Supplement 2. Example of the first-round case form for item development

Representative Nursing Case 1-1 (Examination Question 1-2 link)							
Job	F3 (Transfusion nursing)	Area of learning objectives (category)	3. Cancer management				
		Area (division)	2) Anticancer therapy nursing				
Major area	Basic, adult nursing area	Nutrition /metabolism/excretion Nursing	Breast cancer				
Integrated nursing knowledge	Execution of appropriate tests and procedure for transfusion						

A 45-year-old breast cancer patient visited an emergency room with stomatitis and fever as chief complaints on the seventh day after the administration of anti-cancer drugs started. The result of a CBC test was Hb 9 g/dL, Hct 18%, and platelets 5000/mm³. Therefore, 2 units of packed red blood cells were prescribed.

Which are the appropriate general examinations that should be performed to confirm compatibility before blood transfusion?

- 1) Cross-matching test, HBsAg Test
- 2) Antibody screening test, HIV test
- 3) ABO and Rh type, cross-matching test
- 4) ABO and Rh type, genetic testing
- 5) Antibody screening test, cold agglutinin test

Knowledge level of question	Memorizing type	Interpreting type	Problem-solving type	Answer	Level of difficulty		
Knowledge level of question	\checkmark			3	Low		
Basis	·Blood compatibility test before transfusion ·It should be not confused with the pretest for a blood donor. ·Knowledge of transfusion procedures and blood test results, nursing according to transfusion guide						
Reference	Kim et al., 2013, Korean Journal of Adult Nursing, 1062-1063, Sumunsa						