MSQB Madness II Editors' Packet 2

Written and Edited by: Aalok Bhattacharya, Andrew Gao, Cindy Gao, Charles Heydt, Aditya Khambekar, Lukas Koutsoukos, Sam Macchi, and Neev Sahgal.

This packet is intended to be more difficult than the previous packets. This page is empty to help people who wish to read these questions to themselves.

Tossups

1. After getting discharged from a Tashkent hospital, Oleg Kostoglotov visits one of these places in the *Cancer Ward*. It's not a movie theater, but in the *Glass Menagerie*, Laura Wingfield skips class to go to one of these places. One of these places titles a play in which Jerry impales himself on Peter's knife on a (*) Central Park bench. In *Slaughterhouse-Five*, Billy Pilgrim and Montana Wildhack are kidnapped and placed in one of these places in Tralfamadore. One of these places is the subject of a "story" by Edward Albee. For 10 points, an empty cage used to hold a monkey in what type of location?

ANSWER: **<u>zoo</u>** [accept *The* **<u>Zoo</u>** *Story*; prompt on <u>aquarium</u>] < Literature - Other, A. Gao>

- 2. The words "many thanks" were spelled out in tulips after one of these events relieved a famine in the Netherlands as part of Operation Manna. 78 babies were killed in the first part of one of these events after the fall of Saigon. David Ben-Gurion oversaw one of these events that saved Arab Jews in Operation Magic Carpet. Gail Halvorsen gained his nickname by giving (*) candy to children during one of these events. Lucius Clay planned that one of these events codenamed Operation Vittles in a city encircled by the USSR. For 10 points, name these events, one of which involved planes landing at Tempelhof Airport to get around the Berlin Blockade.

 ANSWER: airlift [accept Operation Babylift, and Berlin airlift; prompt on Operation Magic Carpet and Operation Vittles and Operation Manna before mention with "that operation was what kind of event?"; do NOT accept or prompt on "air raid"] < History Other, A. Gao>
- 3. These mythological figures were fathered from a fruit when its spit impregnated their mother. Cabracan and Zipacna were killed by these figures. These figures tricked their older brothers into climbing a tree to retrieve a bird and eventually turned them into monkeys. These youths are told to light torches through the night and keep them unburnt simultaneously when they are called to (*) Xibalba ("SHI-BALL-BUH") to play "Pitz," a ballgame, with its residents. For 10 points, what two figures of legend in Mayan Mythology avenged their father and uncle by beating the Xibalbans at their ballgame, eventually becoming the Sun and the Moon? ANSWER: Hero Twins [or Second Hero Twins; or Hunahpu ("HOON-AH-POO") AND Xbalanque ("SH-BALAN-KAY"), both parts required, accept answers in either order; do NOT accept or prompt on the "First Hero Twins"; do NOT accept or prompt on partial answers] <RMPSS Myth, Khambekar>
- 4. Applying this operation to the gradient and a normalized vector on a scalar field gives the directional derivative. This operation, which appears in the line integral expression over a vector field, is used in Gram-Schmidt orthonormalization to eliminate non-orthogonal components of a vector. This operation is equivalent to the product of the magnitudes of two vectors times the (*) cosine of the angle between them. Summing the product of corresponding terms of two vectors gives, for 10 points, what vector operation that returns a scalar value?

 ANSWER: dot product [accept scalar product] < Science Math, Heydt>
- 5. The proposed Appoquinimink County would have added a county to this state, which, with three, has the fewest in the US. The Christina River is located in this state, which is completely cut through by a ship canal. A majority of Fortune 500 and publicly traded companies are based in this state due to its lax tax laws. A (*) courthouse in New Castle serves as the center of the Twelve-Mile Circle, which forms this state's northern border. This state's namesake river flows past the capital of New Jersey, Trenton, as well as Philadelphia. For 10 points, name this state with cities like Dover and Wilmington.

ANSWER: **<u>Delaware</u>** [accept **<u>Delaware River</u>**] <Geography - US, A. Gao>

NOTE TO MODERATOR: *emphasize "physical"* in the first line. NOTE TO PLAYERS: *description acceptable*.

