

ScotBowl 2019

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Packet 4: Trash just randomly floating around

1. “The real aestus, the awen of the Welsh Bards, the divinus afflatus that transports the poet beyond the limits of sublunary things.” What mathematical objects did Peter Guthrie Tait bestow these epithets upon? A member of their namesake society, he claimed that Alexander McAuley managed to “snatch up the magnificent weapon which Hamilton tenders us all” when he used this extension of the complex numbers in his physics research.

ANSWER: **quaternions** <VB>

2. Translated by Marc Blitzstein from the German original, what song was banned by the BBC over concerns that it incited gang violence? Used to introduce the main character of Brecht and Weill’s *Threepenny Opera*, its opening lines are “Oh the shark, babe / Has such teeth, dear / And he shows them / Pearly White”. Popularised by Louis Armstrong, its 1959 cover by Bobby Darin was named the “best song ever made” by Simon Cowell.

ANSWER: **Mack the Knife** (do not accept “Die Moritat von Mackie Messer”) <RCH>

3. An alternative to this act involves the participant standing under a cold waterfall while chanting, called *misogi*. Water and salt are often used to rinse the face and hands during this act. What is this act, performed at the beginning of all Shinto religious ceremonies as a ritual to cleanse the shrine of any evil, pollution, or sins before any of the worshippers may make offerings to the kami, or spirits?

ANSWER: **Harae** (or **Harai** or **O-harai**) <JW>

4. The company that on the orders of Catherine II created approximately a thousand pieces each bearing an image of a green frog was named after whom? Credited with inventing free delivery, “buy one, get one free”, and illustrated catalogues, he was the creator of a medallion inscribed with the phrase “Am I Not a Man And a Brother?” He is perhaps best remembered for his improvements on Thomas Whieldon’s technology to produce lead-glazed “creamware”.

ANSWER: Josiah **Wedgwood** <VB>

5. Two F minims, a crotchet rest, a crotchet G and two E minims open an instance of what slow dance in triple meter that probably originated in South America? Examples include the second movement of Grieg’s *Holberg Suite*, the 25th *Goldberg* variation, and the fourth movement of the keyboard suite in D minor by Handel.

ANSWER: **sarabande** <RCH>

6. “You are a god and never have I heard anything more divine” is one of the replies to the demon who explains what philosophical idea in a work of 1882? *Amor fati* is proposed as a way of embracing this concept, and it is first mentioned in aphorism 341 of *The Gay Science* by Friedrich Nietzsche. It is contrasted with lightness of being in a novel by Milan Kundera.

ANSWER: **eternal return** (or **eternal recurrence**, do not accept or prompt on “eternity”) <VB>

7. Motoo Kimura's theory posits that on a molecular level most differences between species are explained by what phenomenon acting on neutral mutations? Its absence is assumed in the Hardy-Weinberg equilibrium, and it underlies the bottleneck effect and the founder effect, in which reduced population size causes dramatic changes in allele frequencies.

ANSWER: **genetic drift** <VB>

8. Robert C Allen argues that the invention of what device shows that the Industrial Revolution happened in England due to pre-existing high wages? Despite them being destroyed in the first two villages they were built in, by 1788 there were over 20,000 of them throughout the country. Robert 'Parsley' Peel supported its inventor James Hargreaves for three years while the machine, which enabled one weaver to work many threads at once, was perfected.

ANSWER: **Spinning Jenny** <RCH>

9. Theories that admit elimination of what objects include Presburger arithmetic and dense linear orders? These constructors bind variables, and can come in existential or universal types, typically symbolised by a backwards capital E and an upside down capital A, respectively. These language elements include expressions such as 'there exists' and 'for all'.

ANSWER: **quantifiers** <MB>

10. De Selby's theory that those who ride bicycles slowly become like bicycles themselves appears in what 1967 Irish novel? The narrator journeys through purgatory after being murdered by Divney on a pretence to rob Mathers. The mysterious lawman Fox, who completes a trio with Sergeant Pluck and Policeman MacCruiskeen, titles the novel, written by Flann O'Brien.

