Disease Detective Mentor Invitational 2017 Divisions B/C Record answers on this sheet Team \_\_\_\_\_\_\_

All answers are worth 1 point. Tie breaker is the most correct on Disease fill in grid section. Tie break 2 most correct page 1 of the exam. Tie 3 Question 21, Tie 4 Question 26

Question 1-12

You are a physician evaluating Matilda, 16 year- old, who is complaining of nausea, vomiting, and diarrhea of thirty six hour duration which began Jan 3, 2017. In order to narrow down the possibilities of what organism could be causing the illness; you need to ask the patient these basic 12 questions (clues). What do you ask, be specific and don’t ask the same question twice… This patient is a good historian and not trying to trick you. complete sentences are NOT NECESSARY ( MMWR Foodborne Illness 2004)

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You are the local Department of Health Food Inspector and have been notified that, Brenda’s ALL You Can Eat American Buffet, may be the source of Campylobacter gastroenteritis.

13. What temperature is necessary to decrease the risk of bacterial growth in the cold food area? \_\_\_\_\_\_\_

14. What temperature is necessary to decrease the risk of bacterial growth in the hot food area?

\_\_\_\_\_\_\_\_\_\_\_\_\_.

15. You notice that the food worker continuously refills the food items into the serving line as the diners deplete them. Is this the safest method? Yes, or No and explain very briefly why or why not. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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16. Some of the diners have difficulty serving themselves, elderly, children, and the uncoordinated….in regards to the serving utensils what is the main problem? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ The answer is not dropping utensils on the floor.

17. What are upper intestinal symptoms? \_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

18. What are lower intestinal symptoms? \_\_\_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

19 Where/ What is the most likely source of Campylobacter? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

20. You notice that a food worker seems to be using the restroom more frequently than you would expect and appears ill. He probably has Winter Fever. What illness / organism is that? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Should this person be working in public place? \_\_\_\_\_\_\_\_\_\_\_\_

21. Tie Break 3 A young mother with a ten-month old baby pours honey on a spoon and gives it to the child. What illness is she putting her child at risk for? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Twenty days later the baby is lethargic, has a poor gag reflex, and poor sucking reflex. What would you treat the child with? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

22. There have been multiple food related outbreaks investigated by the CDC in 2016. Name the causative agent for each food product.

Shell eggs \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Alfalfa Sprouts \_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Beef products \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Flour \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Frozen Strawberries \_\_\_\_\_\_\_\_\_ Frozen Vegetables \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Frozen Scallops \_\_\_\_\_\_\_\_\_\_\_\_ Raw Milk \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Pistachios \_\_\_\_\_\_\_\_\_\_\_\_\_ Packaged Salads \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Organic Shake and Meal Products \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In regards to reports published in Medical Journals

23. What three epidemiologic terms are used to describe the frequency of an event, \_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

24. What three epidemiologic terms are used to describe the MAGNITUDE of an event? \_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_

25. What 2 epidemiologic terms are used to describe the quality of measurements \_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

26. What epidemiologic terms are measures of diagnostic Test performance? \_\_\_\_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.