6. An item in this *physical* collection "clipped from the" "Mount Sebastian yearbook" shows virgin-looking legs. Some of these *physical* items owned by Dave Jensen include stolen bars of soap from Sydney. These items title the first chapter of a work whose other chapters include "The Sweetheart of the Song Tra Bong" and "The Lives of The Dead." Pictures of his love interest, Martha, are in this collection owned by (*) platoon leader Jimmy Cross. Kool-Aid, chewing gum, Military Payment Certificates, and M-16s are some of these items possessed by members of the Alpha Company. For 10 points, name this title collection of items in a memoir by Tim O'Brien.

ANSWER: the **thing**s they **carried** from *The Things They Carried* [both parts required; accept answers indicating **object**s in *The Things They Carried*; prompt on **thing**s alone; anti-prompt on answers mentioning a specific character's possessions before mention] < Literature - American, A. Gao>

7. After an event against this politician, crowds chanted "Blood for blood!" and were told to "[kill] the sons of the snakes." This politician died while going to an interview with Peter Ustinov. This politician's son declared "when a great tree falls, the earth shakes" following their death. The Shah Commission investigated a (*) forced sterilization campaign led by this politician during "The Emergency." The Smiling Buddha nuclear test occurred under this politician, who launched Operation Blue Star. This politician was assassinated at the Golden Temple of Amritsar by their Sikh bodyguards. For 10 points, name this daughter of Jawaharlal ("juh-waa-huhr-laal") Nehru and first female prime minister of India.

ANSWER: <u>Indira Gandhi</u> [both parts required; accept <u>Indira</u> Priyadarshini <u>Gandhi</u>; prompt on <u>Gandhi</u>] (The first line refers to 1984 anti-Sikh riots after the assassination of Indira Gandhi.) < History - World, A. Gao>

8. A three-octave fortissimo G is followed by a piano three-octave E in a section of this piece meant to evoke traveling in the Roman catacombs. The first section of this piece alternates between 5/4 and 6/4 in its first few measures and reoccurs several times between movements. This piece's popularity was boosted by a 1922 orchestration by (*) Maurice Ravel, and this piece's last two movements depict the Baba Yaga and the Great Gates of Kiev. A solo trumpet voluntary opens, for 10 points, what set of ten suites and a recurring promenade based on paintings by Victor Hartmann, composed by Modest Mussorgsky?

ANSWER: Pictures at an Exhibition [accept Kartinki s vistavski] < Fine Arts - Auditory

ANSWER: <u>Pictures at an Exhibition</u> [accept <u>Kartinki s vistavski</u>] <Fine Arts - Auditory, Koutsoukos>

9. This scientist, who theorized about a particle that would later be discovered by James Chadwick, discovered a namesake form of scattering through his most famous experiment. This scientist differentiated and coined the terms for alpha and beta radiation. This scientist compared the results of an experiment to "fir[ing] a (*) 15-inch shell at a piece of tissue paper and [having] it [come] back and hit you." This scientist disproved J. J. Thomson's atomic plum-pudding model and fired alpha radiation at a certain material, the namesake of his most famous experiment. For 10 points, name this scientist who conducted the gold foil experiment.

ANSWER: Ernest Rutherford [accept Rutherford gold foil experiment] < Science - Physics, Khambekar> [Ed. A. Gao]

10. The Marassa are a pair of twins and the first humans in this religion. The initiation ceremony of this religion involves multiple baths and crushed leaves. People of this religion are considered "mounted horses" when they are possessed by a spirit. In this religion, temples whose name means "abode of spirits" are called (*) Hounfours. Priests in this religion can be called houngans or mambos depending on their gender. A practitioner of this religion, Marie Laveau, was known as its "Queen of New Orleans." For 10 points, name this religion whose practitioners worship loa and use namesake dolls.

ANSWER: **Voodoo** [or **Vodou**] < RMPSS - Religion, Khambekar>

11. After one ruling, this man referenced his dissatisfaction in following cases involving yellow-dog contracts and minimum wage laws. In a case, this man wrote "the Fourteenth Amendment does not enact Herbert Spencer's Social Statics." With Harlan, this man dissented in a case where 60-hour work weeks regulated by the Bakeshop Act were overturned, (*) Lochner v. New York. A ruling by this man overturned in Brandenburg v. Ohio made the "clear and present danger" test. This man wrote that shouting fire in a crowded theater would not be free speech in that case, Schenck ("SHANK") v. United States. For 10 points, name this Supreme Court justice and son of a poet.

