

OOT 2019: A Pope for Every Packet

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THE ANSWER TO THE LAST TOSS-UP SHOULD HAVE BEEN: **ketones**

Packet 5

Toss-ups:

1. A thinker from this country saw grammar as ‘the necessary preliminary to logic’. A philosopher from this country, which was home to Vic Dudman, argued against ‘hyperseparation’ between humans and nature in their work, *Feminism and the Mastery of Nature*. A work from this country was inspired by the starvation of Bengali refugees and employs an example of child drowning in a shallow pond to argue that we must help the global poor. A philosopher from this country used the concept of ‘marginal cases’ to argue that animals should be given equal consideration in *Animal Liberation*. For 10 points, name this country, the birthplace of Val Plumwood and Peter Singer, who still teaches at its University of Melbourne.

ANSWER: **Australia** <GDC>

2. Gowrisankaran and Holmes found that if markets have elastic demand, it is more likely that this scenario will arise. If a good is durable, the Coase conjecture argues that a low price may pertain in this scenario. When a market can be described in this way, the Lerner index is equal to one. The markup generated in this scenario can be calculated as ‘1 over 1 minus 1 over the elasticity’. This scenario can arise naturally when the minimum efficient scale in a market is large relative to market size. Natural forms of these entities may include the electricity grid and water supply. For 10 points, name this type of market, where only one firm is present.

ANSWER: **monopoly** <GDC>

3. Mary Maverick created possibly the first-ever image of this place. Andres Barcenas and Anselmo Bergaras were arrested as spies when trying to bring news of a battle here, only to have their report confirmed by Susannah Dickinson. That revelation prompted a government to flee east from Gonzales in the Runaway Scrape. One of the first people to die at this site was its commander William B. Travis, who supposedly drew a line in the sand to encourage his men to fight to the death, and later the victor of the Battle of San Jacinto told another general that he ‘should have remembered’ this place. For 10 points, name this Spanish mission in San Antonio where about 200 Texians were killed by the Mexican army under Santa Anna during the Texas War of Independence.

ANSWER: the **Alamo** <CJ>

4. A single one of these objects is visible on a windowsill in the background of Henry Wallis’s *The Death of Chatterton*. An image of one of these objects symbolising St Agnes’ Eve can be seen inside a shield on a stained glass window in John Everett Millais’ *Mariana*. One of these objects carried by a dove references the manner of Elizabeth Siddal’s death in Rossetti’s *Beata Beatrix*. Because they had been represented so realistically, a professor of science took his students to study some of these objects in a painting for which Siddal modelled in a bathtub, holding many types of these objects in a portrayal of the title Shakespeare character. Featuring heavily in Millais’ *Ophelia*, for 10 points, name this botanical object with petals.

ANSWER: **flowers** [accept different types like **roses**, **snowdrops**, **poppies**; accept ‘**plant**’ or ‘plant **pot**’ before ‘St Agnes’ Eve’ and prompt on ‘**plant**’ thereafter] <IB>

5. M-tropic strains of this pathogen bind the co-receptor C·C·R·5, whilst T-tropic strains use C·X·C·R·4 coreceptor for host entry. Infection with this pathogen is associated with progressive multifocal leukoencephalopathy caused by

the JC virus, and pneumonia caused by *Pneumocystis jirovecii*. Strain 2 is thought to be closely related to a pathogen of the sooty mangabey, whilst Strain 1 of this virus is thought to have derived from a pathogen of chimpanzees. Both trophic types of this virus enter cells when a glycoprotein binds the CD4 receptor of T cells. For 10 points name this retrovirus which infects T cells and compromises the immune system; the causative agent of AIDS.