ANSWER: *The **Third Policeman*** <MB>

11. Which ancient King commanded the right wing of his father's army at Chaeronea? After ascending to the throne, following his father's assassination, this man would go on to acquire the titles: Hegemon of the Hellenic League; Pharaoh of Egypt; King of Persia; and Lord of Asia. He would also go on to found at least 20 cities which bore his name, most notably one in Egypt.

ANSWER: **Alexander the Great** (or **Alexander III of Macedon**. Prompt on Alexander or Alexander of Macedon) <JW>

12. Scott Walker's *My Death*, Stephen Sondheim's *The Ballad of Sweeney Todd*, Wendy Carlos and Rachel Elkind's opening for *The Shining*, and the *Songe d'une nuit du Sabbat* movement of Hector Berlioz's *Symphonie Fantastique* all quote the plainchant melody of which Latin hymn? Written in trochaic metre and describing the Last Judgement, its name means "day of wrath."

ANSWER: **Dies Irae** (prompt on anything involving the Requiem or Funeral Mass) <MB>

13. Factors as diverse as deindustrialisation, overcrowding, and higher rates of child abuse have been used to explain the fact that at every social grade, residents of which UK city die younger than those in similar cities such as Manchester and Liverpool? Poor city planning throughout the 1960s, 70s and 80s, colder winters, and religious sectarianism have also been proposed as explanations of this city's namesake 'effect'.

ANSWER: **Glasgow** <CH>

14. 'By making a bath for me by the side of a river, making a curved, slatted roof over the tub, and thatching that well and without leaving any gaps. And bringing a buck,' he continued 'and putting it next to the tub, and me putting one of my feet on the buck's back, and the other one on the side of the tub.'

Whoever would strike me [while I am] like that would bring about my death.' Which figure of Welsh mythology says these words, foolishly revealing how he could be killed?

ANSWER: **Lleu Llaw Gyffes** [hlay hlou gafes] <JW>

15. One poem in this form written by Hendrik Doeff begins “lend me your arms / fast as thunderbolts”. R.H. Blyth wrote one of these about a sasanqua flower, and Jack Kerouac wrote one about a sparrow’s nest. What are these poems that traditionally contain a seasonal reference and a cutting word, called *kigo* and *kireji*, respectively? The lines “An old pond / a frog jumps in” begin a famous poem of this form consisting of three groups of 17 *on* by Matsuo Bashō.

ANSWER: **haiku** (accept **hokku**) <MB>

16. Despite the Judiciary committee describing it as “on borrowed time,” in 2016 the Scottish Parliament voted 80 to 28 to retain which concept? Invoked by Arlen Specter during the impeachment of Bill Clinton, it was christened by the then sheriff of Selkirk, Walter Scott, as “The Bastard Verdict”. Roughly 1% of decisions in all cases, it is the verdict in 20% of trials for sexual crimes.

ANSWER: **Not Proven** (accept **bastard** verdict before read) <RCH>

17. Consisting of jazz records played on a broken turntable, *An Empty Bliss Beyond This World* is a 2011 concept album about Alzheimer’s disease by which musician? He shares his stage name with a 1960 play during which Davies claims his papers are in Sidcup and is offered the titular job by Mick, which was the first commercial success of Harold Pinter.

ANSWER: The **Caretaker** <MB>

18. In their various stints with the WWE, which Hall of Famer has kayfabe bought out Monday Night Raw and defeated Vince McMahon in a “hair vs. hair” match in which the loser had their head shaved? On one episode of Raw, an impersonator of this man defeated a fictional Rosie O’Donnell before comically losing his wig. This man appointed wrestling impresario Linda McMahon as Chief Administrator of the Small Business Administration in 2017.

ANSWER: President Donald J. **Trump** <CH>

19. The following occurred during which type of event: the Lena massacre of 1912, about which the Tsarist Interior minister said “Thus it has always been and thus it always will be”; the Marikana massacre of 2012 which was the deadliest incident involving South African Police since 1976; the Tonypandy riots of 1910; and the Battle of Orgreave in 1984?