ANSWER: Oliver Wendell **Holmes** Jr. (The first line refers to Holmes' ruling in the cases *Coppage v. Kansas* and *Adkins v. Children's Hospital of D. C.*, respectively, where he asked for Lochner to be overruled.) < History - American, A. Gao>

12. BCA tables are constructed to calculate this quantity for the formation of coordination complexes. Powers of RT calculated from coefficients are used to convert between the "pressure" and "concentration" versions of this quantity for gasses. Because solids and liquids do not contribute to this quantity, a version of this quantity is calculated by multiplying the concentrations of two ions and is called the (*) solubility product. Products of a reversible reaction are placed in the numerator and reactants in the denominator by the law of mass action, which governs the calculation of this constant. For 10 points, name this ratio of products to reactants symbolized uppercase \underline{K} .

ANSWER: **equilibrium** constant [accept **Keq**, **Kp**, **Ksp**, or **Kc**; accept **K** before mention] <Science - Chemistry, Heydt>

NOTE TO PLAYERS: two answers required.

13. Gertrude Stein's word paintings inspired one of these people to paint the other's name on a neon-red Scientific American sign in a fog-shrouded painting. The charcoal *Drawing XIII* ("thirteen") and a landscape by one of these artists, *Sunrise and Little Clouds*, were in the other's Gallery 291. One of these two artists painted the Radiator Building before moving to the "White Place" in Abiquiu ("ah-bih-kew"), (*) New Mexico, following the other's affairs. One of these artists photographed passengers on the ship *SS Kaiser Wilhelm II*. For 10 points, name this couple, one of whom photographed one of his wife's common subjects in "Hands and Horse Skull," as well as *The Steerage*.

ANSWER: Alfred <u>Stieglitz</u> AND Georgia Totto <u>O'Keeffe</u> [accept answers in either order; do NOT accept or prompt on partial answers] <Fine Arts - Visual, Pujara> [Ed. A. Gao/C. Gao]

- 14. A text in this language describes a "ghost-custodian" known as the "last survivor" performing final rites over the treasures of his people. Maria Dahvana Headley translated a word in this language as "Bro!" It's not from a Nordic country, but "heaven-candle," "whale-road," and other kennings originated in this language. A poem in this language ends after a king dies fighting a (*) dragon, causing Wiglaf to blame his people's cowardice. That poem in this language opens with "Hwæt" and describes its title character fighting Grendel. For 10 points, name this language that Beowulf was written in, that *preceded* a "Modern" form used by Shakespeare. ANSWER: Old English [prompt on English; do NOT accept or prompt on "Middle English" or "Modern English"] <Literature British, C. Gao>
- 15. This is the northernmost region where nomadic people live in tents called chum. In this region, Birobidzhan ("beer-oh-bee-john") is the capital of an autonomous Jewish subdivision. The Nenet people live on the Yamal Peninsula in this region. In this region, the Lena and Yenisey rivers flow into the Laptev and Kara Seas. The port city of (*) Madagan is in this region, home to the Amur River. Freshwater seals can be found in the world's deepest lake, Lake Baikal, in this region east of the Urals. Cities built on permafrost include Irkutsk and Novosibirsk in, for 10 points, what frigid region of Russia?

ANSWER: <u>Siberia</u> [prompt on Russian <u>Far East</u>; prompt on <u>Asian Russia</u> or <u>Asiatic Russia</u> or <u>Northern Asia</u>; prompt on <u>Russia</u> before mention] < Geography - World, A. Gao>

16. A soldier from this country traveled over 200 miles after ingesting thirty methamphetamine pills. The Battles of Kollaa ("KOLA") and Suomussalmi ("sooh-ah-moo-sah-lah-me") were fought in a war where this country defended the Mannerheim Line. Bombs nicknamed "bread baskets" were dropped on this country, which developed the (*) Molotov cocktail. A very successful sniper from this country was nicknamed the "White Death" by Soviet forces. This country *lost* a war ending in the Moscow Peace Treaty that preceded the Continuation War. It's not Sweden, but in the Lapland War, this country forced German troops back into neighboring Norway. For 10 points, name this loser of the Winter War.