ANSWER: Human Immunodeficiency Virus [anti-prompt on Acquired Immuno-Deficiency Syndrome before mention] <LC>

6. A poem in this language is most often translated as ending with the line 'her blood, his tears, are mingled on the sands'. A poem written in this language begins with the claim that people have disappeared but 'one can hear the echoes of people's words'. The narrator of a poem in this language says that they 'cannot read my books for grief' after a battle. A poem in this language, which was used to write a poem known as the *Deer Park*, features the line 'forever we will keep this unfetter friendship / Till we meet again far in the Milky Way' in the poem 'Drinking Alone by Moonlight'. For 10 points, name this language used by Wang Wei, Du Fu and Li Po.

ANSWER: classical Chinese <GDC>

7. Cosmin Iorga devised a compartment based method of analysing these substances. Paschen's law describes how the namesake strength of one type of these substances changes with pressure. The Curie-von Schweidler law, which reduces to the Debye [deb-EYE] model in some limits, is a model for these substances' namesake relaxation. Anisotropy of these substances' namesake constant leads to birefringence, while dispersion occurs if it is complex. Displacement currents occur in these substances due to the polarisation changing. For 10 points, name these substances, into which electric fields can penetrate because there are no free charges.

ANSWER: dielectrics [accept insulators] <LW>

8. A German altered version of this play ends when its main character is fed a macaroon, swallows, and says 'The Miracle.' One character in this play was inspired by Laura Kieler, and George Bernard Shaw claimed that that character's revolt is 'the end of a chapter of human history'. This play's ending was changed in a UK adaptation called *Breaking a Butterfly*. A man teases his wife he calls 'squirrel' for spending money on Christmas gifts in this play. The widow Christine takes Krogstad's banking job in this play, prompting him to blackmail the protagonist who later dances the tarantella to distract her husband from reading a letter. For 10 points, name this play centred on Nora Helmer, a work by Henrik Ibsen.

ANSWER: *A Doll's House* [accept *A Doll House*, or *Et dukkehjem*] <DC>

9. A character who works in one of these institutions claims that Kipling is 'not even a type, he's a type of types' in one novel. Another character who works in one of these institutions has his relationship with his daughter Grace sabotaged by his neurotic wife Edith. A third character that works in one of these institutions visits 'the most photographed barn in America' and learns German from Howard Dunlap. That character who works in one of these institutions, which is also the setting of John Williams' *Stoner*, shoots a man who had been sleeping with his wife and giving her a drug known as Dylar. For 10 points, Jack Gladney from *White Noise* works in the Hitler Studies department of what kind of educational institution?

ANSWER: university [or college] <GDC>

10. After they was removed from their position, this commander probably spent much of their time at their family estates at a place called 'Dug Woodland' in Thrace. That fall from grace was due to Brasidas' success in taking Amphipolis before this commander, who noted in one text that their subsequent exile meant they 'had leisure to observe affairs'. This man's probable grandfather of the same name succeeded Cimon [KEE-moan] as the leader of the conservative faction of Pericles, but in his only surviving work this author, though critical of demagogues, notably praises Pericles as the 'first man' of Athens after describing his death in a plague. For 10 points, name this Athenian general and author of the unfinished *History of the Peloponnesian War*.

ANSWER: Thucydides <OSC>

11. Fatou's lemma is the statement that this operation and the limit inferior can be exchanged. One form of this operation is named for Berezin and operates on Grassmann variables. That form of this operation is equivalent to differentiation. Exchanging the order in which two of these operations are done is the subject of Fubini's theorem. Applying this operation to the product of 'f of x' and 'g of x minus y' is a convolution. When changing variables whilst performing this operation one must multiply by the Jacobian determinant of the transformation. The trapezium rule can be used to approximate the definite type of this operation. For 10 points, name this operation on functions that returns the area under the graph.