ANSWER: **miners’ strike** (prompt on strike) <RCH>

20. One character with this profession was inspired by the author’s real-life uncle Henry from Whitstable, which is called Blackstable in the semi-autobiographical novel. Colonel Lucius Protheroe is found dead in the residence of a character with this profession in the first novel to feature Miss Marple. What is this profession of Charles Primrose, the title character of an enormously popular in its time novel by Oliver Goldsmith?

ANSWER: **vicar** <VB>

21. *Squares With Two Circles* and *Pelagos* — a carved sphere with strings attached across the hollow — are works by which artist? One of the best-known works by this artist, *Single Form*, is an example of Organic Abstractionism dedicated to Dag Hammarskjöld and located at the UN headquarters, though a similar wood sculpture is displayed in St Ives at her namesake museum.

ANSWER: Barbara **Hepworth** <VB>

22. The Crookes radiometer, Cox's timepiece, the Oxford Electric Bell, the capillary bowl, the Brownian ratchet, the float belt and the overbalanced wheel are all apparent examples of what? These objects, several of which were designed by da Vinci, are more efficient than Carnot [Car-no] engines, and hence violate the laws of thermodynamics.

ANSWER: **perpetual motion** machines (accept **perpetuum mobile**) <MB>

23. What colour links: the "August moon" in a Brian Eno song; a series of 1959 murals made for the Gelsenkirchen opera house; a 2019 B-side by Vampire Weekend; a type of glass from Bristol; a group of men that Tobias Fünke wishes to join; a 2013 film starring Adèle Exarchopoulos and Léa Seydoux; the pigment iron ferrocyanide; a 1998 song by Eiffel 65; and albums by Jay-Z, Miles Davis, John Coltrane, and Joni Mitchell?

ANSWER: **blue** (*St Elmo's Fire*, Yves Klein, *Big Blue*, Bristol blue glass, The Blue Man Group, *Blue is the Warmest Colour*, Prussian blue, *Blue (Da Ba Dee)*, and *The Blueprint*, *Kind of Blue*, *Blue Train*, and *Blue*) <MB>

24. In 1971, Médecins Sans Frontières was founded in the aftermath of the attempted secession of which African state, which existed from 1967 to 1970? Having its capital at Enugu, and consisting of mostly Igbo inhabitants, its attempt to break with Nigeria resulted in civil war.

ANSWER: **Biafra** <MB>

25. Which sport was created as a programme of physical, mental and moral teachings in 1882? This sport's central dictum is "maximum efficiency, minimum effort" as demonstrated in the throws and holds of this sport which frequently use an opponent's strength and momentum against them. Invented by Jigoro Kano, this sport joined the Olympics in 1964 and is a favourite of Vladimir Putin.

ANSWER: **Judo** <CH>

26. Manuel Valls is a candidate for the 2019 mayoral elections in which region's capital? The leader of its ANC organisation, Jordi Sànchez, is currently in jail awaiting trial for sedition, while its former president is living in Belgium. In 2017 Mariano Rajoy suspended the region's government, led by Carles Puigdemont [push-day-MON], after its parliament unsuccessfully unilaterally declared independence.

ANSWER: **Catalonia** (or **Catalunya**) <RCH>

27. "He did not set us on the right roads, but off the roads. He disturbed our complacency" is a quote about Gustave Moreau, who taught many members of which art movement, including Georges Rouault and Albert Marquet? Its first work is considered to be the Signac-inspired *Luxe, Calme et Volupté* by Henri Matisse. At the 1905 *Salon d'Automne* exhibition, Louis Vauxcelles coined their name when he disparaged them as wild beasts.

ANSWER: **Fauvism** (accept les **Fauves**) <MB> (the quote is by Matisse)

28. Which poem was inspired by the reading of a work by Purchas and is subtitled *A Vision in a Dream: a Fragment*? This poem describes an "Abyssinian maid" who sings "of Mount Abora" and "Alph, the sacred river" which runs through "caverns measureless to man", and its composition was supposedly interrupted by a "person from Porlock". This Coleridge poem describes Xanadu, the summer palace of the title ruler.

ANSWER: **Kubla Khan** <MB>

29. What links the following buildings: the Tower of the Americas in San Antonio; the Sunsphere in Knoxville; the Skyneedle in Brisbane; The Unisphere in New York City; Atomium in Brussels; the Crystal

Palace in London; and, in Paris, the Eiffel Tower?

