation syndrome known as Wolff-Parkinson-White syndrome. This condition may be treated by sodium-channel blockers such as flecainide and procainamide. The drug Sotalol, which lengthens the QT interval, is a beta blocker which treats this condition. Atrial flutter and atrial fibrillation are types of this condition. It also includes tachycardias and bradycardias, which involve rates below 60 bpm or above 100 bpm. For 10 points, name this condition in which the heart beats irregularly.

ANSWER: cardiac arrhythmia [or cardiac dysrhythmia; or tachycardias; or bradycardias; or atrial flutter; or atrial fibrillation; or ventricular flutter; or ventricular fibrillation; prompt on descriptive answers, such as “an irregular heartbeat”]

12. Gottfried Stölzel composed one of these pieces for four choirs. A polystylistic example of one of these pieces includes a tango for harpsichord in its fifth movement Rondo, and begins with a quiet passage for prepared piano. That piece is the first of the six ones composed by Alfred Schnittke. Handel composed a third movement musette for the sixth of these pieces published as his Opus 6. Another piece in this genre imitates the sound of the zampogna, a bagpipe played by Italian shepherds, in its final movement Pastorale. Pieces of this type often pass music between the *ripieno* and a small group of string instruments called the *concertino*. Handel’s pieces in this genre were modeled after the twelve published as the Opus 6 of Corelli, which includes one composed for Christmas. For 10 points, name this popular Baroque orchestral genre that was eclipsed in popularity by the solo concerto.

ANSWER: concerto grosso [or concerti grossi; prompt on “concerto” until it is read]

13. This site was home to the worker’s village of Wah-Sut, set up to build the tomb of Senusret III [Sen-woz-ret]. It also contains a recently-discovered pyramid dedicated to queen Teti-sheri, and its complex with an Outer Hypostyle Hall has an engraving of a machine called the “helicopter” of this place. At this site, Arthur Mace unearthed the pyramid of Ahmose I, often called the “last royal pyramid complex,” and David O’Connor’s project at the mortuary of Khasek-hemwy discovered a fleet of 14 boats in brick-built graves. Several pillars contain the “Flower of Life” imagery at a complex built here by Merneptah, which is a part of the funeral complex of Seti I. Seti’s titles are extensively listed on the third row of the “king list” or “table” named for this site. For 10 points, name this city known for its Osirian building and for being a primary cult center of Osiris, allegedly the resting spot of his head.

ANSWER: Abydos [or Abduj]

14. In one story, a man comes to this location and is told to visit an old frog who may know the location of “I Know Not Whither” so that he can find “I Know Not What.” A young man comes to this location and subdues its forty mare-daughters in a story in which its primary occupant gives him a fire-breathing enchanted horse so that he can rescue his bride Maria Morena. In another story, the day, the sun, and the night are represented by horsemen clothed in all white, red and black who come and go from this location. In that story, a talking doll in this place helps a maiden separate rotten corn from good corn so that she is not killed. The primary occupant of this location once terrorized Vasilisa the Fair, and is normally seen flying around in a giant mortar. The skulls of unfortunate passersby decorate the fences surrounding this location, which is supported by either one or several chicken legs. For 10 points, name this building in a forest, which is occupied by a Slavic hag.

ANSWER: Baba Yaga’s house [or obvious equivalents that mention Baba Yaga]

15. Curing this disease is an unintended side effect of a fertility drug made from the “martin” that is the subject of the research of the Kurtz-like Dr. Annick Swenson in Ann Patchett’s novel *State of Wonder*. The missing L. Murugan is obsessed with the history of this disease in a 1995 novel, in which the main characters discover a cult that attempts to use the transmission of this disease as a vehicle for soul transference. A short story titled for a euphemism for this disease ends with a character to responding to the accusation that she “had nothing but that one letter he didn’t write” with the zinger “I had Barbara”, and depicts an argument between Mrs. Ansley and Mrs. Slade. A literary character catches this disease after walking with Giovanelli through the Colosseum at night. Amitav Ghosh’s *The Calcutta Chromosome* fictionalizes the research done on this disease by Robert Ross. For 10 points, name this disease that kills Daisy Miller and is referred to in the title of Edith Wharton’s “Roman Fever”.