ANSWER: <u>Finland</u> [or Republic of <u>Findland</u> or <u>Suomen</u> tasavalta or Republiken <u>Finland</u> or <u>Suomi</u>] <History - European, A. Gao>

NOTE TO MODERATOR: Read the answerline carefully before starting. Have fun. NOTE TO PLAYERS: Though a specific location is required, a description is acceptable.

17. Mannequins and cutouts mounted to trains are used to trick two people watching this location. After stealing a toothbrush, a character strikes a pose based on Munch's *The Scream* in front of a mirror in this location. A pizza boy is scared away from this location when a character plays half of the dialogue in an *Angels With Filthy Souls* scene. The use of a blowtorch to burn an antagonist's scalp is part of a (*) "Battle Plan" to defend this location. While his family is in Paris, a boy in this location uses boobytraps to scare away the "Wet Bandits" Harry and Marv. For 10 points, name this place where Kevin is left by himself in a Christmas movie. ANSWER: the home Alone [both parts required; accept any answer indicating the residence of a member of the McAllister family, including Peter, Kate, Buzz, Megan, Linnie, Jeff, or Kevin McAllister; accept 671 Lincoln Ave, Winnetka, Illinois; accept answers mentioning Home Alone 2: Lost in New York in place or with "Home Alone"; prompt on general answers like Chicago, Illinois alone by asking "what specific location"; prompt on house;; prompt on the setting of Home Alone; do NOT accept or prompt on answers mentioning other Home Alone movies, as those are not set in the same house as Home Alone 1 or 2] Trash - A. Gao/C. Gao>

18. Several diseases of this organ present Hürthle ("hurth-lee") cells, which can nearly exclusively only have mitochondria. One molecule produced by this organ is formed from the cleaving of CALC1 ("calc-one") protein; that molecule functions to inhibit osteoclast activity, decreasing blood calcium levels. *Yersinia enterocolitica* and the Epstein-Barr virus are thought to trigger (*) Grave's Disease, an autoimmune disease of this organ. This organ names a class of two hormones abbreviated T₃ ("tee-three") and T₄ ("tee-four"). Goiter results from the enlargement of this organ, largely due to iodine deficiencies, is why many countries mandate salt be iodized. For 10 points, name this butterfly-shaped organ in the neck that secretes calcitonin and thyroxine.

ANSWER: **thyroid** gland [accept **thyroid hormone**; do NOT accept or prompt on "parathyroid"] <Science - Biology, Bhattacharya>

19. A person participating in one of these events hires employees Old Jack and Mat O'Connor. A character cries "Can't we start over?" after learning of one of these events. Walt Trowbridge and "Buzz" Windrip participate in one of these events in Sinclair Lewis' novel (*) It Can't Happen Here. In James Joyce's "Ivy Day in the Committee Room," Colgan and Richard Tierney are rivals in one of these events. In "A Sound of Thunder," the hunter Eckels steps on a butterfly, changing one of these events. For 10 points, Jose Saramago wrote a novel featuring what event in which 83% of ballots are blank?

ANSWER: <u>election</u> [accept 2055 <u>presidential election</u>; accept 1936 <u>presidential election</u>; accept <u>municipal election</u>; accept <u>voting</u> or <u>vote</u>] < Literature - European, A. Gao>

20. This person was challenged by Jennifer Strahan in one race, where they face Marcus Flowers in the general election. Milo Yiannopoulos ("yuh-NOP-uh-lis") posted a picture of his intern badge for this politician on Telegram. This politician responded "wait, hold on now" after earlier saying they didn't call a Californian politician a "traitor to our country." In a video, this politician is shown accosting Parkland survivor David (*) Hogg. This representative, who was stripped of all her committee assignments, showed support to execute Nancy Pelosi. A bill to impeach Joe Biden a day after becoming president was introduced by, for 10 points, what far-right Georgian representative?

ANSWER: Marjorie Taylor **Greene** [accept **MTG**] < Current Events, A. Gao>