ANSWER: **integration** (accept specific forms of integration such as **Lebesgue integration**, or **Berezin integration**. Accept answers containing the word integral along with domain information eg **double integrals**, **multiple integrals** or answers in the form **the integral from 'a' to 'b'**) <JR>

12. The visit of this polity's third ruler to Italy is commemorated by Romanino's extensive frescoes at Malapaga Castle, while Philippa of Lancaster acted as its regent during its first ruler's pilgrimage to Jerusalem. It's not Bohemia, but peasants in this polity successfully used wagons as defensive barriers at the Battle of St Jorgen's [YOR-gens] Hill, opposing this polity's Bark King, Christopher of Bavaria. This polity, devised by Margaret I and confirmed by her adoption of her nephew Bogusław [Bog-u-slav] was dissolved after the election of Gustav Vasa. Named after the site of Eric of Pomerania's 1397 triple coronation, for 10 points name this political entity formed out of the kingdoms of Sweden, Norway, and Denmark.

ANSWER: **Kalmar Union** [prompt on **Sweden, Denmark, Norway**] <AP>

13. Charles Hartshorne argued that this concept is 'at odds with the disorderliness in nature'. Hoffman and Rosenkrantz analysed this concept in terms of unrestricted repeatability. An example of a being that can only scratch their ear called McEar is a counterexample used to challenge a definition of this concept. Thomas Aquinas considered a triangle of more than 180 degrees when analysing this concept. A paradox named for this concept is often solved by claiming it does not apply to logically impossible actions and is often explained by considering whether a particular being could create a stone that it is not possible for it to lift. For 10 points, name this attribute commonly ascribed to the Christian God, the property of being all-powerful.

ANSWER: **omnipotence** <GDC>

14. During a 1950 general strike in this country, workers stormed railway stations and clashed with the so-called 'Olah battalions'. Since World War II, this nation's government has been divided between its Social Democratic and People's parties in the Proporz system. One politician from this country came under scrutiny for events that occurred at Jasenovac, a war crimes controversy that complicated his election to this country's presidency after Javier Pérez de Cuéllar succeeded him as UN Secretary General. An earlier fascist leader of this country issued the First of May Constitution and was assassinated in the July Putsch. Kurt Waldheim and Engelbert Dollfuss governed, for 10 points, what Central European country that was annexed by its neighbor in the Anschluss?

ANSWER: **Austria** [accept **Österreich**] <CJ>

15. One of these structures celebrating the centenary of Brigham Young University is one of only two Mormon examples. Another of these structures features a series of hexagonal panels including a depiction of a doctor inspecting urine and the Creation of Adam, and a set of lozenges depicting the Seven Virtues. That polychrome example of these structures was planned by Giotto, while one in Siena called 'of the Eater' is the model for another at the University of Birmingham, called 'Old Joe'. For 10 points, name this kind of structure designed to hold sets of musical instruments, such as one at Westminster recently renamed after Elizabeth II.

ANSWER: **bell tower** [accept **belfry**, **campanile**; accept **clock tower**] <AP>

16. One album by this band, released a month after the 1997 general election, was likened by Dorian Lynskey to Banquo's ghost, returning to warn that 'things can only get worse'. The staircase of St Catherine's Court in Bath provided the heavy reverberation for a song by this band, which ends 'we hope / that you choke / that you choke'.

This band described tracks like 'Faust Arp' on one album as conveying 'the fucking panic of realising you're going to die!'; that album was released as a pay-as-you-want download in 2007. The lyrics 'you don't remember, you don't remember my name' introduce a distorted guitar riff in this band's song, 'Paranoid Android'. For 10 points, name this band, whose albums include *Amnesia*, *Kid A*, and *OK Computer*.

ANSWER: **Radiohead** <BP>

17. A city on this river is home to a 'conservation club' with the largest independent library in the UK outside of London. That city on this river is also the location of a film studio which produced the film *Scar* and is called the Amber Film & Photography Collective. Two-story flats with doors to both flats being directly accessible from the street are named for this river. Between 1981 and 2007 the *Tuxedo Princess* operated as a floating nightclub on this river, which is spanned by the first rail and road bridge in the world, the High Level Bridge. This river also features a bridge nicknamed the 'winking eye', which is officially called the Gateshead Millennium Bridge. For 10 points, the city of Newcastle sits on which English river?