ANSWER: malaria [prompt on “Roman Fever” until it is read]

16. An artist born in this country created the ephemeral installation *Intensities and Surfaces*, in which slabs of ice surrounding a core of rock salt were left to melt. An art exhibit in this country featured a duo’s *The Rape of Creativity*, in which Goya’s *The Disasters of War* was defaced with insertions of Nazis, zombies and Ronald McDonalds. Those artists, Anya Gallaccio and the Chapman brothers, were part of an art movement in this country that began with the exhibition *Freeze*, whose organizer created “spot paintings” by directly painting on gymnasium walls. This country was the setting of *Break Down*, in which Michael Landy destroyed all of his possessions. The businessman Charles Saatchi patronizes a group of artists working in this country, including the creator of the tent *Everyone I have Ever Slept With* and the creator of an artwork featuring a preserved shark. Tracy Emin and Damien Hirst are members of, for 10 points, what country’s YBA movement, which sometimes exhibits in the Tate?

ANSWER: Great Britain [or Scotland until “Creativity” is read and prompt thereafter; prompt on “England”]

17. This quantity can be estimated using 12 parameters by the Ramsauer model, and in a different context, it is given by the Rosenbluth formula. Its value due to the presence of a charge distribution equals its value due to an equivalent point charge times the square of the form factor. The formula for this quantity is modified by two “structure functions” which are functions of the square of the momentum transfer and the energy transfer in a phenomenon called Bjorken scaling. This quantity equals 4 pi divided by the wave vector times the imaginary part of “f of zero” according to the optical theorem. The mean free path is the inverse of the “macroscopic” form of this quantity, which equals the number of particles per unit volume times its “microscopic” form. This quantity is equal to the square of the scattering amplitude, and for a sphere it equals pi times the radius of the sphere squared. It is often given in units of barns. For 10 points, name this quantity denoted sigma which represents an effective area characterizing a particle interaction.

ANSWER: cross section [or differential cross section; or total cross section; or macroscopic cross section; or microscopic cross section; or scattering cross section; prompt on “effective area”]

18. The basin of this river contains the largest-known deposit of trona ore, which is refined into soda ash, a fact which led this river to become the namesake of a soda pop released just after Prohibition by the Sweetwater Beverage Company. After it’s joined by the Big Sandy River, it flows through the Fontanelle Reservoir at the town of La Barge. This river shares its name with a city that, in 1931, was the first to prohibit door-to-door solicitation by passing its namesake ordinance. It picks up Nine Mile Creek and Yampa River at Steamboat Rock, after passing through the scenic Gates of Lodore. It also runs through the Flaming Gorge Dam, creating a reservoir when it passes through the Uinta Mountains, and the banks of this river contain the fossil beds of Dinosaur National Monument. For 10 points, name this largest tributary of the Colorado River, which passes through a namesake town in southern Wyoming.

ANSWER: Green River

19. After one character in this work puts on a Chopin ballade, a man named Wilkinson is shot in the back of the head. Minor characters in this work include an electrician who always stays for one more drink and a Moorish tart named Anita. At one point, its protagonist gets into a dispute with his American lover about the wasteful purchase of a new fox cape; that discussion ends when Max enters Room 110 in the Hotel Florida and Dorothy Bridges leaves. Originally published in a 1938 volume along with its author’s first 49 stories, including works from collections like *Winner Take Nothing* and *Men Without Women*, this work in three acts centers on playboy journalist Philip Rawlings, who is really a spy for the Republican forces in Madrid. For 10 points, identify this play set during the Spanish Civil War, the only such work by Ernest Hemingway.