ANSWER: built for a **World Fair** (or any combination of World/International/Universal with Exposition/Expo/Exhibition) <RCH>

30. Which river was dammed in 1959 to create the world's largest man made reservoir, Lake Kariba, with a surface area of over five and a half thousand square kilometres? Forming the border between Zambia and Zimbabwe, the river is also home to what locals call "the smoke that thunders", also known by the name given to it by David Livingstone, Victoria Falls.

ANSWER: **Zambezi** <RCH>

1. Three bonuses on minimalism in music. For five points each:

[5] This 1968 Steve Reich piece is composed for an "orchestra" of microphones that swing suspended above speakers in order to create feedback tones.

ANSWER: ***Pendulum Music*** (*For Microphones, Amplifiers Speakers and Performers*)

[5] This English minimalist is known for his film scores, often in collaboration with Peter Greenaway. He also provided the soundtrack to *The Piano*, as well as writing several operas including *The Man Who Mistook His Wife For A Hat*.

ANSWER: Michael **Nyman**

[5] This "Walkman-suitable" album of chamber music by Philip Glass contains tracks such as *Floe* and *Rubric*.

ANSWER: ***Glassworks*** <MB>

2. Three bonuses on an event signaled by the Eurovision song *E Depois do Adeus* [ee day-POISE do ah-DAY-us]. For five points each:

[5] Which revolution takes its name from the flowers that Celeste Caleiro gave out to soldiers? The second signal for its start was *Grândola, Vila Morena* [GRIN-doe-la VEE-la mow-RAY-na] by Zeca Afonso [ZAY-ca-PHONE-sue], whose songs were banned during the Estado Novo [EAST-ah-doe NO-voov].

ANSWER: ***Carnation Revolution*** (or ***Revolução dos Cravos***)

[5] Along with Vasco Gonçalves [VASE-coo gone-SAL-vees], this military officer was one of the chief strategists of the Carnation Revolution, after which he stood in the first presidential election on a socialist program. Later in life he was accused of membership of the clandestine group *Forças Populares 25 de Abril* [forces poe-POO-la-rees veen-tee-SINK-oh day a-BRILL]

ANSWER: ***Otelo*** or ***Saraiva de Carvalho*** (accept either underlined portion)

[5] This conservative politician and former Governor of Portuguese Guinea formed the National Salvation Junta and later took on the role of President of the Republic. He resigned six months later over his inability to suppress revolt in the colonies, and later lead the far-right paramilitary organisation *Exército de Libertação de Portugal*. [ay-ZARE-see-toe day lee-bear-ta-SOW day poor-too-GAL]

ANSWER: António de **Spínola** <DA>

3. Three bonuses on book burning. For five points each:

[5] Which German poet wrote in his play *Almansor*: "Where they burn books, they will in the end burn human beings"? He also wrote *Germany: A Winter's Tale*.

ANSWER: Heinrich **Heine**

[5] In which work, first published in 1966, does Woland tell one of the title characters that "manuscripts don't burn"?

ANSWER: *The **Master and Margarita*** (by Mikhail Bulgakov)

[5] Taking its name from an event of 1497 where many books were burnt, the 1987 novel whose characters include the corrupt financier Sherman McCoy was written by which American author, a prominent figure in the New Journalism movement?

ANSWER: Tom **Wolfe** (the book and event is the *Bonfire of the Vanities*) <RCH>

4. Three bonuses on mirrors in film. For five points each:

[5] This protagonist of *Taxi Driver* famously monologues "You talkin' to me?" into a mirror in his apartment.

ANSWER: Travis **Bickle**

[5] This 1943 experimental surrealist film by Maya Deren and Alexander Hammid features an enigmatic cloaked figure with a mirror for a face.

ANSWER: ***Meshes of the Afternoon***

[5] *The Mirror* is a 1975 film by this Russian director, also known for *Andrei Rublev* and *Solaris*.

ANSWER: Andrei **Tarkovsky** <MB>

5. Three bonuses on the career of the mathematician, philosopher and Catholic priest, Bernard Bolzano. For five points each:

[5] Which other mathematician, along with Bolzano, gives his name to a theorem in real analysis that states that every bounded sequence in \mathbb{R}^n has a convergent subsequence?