ANSWER: **Tyne** [accept **Tyneside**]

18. A piano sonata by a composer from this country begins with three block C-major chords in a 3-4 time signature before changing to a 2-4 time signature with a chord of A, C sharp, E flat, G. That composer also wrote the operas *Bomarzo* and *Beatrice Cenci* [CHEN-chi]. Another composer from this country composed pieces such as *Oblivion*, *Milonga Del Ángel* [mee-LON-ga del AN-hel], and *Zita* for the *bandoneón* [ban-don-ay-ON]. That compatriot of Alberto Ginastera [HEE-na-ste-ra] is most famous for initiating the 'nuevo' variant of a prominent music style in this country with his piece *Libertango* [lee-burr-TAN-go]. For 10 points, name this South American country, the birthplace of the composer Astor Piazzolla, who wrote *The Four Seasons of Buenos Aires*.

ANSWER: **Argentina** <FL>

19. The trimethyl form of this element is a hard Lewis acid that is found as a dimer. It's not titanium but this metal is found in an organic reagent used to methylenate carbonyls; that compound is Tebbe's reagent. A compound containing lithium, hydrogen and this element is a common reducing agent. This compound is converted to its trioxide with a large release of heat in a displacement reaction called the thermite reaction. This element is commonly extracted from its ore bauxite using electrolysis in the Hall process. Located directly below boron on the periodic table, for 10 points, name this P block metal with atomic number thirteen.

ANSWER: **aluminium** <JR>

20. A man nicknamed the Tortoise for his slow work features in a novel by this author which ends with the narrator looking at an office building which has replaced a bar he used to frequent. The protagonist of another novel by this author claims only to be trying to 'develop his control of the English language' after being caught reading a sentimental novel, and continues working at a conference even as his father is on his deathbed in another room. A painter reflects on life after World War Two in this author's *An Artist of the Floating World*, while in another of his novels a drive to visit Miss Kenton allows the protagonist to recall his time working for Lord Darlington. For 10 points, name this author who wrote about the butler Stevens in *The Remains of the Day*.

ANSWER: Kazuo **Ishiguro** <IB>

Bonuses:

1. One thinker claimed that any judgement on this concept should have 'universal validity' and this concept is not a 'concept of the object'. For 10 points each:

[10] Name this concept. According to one thinker judgements relating to this concept do not presuppose an end or 'Zweck' which an object satisfies.

ANSWER: **beauty**

[10] This German thinker's main work of aesthetics is *Critique of Judgement*, which is one of their critiques along with *Critique of Pure Reason*.

ANSWER: Immanuel **Kant**

[10] In a section of *The Critique of Judgement* entitled for the 'deduction' of this concept, Kant is sometimes read as arguing all objects are beautiful. 'A Social Critique of the Judgement of [this concept]' is the subtitle of *Distinction*, a work that assesses this concept by Pierre Bourdieu.

ANSWER: **taste** <GDC>

2. A charitable trust set up for the victims of this event was compelled to pay out £150,000 to assist in the removal of the structures which had caused it. For 10 points each:

[10] Name this 1966 event, in which 144 people died, most of whom were children attending Pantglas Junior School, which was destroyed in this event.

ANSWER: **Aberfan** disaster

[10] The Aberfan disaster was the result of the collapse of spoil heaps produced by this industry, having been saturated by heavy rain. Industrial action in 1973-4 of workers in this industry prompted the introduction of the Three Day Week.

ANSWER: **coal** mining [prompt on mining]

[10] Known as Old King Coal for their autocratic style, this head of the National Coal Board was criticised for their apparently callous response to the disaster. They would later chair a namesake report which led to the creation of the Health and Safety Executive.

ANSWER: Alfred 'Alf' **Robens** <AP>

3. There is one of these creatures. Now there are two. There are two what? For 10 points each:

[10] Name these invented bird-like creatures from a study by Jean Berko. They feature in an eponymous test, where having been told what an individual one is called, children are asked to supply the plural form.