ANSWER: *The* Fifth Column

20. This ruler tried to broker peace on a barren plain called Campus Serenus, but on being rebuffed, his army won the Battle of Tzirallum, though shortly afterwards he was defeated in battles at Cibalae and on the plain of Mardia. This ruler was granted the territory of Pannonia at the Conference of Carnuntum, and expanded his power from that base. His fleet of ships was busted up by the general Flavius Crispus at the Battle of the Hellespont, after which he met his final defeat at Chrysopolis and was kept as prisoner at Thessalonica until being hanged the following year. He ascended to the throne solely due to his friendship with Galerius, and in the midst of fighting against his main rival Maximinus Daia, he celebrated his wedding to Constantia, which was the occasion for the formal issuance of the Edict of Milan. For 10 points, name this Roman emperor who, after defeating Maxentius and Maximinus, launched a failed civil war against Constantine the Great.

ANSWER: Licinius [or Valerius Licinius Licinianus]

TIEBREAKER

21. After this man bought up huge tracts of land, he became involved in a dispute with Joseph Plumb Martin over the right to farm that property, and reportedly bankrupted Martin. When this general threatened to resign from the army over the appointment of Philippe du Coudray, that French soldier of fortune was reassigned to the post of inspector general. This man made the decision to storm the stone house of Benjamin Chew at the Battle of Germantown and use that home as a fort. He initially led the contingent of officers that drafted a letter complaining about war pensions, during the Newburgh Conspiracy. This man, who also founded the Society of the Cincinnati, is best known for fortifying Dorchester Heights by conducting the “noble train of artillery,” in which he transported a bunch of cannons from Fort Ticonderoga. For 10 points, name this fat general from Maine who Washington appointed as the first Secretary of War.

ANSWER: Henry Knox

BONUSES

1. The Hamiltonian for this model system can be obtained by splitting the free-electron model Hamiltonian into left-moving and right-moving electrons, linearizing the expression for the energy, then mapping the electronic Hamiltonian to a bosonic Hamiltonian. For 10 points each:

[10] Name this model, initially developed by Tomonaga, that is used to describe 1D conductors such as carbon nanotubes.

ANSWER: Tomonaga-**Luttinger liquid** model

[10] The Luttinger liquid model is used because the liquid model derived by Landau and named for this scientist breaks down in one dimension. This scientist also names a statistical distribution for spin one-half particles along with Dirac.

ANSWER: Enrico **Fermi**

[10] This quantity appears in the numerator for the Fermi-Dirac distribution for the total amount of fermions. It gives the number of particle states in an energy level as a function of the energy.

ANSWER: **density of states** [or **degeneracy**]

2. Name these writers in the social sciences who discussed the ancient Egyptians, for 10 points each.

[10] In his book *Black Athena*, this man argued that the ancient Egyptians had black-colored skin and that all ancient Greek culture had Afro-Asiatic roots.

ANSWER: Martin **Bernal**

[10] By examining the skulls of ancient Egyptians, this 19th century natural scientist concluded that the ancient Egyptians were Caucasoid. Through skull measurements, he advocated polygeny, the idea that different human races were different species, with black people having the smallest skulls.

ANSWER: Samuel **Morton**

[10] This author of *Essay on the Geographical Description of Egypt before the Conquest of Cambyses* is better known as the philologist who deciphered the Rosetta Stone.

ANSWER: Jean-Francois **Champollion** le jeune

3. Fought mostly between 1818 and 1840, this series of conflicts escalated after Chief Hongi Hika returned from overseas with a device that he called the Duck's Bill. For 10 points each:

[10] Identify these inter-tribal Maori battles fought between rivals like the Ngapuhi and the Ngati Whatua.

ANSWER: **Musket Wars** [or **Potato Wars**]

[10] The era of the Musket Wars was essentially over after the signing of this 1840 treaty drafted by William Hobson allowed the British to establish sovereignty over New Zealand.