ANSWER: Karl **Weierstrass**

[5] Bolzano was the first to formally define which foundational concept in analysis? It exists for a real valued function f at a point c if one can take f of x to be arbitrarily close to some L by taking x close enough to c .

ANSWER: **limit**

[5] Which theorem's first accepted proof, given by Gauss in his doctoral dissertation, did Bolzano call "an intolerable offense against correct method"? A modern proof applies Liouville's Theorem to the function one over p , where p is an arbitrary polynomial.

ANSWER: **fundamental theorem of algebra** (prompt on **FTA**, do not accept "fundamental theorem of arithmetic") <RCH>

6. Three bonuses on Yiddish words commonly used in English. For five points each:

[5] What eight letter word's meaning is roughly captured in a definition of Leo Rosten: the "quality of the man who, having killed his own mother and father, throws himself on the mercy of the court as an orphan"?

ANSWER: **chutzpah**

[5] What eight letter word, meaning a type of chicken fat commonly used in Central European food, has passed into English as "excessive sentimentality"?

ANSWER: **schmaltz**

[5] What six letter word, deriving ultimately from the German word for "crusher", means to complain often or constantly?

ANSWER: **kvetch** <RCH>

7. Three bonuses on Russian authors who used reduplicated animal names in their works. For five points each:

[5] Mumu, a stray dog rescued by a deaf and mute serf Gerasim who then had to drown her on the orders of barynya, was written about by this author who was consistently concerned with the plight of Russian peasantry.

ANSWER: Ivan Sergeyevich **Turgenev**

[5] This other author's depiction of how the back of the horse called Frou-Frou was broken by Vronsky is anatomically inaccurate: it is almost impossible to do that by jumping into the saddle.

ANSWER: **Lev** Nikolayevich **Tolstoy** (accept **Leo** instead of **Lev**)

[5] In addition to a story about a cat Yu-Yu, this author wrote about the affair of lieutenant Romashov in *The Duel* and spiritual awakening of Princess Vera in *The Garnet Bracelet*.

ANSWER: Aleksandr Ivanovich **Kuprin** <VB>

8. Three bonuses on tripoints in South America. For five points each:

[5] The borders of Venezuela, Guyana and Brazil all meet at a point located on this mountain plateau. It is claimed to have inspired Arthur Conan Doyle's *The Lost World* and Paradise Falls from Pixar's *Up*.

ANSWER: **Roraima**

[5] Another tripoint in South America is the volcano Zapalero in the Andes where the borders of which three countries meet? Their corresponding administrative divisions which include Zapalero are the Potosí Department, Jujuy Province, and Antofagasta Region.

ANSWER: **Bolivia**, **Argentina** and **Chile** (accept in any order)

[5] A small island containing the tripoint of Brazil, Argentina and which other country is on the river with the same name as that country? From 1964 to 2011 the island only had one house, with one inhabitant.

ANSWER: **Uruguay** <VB>

9. Three bonuses on literature in the works of Karl Marx. For five points each:

[5] What literary work has extensive references in Capital? These include ‘Abandon all hope ye who enter here’, and Marx’s invitation into the hidden abode of production ‘on whose threshold there stares us in the face “No admittance except on business.”’

ANSWER: **Inferno** (accept **Divine Comedy**, **Divina Commedia**)

[5] Marx often made reference to golems, werewolves, vampires, and to which Canaanite god? In Howl, Ginsberg names this figure “whose eyes are a thousand blind windows”.

ANSWER: **Moloch**

[5] When describing colonial capital, Marx compares Britain to which Hindu Goddess of death, time and doomsday? This figure is usually depicted with a necklace of heads, skirt of arms, lolling tongue, and brandishing a knife dripping with blood.

ANSWER: **Kali** (also known as **Kālikā** or **Shyama**) <CH>

10. Three bonuses on particle physics. For five points each:

[5] What name is given to the fermion subset of elementary particles of half-integer spin that do not undergo strong interactions? Examples include electrons and neutrinos.

