## FINAL EXAM EVALUATION

COURSE: TRANSPORT OF BIOMEDICAL MATERIAL COURSE

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**COURSE NUMBER: 140** 

SCENARIO	EVALUATION	POINTS EARNED
Part I. COVID-19	Your decision to ship all as Biological substances, Category B is great. You clearly identified all packaging steps for the Category B packaging and properly marked and labelled all the packaging per 49 CFR and the IATA Dangerous Goods Code. One item missed is the dry ice. Per the International Air Transport Association (IATA) Dangerous Goods Code, you must add the proper shipping name either "Dry Ice" or "Carbon dioxide, solid', "UN1845", and the net weight of the dry ice to the outside of the package along with the Miscellaneous Class 9 label. (-4) The Air Waybill that pays for the shipment should include the words "Biological substances, Category B, UN1845, and the number of packages." The words "Dry Ice, UN1845, the net weight of the dry ice" should also be on the Air Waybill. Minus 4	Requirements - 5 pts Identified Regulations - 5 pts Ways to Mitigate - 15 pts  TOTAL - 21 PTS
Part II. Marburg & Ricin Samples	You identified the need to ship items in separate boxes. You identified some items that are incorrect on the original package. You then properly packaged both the Biological substances, Category B and Toxin packagings. The Toxins packaging meets all requirements. Your properly identified the proper shipping name for toxins, the correct UN identification number "UN3172", and added the "Poison" 6.1 label on the outside of the package. The Biological substances Category B package includes samples which are suspected of containing Marburg, you should upgrade the packaging to a Category A infectious substance packaging and change the proper shipping name to "Infectious substances, affecting humans, UN2814". In addition to "UN2814" and "Infectious substances, affecting humans", you also need the Infectious Substance 6.2 label. (-3) Minus 3	Issues – 5pts Consequences/Actions-5 pts Correct Package – 15 pts  TOTAL – 22 PTS
Part III. Shipping Paper	You shipping paper is acceptable, but has a few errors:  Infectious Substance Shipping Paper (1) Your shipping description should read "UN2814, Infectious substance, affecting humans (Marburg or Suspected Category A), 6.2. (You should leave the Packing Group column blank and not use the letters N/A.) (-1) Your dry ice entry is also good, but you should not put the letters N/A in the Packing Group column. (-1) As well, you should add the words "OVERPACK USED" immediately below 2.5 kg in the Quantity and type of packaging column. (-1)  For your toxin entry, you should put the technical name "Ricin" in parenthesis after the proper shipping name. It should read "Toxins, extracted from living sources, liquid, n.o.s. (Ricin)". (-1) You should also change "1 vial" to either "30 mL x 1 Fibreboard box" or "1 Fibreboard box x 30 mL". (-1)  Everything else looks good! Minus 5	Shipping Paper & Airway Bill – 25 pts  TOTAL – 20 PTS

Part IV.		
Mixed		
Sample		
Shipment		

You did a good job classifying the samples --- labeling two as Infectious substances, affecting humans and one (the HIV samples) as Biological substances, Category B.

Complete Shipment - 25pts

## Infectious substances, affecting humans

- (1) Both infectious substance boxes look great. In addition to all you've put on the boxes, you must also add the proper shipping name, UN identification number, and net weight of the dry ice on the outside of both packages (-2)
- (2) Because you've added dry ice to each of the completed packages, you should not Overpack your two boxes as it would not allow the dry ice room to release. (-2)

TOTAL - 16 PTS

## **Shipping Paper**

- (1) You should leave the Packing Group column blank as infectious substances do not have a packing group (-2).
- (2) The Dry ice should be under each infectious substance listing and should be "UN1845, Dry ice, 9" "1.5kg" in the Quantity and type of packaging column then have the words "All packed in one Fibreboard box". (-2)

NOTE: If the dry ice is in the same package as the infectious substance samples, you then you only need to put the quantity of the infectious substances in the "Quantity and type of packaging" block. The infectious substance entry should read "20g", the dry ice entry should read "1.5kg" and underneath both entries you should place "All packed in one Fibreboard box". (See the IATA Dangerous Goods Shipping paper section for an example.)

## **Biological Substances, Category B**

Your Biological substance, Category B package looks great! In addition to all you've put on the boxes, you must also add the proper shipping name, UN identification number, and net weight of the dry ice on the outside of both packages (-1)

Minus 9

**EXAM SCORE = 89/100pts (89%)**