ANSWER: Treaty of **Waitangi**

[10] In 1809, this European sailing ship under John Thompson anchored in Whangaroa Harbor to pick up timber spar. A group of Maori killed and ate most of the crew of this ship, allegedly because one of their chiefs had been flogged and denied food on board.

ANSWER: **Boyd** [or the **Boyd Incident**; or the **Boyd Massacre**]

4. In a 2008 interview, Peter Matthiessen revealed that he founded this literary magazine as cover for his work as a CIA agent. For 10 points each:

[10] Name this magazine that first published, among other works, Philip Roth's novella "Goodbye, Columbus". Its long-running features include its *The Art of Fiction* and *Writers at Work* interview series.

ANSWER: The **Paris Review**

[10] The first editor-in-chief of the *Paris Review* was this participatory journalist, who wrote about his time in an NFL training camp in *Paper Lion*. He also wrote the April Fools' Day hoax article "The Curious Case of Sidd Finch".

ANSWER: George **Plimpton** [or George Ames **Plimpton**]

[10] In January 2014 the *Paris Review* published an article declaring that Paris was "pretty good" in response to this contemporary poet's question "So is Paris any good or not?" This author of *Balloon Pop Outlaw Black* also gained fame for her poem "Rape Joke".

ANSWER: Patricia **Lockwood** [or Tricia **Lockwood**]

5. This sculpture depicts the she-wolf that suckled Romulus and Remus as well as episodes from the Book of Genesis, such as the Expulsion. For 10 points each:

[10] Name this “joyous” sculpture, a work that replaced a pagan statue in Siena that was believed to be the cause of the Black Death.

ANSWER: **Fonte Gaia**

[10] This artist created the Fonte Gaia for Siena, including the many sculptors that adorn it, such as *Rhea Silvia* and *Acca Larentia*.

ANSWER: **Jacopo Della Quercia** [accept either underlined portion]

[10] After Jacopo della Quercia left Siena, he became a competitor to design the bronze doors of the Baptistery of the Florence Cathedral, a contract which was eventually awarded to this other sculptor.

ANSWER: Lorenzo **Ghiberti**

6. Rhizobia use quorum sensing to regulate their performance of this process in the root nodules of legumes. For 10 points each:

[10] Name this process in which a gas found in the atmosphere is converted to ammonium by bacteria found in the soil and the roots of some plants.

ANSWER: **nitrogen fixation** [or obvious equivalents, such as **fixing nitrogen**]

[10] Quorum sensing was discovered in this organism, whose genome contains the *lux* operon.

ANSWER: **Vibrio fischeri** [or **V. fischeri**; or **A. fischeri**; or **Aliivibrio fischeri**]

[10] The gene LuxI (lux-eye) in *Vibrio fischeri* codes for one of these subtypes of autoinducers. Quorum sensing in Gram-negative bacteria is mediated by either a furanosyl borate diester or one of these compounds.

ANSWER: **N-acyl homoserine lactones** [or N-**AHLs**; or N-**ASLs**; prompt on “homoserine **lactones**”, “**AI-1**”, or “**autoinducer-1**”]

7. This man’s sentence to serve 20 years in federal prison under the Espionage Act was later thrown out due to the prejudice of Judge Kenesaw Mountain Landis - in the mean time, members of Congress refused to allow him to sit in the House, but Wisconsin voters re-elected him anyway at a special election in 1919. For 10 points each:

[10] Name this Representative from Wisconsin who edited the Milwaukee Leader newspaper.

ANSWER: Victor L. **Berger**

[10] Victor Berger was a founding member of this United States political party, which often ran Eugene V. Debs for president, and later ran Norman Thomas.

ANSWER: **Socialist** Party of America [or **Social Democracy** of America; or **SDA**]

[10] This term was coined by Morris Hillquit in 1932 to describe the socialism espoused in Milwaukee by Victor Berger and his followers. Elmer Beck wrote a book about the Socialist Party of Wisconsin titled for this kind of socialism.