ANSWER: **leptons**

[5] This principle was proposed to relate fermions and bosons. It extends the Standard Model by theorising each group particle has a “partner” in the other, differing by half-integer spin.

ANSWER: **supersymmetry**

[5] First proved for electrons and then extended to all fermions via the spin–statistics theorem, what principle describes the requirement that two or more fermions cannot occupy the same quantum state within a system?

ANSWER: **Pauli exclusion** principle (prompt on partial answer) <FW>

11. Three bonuses on composers who only wrote one opera. For five points each:

[5] *O welche Lust!* [AW VELL-che LOOST] is sung by a chorus of prisoners in which opera? Four different versions exist of its overture, which bears the name of the protagonist, Leonore.

ANSWER: **Fidelio**

[5] What play by Pushkin provided the basis for Modest Mussorgsky’s only completed opera? Though revised by composers such as Rimsky-Korsakov and Shostakovich, its original score is valued for its orchestration and harmonic style.

ANSWER: **Boris Godunov**

[5] Whose only opera, based on the life of St Francis of Assisi, was premiered in Paris in 1983? Several themes in the opera are adapted from bird calls that this composer recorded in New Caledonia.

ANSWER: Olivier **Messiaen** <DA>

12. Three bonuses on a concept from literary theory. For five points each:

[5] Contraposed against the tragic and the epic, what is this literary mode characterised by free interaction between people, eccentricity of action, mésalliances and profanation? It is argued that this mode’s roots trace back to serio-comical works of Menippean satire.

ANSWER: the **carnivalesque**

[5] This literary theorist introduced the concept of the carnivalesque in his essay *Rabelais and His World*, where he contrasted it with the grotesque. He also defined the term “chronotope” in studying literary configurations of time and space.

ANSWER: Mikhail Mikhailovich **Bakhtin**

[5] The Culture of Popular Laughter theory devised by Bakhtin was later taken up by this Soviet scholar, who was nicknamed “Russia’s conscience” for his lifelong commitment to defending morals and his dissident activity.

ANSWER: Dmitry Sergeyevich **Likhachev** <VB>

13. Three bonuses on a film director. For five points each:

[5] Which filmmaker admitted that he couldn’t watch his own movies because they made him depressed? He directed 45 features including *Hour of the Wolf*, *The Silence*, and *Through A Glass Darkly*.

ANSWER: Ingmar **Bergman**

[5] Which actor, a Bergman mainstay, appears in *Through a Glass Darkly* as Karin’s husband Martin, and most notably in *The Seventh Seal* as crusader Antonius Block?

ANSWER: Max **von Sydow** (prompt on just **Sydow**, I guess)

[5] Which Bergman film can loosely be described as a postmodern lesbian psychological horror? In it, the nurse Alma begins to have trouble distinguishing herself from her patient Elisabet Vogler.

ANSWER: **Persona** <MB>

14. Three bonuses on songs whose titles are one word repeated three times. For five points each:

[5] Written by Pete Seeger and covered by, among others, The Byrds, the lyrics to which song are taken almost entirely from the third chapter of the Book of Ecclesiastes?

ANSWER: **Turn! Turn! Turn!**

[5] Written in 1936 by Louis Prima, who later voiced King Louie in Disney’s *The Jungle Book*, which song is perhaps more famous as an instrumental cover of 1938 by Benny Goodman?

ANSWER: **Sing Sing Sing**

[5] Which 1976 Abba song includes the repeated line “It’s a rich man’s world”?

ANSWER: **Money Money Money** <RCH>

15. Three bonuses on an idea. For five points each:

[5] Which policy has been supported by among others Jean-Luc Melenchon, Joe Rogan, the Green Party of England and Wales, Milton Friedman, and US presidential candidate Andrew Yang? Proponents argue that it can overcome the ‘welfare trap’ as it would eliminate the conditional element of welfare provision.

ANSWER: **Universal Basic Income** (or **UBI**, **Citizen’s Income**, **Citizens’ Basic Income (CBI)**, **Basic Income Guarantee**, **BIG** or **Universal Demogrant**, do not accept “free money”.)

[5] Many advocates of UBI were excited about its recent trial in which European country? The trial was led by the Kela agency and supported by the Centre Party, the Left Alliance, and the Green League.