ANSWER: **wugs**

[10] Both 'wug', as a stem, and the suffix '-s' to make it plural, are this type of linguistic unit, the smallest to convey meaning on their own.

ANSWER: **morpheme**

[10] This term is used to characterise morphological processes, such as adding -s for the plural, that can be applied easily and widely to create new forms, as opposed to obsolete morphemes like the -ling in 'duckling'. Another example would be adding -ness to an adjective in English to make a noun.

ANSWER: **productive** <EL>

4. Evidence for the giant-impact hypothesis for the formation of the moon include the similar orientations of the Earth's spin and the moon's orbit. For 10 points each:

[10] Name this planet which the Earth is hypothesised to have collided with about 4.5 billion years ago. It is hypothesised to have been about the size of Mars.

ANSWER: **Theia**

[10] One piece of evidence for the giant-impact hypothesis is the relatively small size of this part of the moon. In terrestrial planets and moons it is the innermost part and is often composed of iron.

ANSWER: the **core**

[10] The giant impact hypothesis suggests the existence of a second smaller moon, which would have eventually collided with the current moon, becoming “pancaked” onto its far side. That would explain why the far side of the moon is thicker, and thus has fewer of these features. These features are formed when lunar magma pierced through the crust forming dark patches.

ANSWER: **maria** [accept **mare** or any attempted pluralisation thereof; accept **seas**] <LW>

5. For 10 points each, name the following men in the life of Catherine the Great:

[10] This husband of Catherine was overthrown after ruling for only six months in 1672. Born a German prince, his inability to speak Russian made him unpopular, and his wife referred to him in her letters as both an ‘idiot’ and a ‘drunkard from Holstein’.

ANSWER: **Peter III** [prompt on **Peter**]

[10] This Cossack pretended to be Peter III in a 1773 rebellion described by Pushkin in a *History* of it. He captured Kazan before Alexander Suvorov defeated him and transported him to Moscow in a cage.

ANSWER: Yemelyan **Pugachev**

[10] This Russian count and victor at the Battle of Chesma made himself ‘the most popular man in Moscow’ by throwing lavish parties. When Catherine left him for another man, he spent over a million Dutch florins on a namesake diamond to try and win her back.

ANSWER: Count Grigory **Orlov** <CJ>

6. The Book of Invasions describes how the fifth group of settlers in one land supposedly brought the Stone of Destiny to this location. For 10 points each:

[10] Name this location of a Neolithic passage tomb called the ‘Mound of the Hostages’. This site in Meath is where that stone now stands in the ‘Royal Seat’.

ANSWER: the **Hill of Tara** [accept **Cnoc na Teamhrach Teamhair** or **Teamhair na Rí**]

[10] The *Cogad Gaedel re Gallaib* describes how High King Máel Sechnaill met this man on ‘the green of Tara’ to give up his crown. This man would later be killed at Clontarf fighting Máel Morda and the Vikings.

ANSWER: **Brian Boru** [accept **Brian Boramha**]

[10] The *Annals of the Four Masters* claims that in the year 123 five of these structures were discovered leading to Tara, which were meant to be wide enough for two chariots to pass. One of these which connected Dublin to Galway was built along the Esker Riada for much of its route.

ANSWER: **roads** [accept **slighe**] <OSC>

7. The title character of this opera rejects the ‘luck bags’ sold by the conjurers Zozetrick, Luddud, and Simon, arguing that it is such superstition which is holding her community back. For 10 points each:

[10] Name this opera, set in post-Civil-War Arkansas, which depicts the title woman rising to the leadership of her community of former slaves through her advocacy of literacy and education.

ANSWER: **Treemonisha**

[10] Not performed in full until 1972, *Treemonisha* [tree-mon-EE-sha] is an opera by this composer, who is most associated with ragtime, as in their piano works *The Entertainer* and the *Maple Leaf Rag*.

ANSWER: Scott **Joplin**

[10] In *Treemonisha*’s second act, Remus, dressed as the Devil, saves Treemonisha from this hazard, into which the conjurers want to push her as retaliation for her refusal of their goods.