ANSWER: **sewer** socialism

8. Name some classical masters of the symphony, for 10 points each.

[10] Mozart’s 37th symphony is actually an “introduction” to the 25th symphony of this Viennese composer, which was mistakenly attributed to Mozart for 150 years. His *Missa Pro Defunctis* probably provided the model for Mozart’s Requiem.

ANSWER: **Michael Haydn** [prompt on “**Haydn**”]

[10] This friend of Joseph Haydn’s, who once saved him from certain death in a bar fight, composed over a hundred symphonies. Twelve of those symphonies are based on Ovid’s *Metamorphoses*, though only half of those, including *The Four Ages of Mankind*, survive.

ANSWER: Carl **Ditters** von Dittersdorf [or Carl Ditters von **Dittersdorf**]

[10] Though he wrote thirty symphonies, this composer is better known for the string quintet *Night Music in the Streets of Madrid* and for his twelve cello concerti, one of which features a particularly famous minuet.

ANSWER: Luigi **Boccherini**

9. This character is given permission to tell jokes but forbidden from complaining about the weight he carries in his first appearance, and later he scares another character by claiming to see the Empousa. For 10 points each:

[10] Name this character who is forced to walk around Lake Acheron while Charon ferries his master across. In a particularly funny scene, his master's efforts not to anger Aeacus lead to them exchanging clothing several times.

ANSWER: Xanthias

[10] Xanthias is the slave who accompanies Dionysus to the underworld in this Aristophanes play, whose namesake chorus repeats the line "Bre-ke-ke-kex ko-ax ko-ax".

ANSWER: The Frogs [or Batrachoi]

[10] The contest between Euripides and Aeschylus in *The Frogs* is an infernal take on one of these "struggles" or "contests," usually of words, in Greek literature.

ANSWER: agon

10. According to the myths of the New Hebrides, dead souls must complete half of the design of one of these objects in order to avert a female guardian of the underworld from devouring them. For 10 points each:

[10] Name these structures, which also include Julian's Bower from British folklore, as well as the *caedroia*, which inspired the Welsh name for Troy. Geoffrey Russell once speculated that Glastonbury Tor was another of these things.

ANSWER: mazes [or labyrinths]

[10] That aforementioned myth of the New Hebrides is recounted in *Primitive Mythology*, the first volume of this four-book analysis of the functions of myth by Joseph Campbell.

ANSWER: The Masks of God

[10] The most famous mythical labyrinth, on Crete, was designed by this inventor, who escaped from prison by constructing wings for himself but was unable to prevent the hubristic death of his son Icarus.

ANSWER: Daedalus

11. A related phenomenon to this one is *gegenschein*, which is the German word for "counter-glow." For 10 points each:

[10] Name this faint optical phenomenon, caused by solar scattering, in which a triangular shaped region of the sky is illuminated immediately before dawn or after dusk.

ANSWER: zodiacal light [or zodiac light]

[10] The zodiacal light is produced by sunlight scattering off of this collection of particulate. Individual particles of them becomes a micrometeor when they enter the earth's atmosphere.

ANSWER: interplanetary dust

[10] The cosmic dust in the Solar System vastly increased after this July 1994 event. This event was observed by the Galileo telescope from a distance of 1.5 AU and resulted in sextillions of Joules of energy being released.

ANSWER: the impact of Shoemaker-Levy 9 with Jupiter [or obvious equivalents, such as Shoemaker-Levy 9 colliding with Jupiter; do not accept or prompt on the "(tidal) breakup of Shoemaker-Levy 9" or obvious equivalents, such as "the dissolution of Shoemaker-Levy 9"]

12. The namesake of this case was convicted of violating a criminal syndicalism statute for advocating racial strife during a televised KKK rally, for 10 points each:

[10] Identify this 1969 Supreme Court case that set forth a test allowing the government to punish speech as illegal only if it is "directed to inciting or producing imminent lawless action" and is "likely to incite or produce such action."