ANSWER: **Finland** (or **Suomi**)

[5] UBI is a central policy of which Icelandic party, founded by Birgitta Jónsdóttir [**bir-GEAT-ta. jones-DOTE-tir**]? It exemplifies a broader European political movement which campaigns in favour of direct democracy, net neutrality, and government transparency.

ANSWER: the **Pirate Party** <CH>

16. Three bonuses on triple deities in Greek mythology. For five points each:

[5] Which three old grey-haired women were sisters to the Gorgons? They shared one eye and one tooth among them, and the former was stolen by Perseus and ransomed for information about Medusa.

ANSWER: the **Graeae** (or the **Grey Sisters** or the **Phorcides**)

[5] Who is the first of the three Fates? She spins the thread of life using her distaff, and her Roman equivalent is Nona.

ANSWER: **Clotho**

[5] The three Furies were created from the blood of which god when he was castrated by his son Cronus?

ANSWER: **Uranus** <MB>

17. Three bonuses on an author. For five points each:

[5] “The most terrible thing about it is not that it breaks one’s heart—hearts are made to be broken—but that it turns one’s heart to stone” and “I am one of those who are made for exceptions, not for laws” are quotes by which author and playwright?

ANSWER: Oscar **Wilde**

[5] The above quotes by Wilde are taken from this long letter he penned while imprisoned in the Reading Gaol, its title referring to the line from Psalm 130, "From the depths, I have cried out to you, O Lord".

ANSWER: **De Profundis**

[5] *De Profundis* was addressed to this Uranian poet and son of the 9th Marquess of Queensberry, relationship with whom led to Wilde’s conviction. Both the surname and the nickname are acceptable.

ANSWER: Lord Alfred **Douglas** (accept **Bosie**) <VB>

18. Three bonus questions on a discovery in observational astronomy. For five points each:

[5] First proposed by Poincaré in 1905, the first indirect evidence for the existence of these things won Hulse and Taylor the 1993 Nobel Prize in Physics. They are often described as “ripples in the fabric of spacetime”.

ANSWER: **gravitational waves** (be ruthless, do not accept “gravity waves”)

[5] This observatory, with two American sites in Hanford and Livingston, was the first to directly observe a gravitational wave event in 2015. Like its European collaborator VIRGO, it uses a Michelson interferometer to detect very minor perturbations in length caused by gravitational wave events.

ANSWER: **LIGO** or **Laser Interferometer Gravitational Wave Observatory** (accept **Advanced LIGO**)

[5] Detected gravitational waves have typically been caused by the merger of a binary black hole system, but one event involving the collision of these dense objects was the first to also be viewed via non-gravitational means, heralding a breakthrough for “multi-messenger” astronomy.

ANSWER: (binary) **neutron stars** <FW>

19. Three bonuses on an event. For five points each:

[5] The curtains of the House of Commons were soaked in lime chloride to try to mitigate the effects of this event, which took place in London over July and August 1858.

ANSWER: The **Great Stink**

[5] This civil engineer and chief of the Metropolitan Board of Works oversaw the building of over 1000 miles of sewers to remedy the Great Stink. As part of the project, the Thames Embankments were built.

ANSWER: Joseph **Bazalgette** [**basil-jet**]

[5] During the Great Stink, the stench of the Thames was thought to spread cholera via the obsolete scientific theory stating that diseases were caused by this kind of ‘bad air’.

ANSWER: **Miasma** (or **night air**) <MB>

20. Three bonuses on the writers of the Eon James Bond films. For five points each:

[5] The most prolific writer, with 13 credits, is Richard Maibaum. What was the first film he is partially credited with? It was released in 1962.

ANSWER: **Dr. No**

[5] Who wrote the script for “You Only Live Twice”? He also published collections of short stories, including “Switch Bitch” and “Tales of the Unexpected”.

ANSWER: Roald **Dahl**

[5] George Macdonald Fraser, who co-wrote Octopussy, is best known for his 12 books about the life of which unsympathetic Victorian adventurer, originally created for the novel “Tom Brown’s Schooldays”?

ANSWER: Harry **Flashman** <RCH>