ANSWER: **wasps’ nest** <AP>

8. This novel is often described as an inverted detective story or a whydunnit. For 10 points each:

[10] Name this novel, narrated by Richard Papen about the murder of ‘Bunny’ Corcoran. This novel is set in a small college in Vermont, with six protagonists who all study Classics.

ANSWER: *The **Secret History***

[10] *The Secret History* is a novel by this author, who more recently wrote about the protagonist Theo Decker in *The Goldfinch*.

ANSWER: Donna **Tartt**

[10] This multilingual intellectual dies near the end of *The Secret History*. Later, in a dream, the narrator asks this character if he is happy; this character replies 'Not particularly. But you're not very happy where you are, either'.

ANSWER: **Henry Winter** [Accept either underlined part] <AH>

9. The Verse of Wilayah supposedly refers to an incident where this figure performs *zakat* to a man while in *ruku*. For 10 points each:

[10] Name this figure who is supposedly the subject of the Verse of Announcement which tells of how Muhammad says that 'to whomsoever I am Mawla, [this figure] is also their Mawla'. This figure was killed by a Kharijite wielding a poisoned sword.

ANSWER: **Ali** [or **Ali** ibn Abi Talib; or **Ali** bin Abi Talib]

[10] Ali's *zakat* of giving a ring to the beggar in the Verse of Wilayah exemplifies one of the pillars of Islam, which commands performing this action.

ANSWER: giving **alms** [or giving to **charity**; accept obvious equivalents]

[10] The Verse of Announcement describes events that took place at this location, a pond between Mecca and Medina.

ANSWER: **Ghadir Khumm** <GDC>

10. The second pandemic of Dutch Elm Disease began in the 1970s and was caused by *Ophiostoma novo-ulmi* [Off-ee-OH-stoma novo ul-me], likely following hybridisation. For 10 points each, answer these questions on Dutch Elm Disease:

[10] The agent of Dutch Elm Disease is in this kingdom which contains other phytopathogens, such as *Puccinia graminis*, the agent of wheat stem rust, as well as *Saccharomyces cerevisiae*, brewer's yeast.

ANSWER: **fungi** [anti-prompt on 'ascomycota/ascomycetes', 'basidiomycetes/ basidomycota' or another less inclusive fungal group. If unsure, anti-prompt with 'I need the kingdom'.]

[10] The symptoms of Dutch Elm Disease are a consequence of the plant reacting to infection by blocking this type of tissue with parenchyme [PA-ren-kyme] outgrowths termed tylose. This tissue is composed of dead lignified cells.

ANSWER: **xylem** vessels [prompt on vascular tissue or equivalent; do NOT accept 'phloem'; prompt on tracheid]

[10] Dutch Elm Disease is predominantly transmitted by *Scolytus* vectors in this order of insects characterised by a hard elytra, which also includes the eusocial *Austroplatypus incompertus* which farm ambrosia fungi growing on the xylem.

ANSWER: **beetle** or **Coleoptera** <LC>

11. This process can be interrupted by groynes, though doing so can actually accelerate beach erosion. For 10 points each:

[10] Give this name of the process in which sediment is moved along a coast by waves approaching the shore at an angle, with the backwash draining perpendicular to the shore.

ANSWER: **longshore drift**

[10] When the shoreline changes direction, such as at the entrances to coves, these landforms can develop, as the longshore current can no longer carry its load of sediment.

ANSWER: **spits**

[10] Material just beyond the highest level of the sea, and so not washed away by backwash, forms a bank given this name. It shares its name with man-made level spaces created between two slopes.

ANSWER: **berm** <AP>

12. A 'neighbourhood Swede' in this story is identified as August Strindberg, whose novel *Inferno* had made a 'strange yet sincere and deep' impression on the author ten years earlier. For 10 points each:

[10] Name this story in which Boku is plagued by ominous signs such as reappearing raincoats as well as the title objects. Boku's brother-in-law commits suicide in this story, pre-figuring the author's own suicide a few months after writing it.