ANSWER: Brandenburg v. Ohio

[10] *Brandenburg's* test was much more protective of speech than *Schenck v. U.S.*, where Oliver Wendell Holmes wrote that the proper legal question was whether the words used and the circumstances were "of such a nature as to create" *this kind* of danger.

ANSWER: "clear and present danger"

[10] Before *Schenck*, this was the primary test to determine whether speech could be criminalized. It's often said that Lincoln invoked it during the trial of Clement Vallandigham, but it was first officially formulated in the 1907 case *Patterson v. Colorado* and then used in the later cases of *Whitney v. California* and *Abrams v. U.S.*

ANSWER: "bad tendency" test

13. The final city usually included in this group became the site of the Italiote League, which was eventually destroyed at the Battle of the Elleporus. For 10 points each:

[10] Give this term which refers to a group of colonies along the coast of southern Italy, starting with the Euboean colonies of Cumae and Pithecusae around 750 BC and ending with Heraclea circa 433 BC.

ANSWER: Magna Graecia [or Megale Hellas; prompt on “Greater Greece”]

[10] This Athenian colony of Magna Graecia, partly built on top of Sybaris, was the place where Herodotus retired and the place where the orator Lysias migrated.

ANSWER: Thurii [or Thurium; or Copiae]

[10] The towns of Magna Graecia were overrun by Dionysius the Elder, a tyrant of this city in Sicily which was home to the mathematician Archimedes.

ANSWER: Syracuse [or Siracusa]

14. The title character of one of this man’s novels is a tradesman who abandons his mistress Diodata to marry into the Trao family of decadent nobles. For 10 points each:

[10] Name this author of *Mastro-don Gesualdo* who wrote about ‘Ntoni, the patriarch of a family of fishermen, in *The House by the Medlar Tree*.

ANSWER: Giovanni Verga [or Giovanni Carmelo Verga]

[10] Giovanni Verga set both of those novels on this island, his place of birth. Luigi Pirandello was also born here.

ANSWER: Sicily

[10] This other Sicilian author wrote many gloomy crime novels about the widespread corruption caused by the Mafia, including *To Each His Own* and *The Day of the Owl*. He criticized the inaction of Giulio Andreotti in his nonfiction book *The Moro Affair*.

ANSWER: Leonardo Sciascia

15. In this book, the author writes that “the more you try to avoid suffering, the more you suffer, because smaller and more insignificant things begin to torture you.” For 10 points each:

[10] Name this autobiographical work which was partly written at Gethsemani Abbey in Kentucky by a man who was later called “The Man in the Sycamore Tree.”

ANSWER: The Seven Storey Mountain

[10] Thomas Merton, the author of *Seven Storey Mountain*, was a member of this order, originally formed to oppose the relaxed Cistercian practices observed by Abbot Armand de Rancé in 17th century Normandy.

ANSWER: Trappists or Trappism or Trappistines [or OCSO; or Order of Cistercians of the Strict Observance]

[10] Trappist monks, like many others, follow the rule of this saint of Nursia who wrote said rule at his monastery of Monte Cassino in the early 6th century.

ANSWER: St. Benedict of Nursia/Norcia

16. Name these artists who were inspired by Johann Wolfgang von Goethe, for 10 points each.

[10] During his Italian journey, this neoclassicist made a celebrated portrait of the author when he was the age of 38. Another of this Swiss artist’s paintings depicts Cornelia pointing to her children as her jewels.

ANSWER: Angelica Kauffmann [or Maria Anna Angelica Kauffmann]

[10] This original leader of the Nazarene painters illustrated Goethe’s play *Gotz von Berlichingen*. His medievalist style can be seen in *The entry of Emperor Rudolf of Hapsburg into Basel in 1273*.