ANSWER: '**Cogwheels**' [or '**Haguruma**']

[10] Suicide also turns out to be the answer to the mystery of how Takehiro died in this other story by the author of 'Cogwheels'. This story involves a series of conflicting accounts about Takehiro's death after his body is found by a woodcutter.

ANSWER: '**In a Grove**' [or '**Yabu no Naka**']

[10] Miyamoto Kenji discussed the impact of this author's 1927 suicide on bourgeois intellectualism in his landmark essay *The Literature of Decline*. This Japanese author wrote 'Cogwheels' and 'In a Grove' as well as 'Rashomon'.

ANSWER: Ryunosuke **Akutagawa** <IB>

13. This condition's namesake equation states that the product of the concentrations of the products raised to their stoichiometric values divided by the product of the concentrations of the products raised to their stoichiometric values is equal to this condition's namesake constant. For 10 points each:

[10] Name this condition. For a system at constant temperature and pressure, Gibbs free energy is maximised when this condition holds.

ANSWER: **equilibrium**

[10] This principle states that when a system in equilibrium is subjected to a change in conditions, the position of equilibrium will shift to oppose the change.

ANSWER: **Le Chatelier's** principle [accept **Braun's** principle; prompt on **equilibrium law**]

[10] This quantity is the total amount of work that can be extracted from a system as it moves towards equilibrium. Minimising this quantity is equivalent to maximising entropy. For a system at constant temperature and pressure, this quantity is equal to the Gibbs free energy.

ANSWER: **availability** or **exergy** [accept **available energy** or **exergic energy**] <LW>

14. In this play, a famous Spanish courtesan named Angellica charges a thousand crowns a month for her services, but Willmore, the title character, somehow manages to charm her into forgoing the fee. For 10 points each:

[10] Name this 1677 play, a revision of Thomas Killigrew's *Thomaso*, set in Naples at carnival-time. It features Blunt being duped out of all of his belongings, Florinda's courtship with Don Pedro, and Hellena's rejection of the convent.

ANSWER: *The Rover* [by Aphra Behn]

[10] *The Rover* was an extremely popular example of Restoration comedy. This other dramatist wrote examples of 'softer' Restoration comedy, such as *Love for Love*, and a play which features a famous 'proviso scene' between Mirabell and Millamant.

ANSWER: William **Congreve**

[10] This term for a stock character in Restoration comedy comes from a word for 'hellraiser', and describes a man inclined to immoral behaviour, particularly womanising. This character's 'Progress' is tracked in a series of eight paintings by William Hogarth.

ANSWER: **rake** <DC>

15. Vybz ['vibes'] Kartel wrote a song which claims everyone is asking the singer where they got their shoes made by this company. For 10 points each:

[10] Name this company, which produces a shoe that has been a popular Jamaican cultural touchstone since the 1970s. The artist John Dillinger wrote about buying this brand of shoe from Baracatt's in the song "CB200".

ANSWER: **Clarks**

[10] Clarks shoes are a favourite of people from this subculture that arose in Jamaica during the 1970s, who originally dressed in sharp suits and wore trilbies.

ANSWER: **rude boy** [do not accept "yardie"]

[10] Rude boy culture centred on the Trench Town area of this Jamaican city, the country's capital.

ANSWER: **Kingston** <GDC>

16. In a story by this author, Victor declines to join Nina and her husband Ferdinand for a car journey, and later learns that they have died in a crash. For 10 points each:

[10] Name this author, whose story 'Signs and Symbols' ends with an unnamed couple's telephone ominously ringing a third time after they have already received two misdials from a girl asking for Charlie.

ANSWER: Vladimir **Nabokov**

[10] In Nabokov's story 'Signs and Symbols', the main couple tries to take a set of fruit jellies to their son in one of these locations. In a novel, a character meets Settembrini and Naphta in one of these locations, after going there to visit his cousin Joachim.

ANSWER: a **sanatorium** [accept an **asylum** or a **psychiatric hospital**; prompt on **hospital**]

[10] This German author wrote about Hans Castorp visiting a sanatorium in the Alps in his novel *The Magic Mountain*.

ANSWER: Thomas **Mann** <IB>

17. For 10 points each, name the following pre-Columbian Mesoamerican cities:

[10] Residents of this city, the center of the Aztec civilization, and its sister Tlatelolco used floating islands called *chinampas* to grow crops in the brackish water of Lake Texcoco.

ANSWER: **Tenochtitlan**

[10] The Florentine Codex recorded that the Toltecs built this other city in the Valley of Mexico, though scholars now dispute that account of its origin. Human sacrifices probably took place in honour of this city's 'Great Goddess' at its Pyramid of the Moon.

ANSWER: **Teotihuacan**

[10] The ruler Spearthrower Owl of Teotihuacan conquered this Mayan city in the fourth century, allowing for the rise of Chichén Itzá in the Postclassic period. This site is located in present-day Guatemala near El Zotz and its colony of Dos Pilas.

ANSWER: **Tikal** <CJ>

18. The Proto-Corinthian *skyphos* is an example of one of these items. For 10 points each:

[10] Name these archaeological objects, which could be decorated in red-figure or black-figure style. Their black-figure style is particularly characteristic of the Archaic period.

ANSWER: **pots** [or **pottery**; accept **jars**, **cups** or other obvious equivalents; accept specific types such as drinking **cups**, storage **jars** etc.]

[10] Another type of Archaic sculpture is these statues, which are near life-size frontal statues of young men or women. Examples are the Dedication of Nikandre and two matching examples of Cleobis and Biton at Delphi.

ANSWER: **kouroi** or **korai** [accept singular forms **kouros** or **kore**]

[10] A kouros at this California art museum is suspected of being a forgery. From 2005 until 2007, this museum was forced to return antiquities to Italy and Greece as a result of its dubious acquisition practices, although it has refused to return the Victorious Youth.

ANSWER: The J. Paul **Getty** Museum [accept **Getty** Center or **Getty** Villa] <AH>

19. Fine structure of atomic energy levels is caused by the interaction of this quantity with the orbital angular momentum. For 10 points each:

[10] Name this quantity. It is often described as a particle's intrinsic angular momentum, and is equal to the difference between total angular momentum and orbital angular momentum. This quantity for an electron can be up or down.

ANSWER: **spin** angular moment

[10] This effect occurs when an atom is placed in an external magnetic field, such that the interaction with the external field is much weaker than the spin-orbit interaction. The anomalous form of this effect occurs when the total spin is not equal to zero and was one of the pieces of evidence for spin.

ANSWER: **Zeeman** effect

[10] When calculating the energy change due to the Zeeman effect, the energy change is equal to an effective g factor times the Bohr magneton times the external magnetic field strength times the orbital magnetic quantum number. The g-factor in that situation is named for this physicist, who also names a formula for the fine structure splitting in alkali metals.

ANSWER: Alfred **Landé** [accept **Lande g factor** etc] <LW>

20. This conductor began their professional career convening a choir to perform Monteverdi's Vespers of 1610 in the chapel of King's College, Cambridge. For 10 points each:

[10] Name this conductor of the Monteverdi Choir and the English Baroque Soloists, an advocate of historically informed performance and the use of period instruments.

ANSWER: John Eliot **Gardiner**

[10] The members of this family of stringed instruments were the main ones used in Renaissance and Baroque music. Instruments in this family, in contrast to the family most common today, have sloping shoulders, five or more strings, and are tuned in fourths rather than fifths.

ANSWER: **viola da gamba** or **viol**

[10] Among the period recordings of Gardiner's Monteverdi Choir is the album *Vigilate!* Consisting of music from English Catholic composers, its title piece is by this student of Thomas Tallis, who also wrote *My Ladye Nevells Booke*.

ANSWER: William **Byrd** <AP>