ANSWER: Franz Pfoor

[10] This artist’s painting *Light and Color* depicts the morning after the Great Flood using a palette inspired by Goethe’s *Theory of Colors*. His depictions of the sea include *Dido Building Carthage* and *The Fighting Temeraire*.

ANSWER: J.M.W. Turner [or Joseph Mallord William Turner]

17. It opens with Aesop providing commentary on a spider fighting a bee, before the title event occurs. For 10 points each:  
[10] Identify this satire that was originally appended, along with “The Mechanical Operation of the Spirit”, to another of its author’s works. It includes a humorous scene in which Vergil meets his translator John Dryden, who wears a helmet that is nine times too big for him.

ANSWER: The **Battle of the Books**

[10] *The Battle of the Books* appears as a prolegomena to this other work by Jonathan Swift, in which Jack, Peter, and Martin satirically represent the various branches of Christianity.

ANSWER: A **Tale of a Tub**

[10] This Canadian critic called *A Tale of a Tub* a “parody of the book as a book” in his study of James Joyce, Gustave Flaubert and Samuel Beckett, *The Stoic Comedians*. He also wrote *The Pound Era* and a book-length study of James Joyce’s masterpiece titled *Ulysses*.

ANSWER: Hugh **Kenner** [or William Hugh **Kenner**]

18. This man’s head chef, Monsieur Mouy, created the pudding named after him by mixing chestnut puree, candied fruit, currants, and white raisins. For 10 points each:

[10] Name this count who served as Russian foreign minister from 1816 all the way through 1856, in which role he formally led the Russian delegation to the Congress of Vienna.

ANSWER: Karl **Nesselrode** [or Count Karl Robert **Nesselrode**; or Charles de **Nesselrode**]

[10] Nesselrode sent troops to Austria to deal with this revolutionary journalist, who led the Hungarian Revolution of 1848 and set himself up as a democratic president for a brief time.

ANSWER: Lajos **Kossuth**

[10] In October 1853, Nesselrode made a declaration that Russia would not take offensive action, but just a month later, Russian warships under Admiral Nakhimov sank the Ottoman patrol fleet at this Black Sea port.

ANSWER: **Sinope**

19. This thinker was put on trial for obscenity after he published an article purporting to be a “Great Encyclopedia of Homosexuality” entitled “Three Billion Perverts.” For 10 points each:

[10] Name this psychiatrist and philosopher who outlined an “ethico-aesthetic paradigm” in his final book, *Chaosmosis*. With a colleague who wasn’t a psychiatrist, he developed a “meta-method” that improves on psychoanalysis called schizoanalysis.

ANSWER: Felix **Guattari** [or Pierre-Felix **Guattari**]

[10] Felix Guattari’s method of schizoanalysis was developed to improve upon the work of this French psychiatrist, who authored a seminar on Poe’s *The Purloined Letter* and the writings found in *Écrits*.

ANSWER: Jacques **Lacan** [or Jacques Marie Émile **Lacan**]

[10] In this second volume of *Capitalism and Schizophrenia*, Felix Guattari and Giles Deleuze propose geophilosophy to study the earth and its art that are leveled by the title objects.

ANSWER: A **Thousand Plateaus** [or **Mille Plateaux**]

20. This equation is derived by considering the total differential of Gibbs free energy and using the chain rule to evaluate the temperature derivative of Gibbs free energy divided by temperature. For 10 points each:

[10] Name this equation which states that the derivative of G over T with respect to T at constant pressure equals minus enthalpy over temperature squared.

ANSWER: **Gibbs-Helmholtz** equation

[10] The Gibbs-Helmholtz equation can be used to derive this equation, which gives the temperature dependence of the equilibrium constant.

ANSWER: **van’t Hoff** equation

[10] The Gibbs-Helmholtz equation can be used to derive the van’t Hoff equation because the change in Gibbs free energy of a reaction equals minus RT times this function of the equilibrium constant.

ANSWER: natural **log** [or **ln**]