

系	級	科	目	授課教師	考 試 日 期	學 號	姓 名
醫技學系三		血庫學		Lu	90 年 5 月 28 日 第 9 節		

①請注意本試題共 3 張。如發現頁數不足及空白頁或缺印，應當場請求補齊，否則缺少部份概以零分計。

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A. Choice : 96% (請寫在答案紙，勿撕開一併交回)

- Which of the following groups of antigens are derived from plasma rather than being an integral part of the red blood cell membrane?
A. I/i B. P₁ C. Le^b D. Fy^a
- How many RBC antigens have been recognized up today?
A. 300 B. 400 C. 500 D. more than 600
- The Lewis phenotype is determined by genes at the following locus?
A. Lele B. Hh, Sese C. Sese, Lele, Hh D. Lele, Sese
- Which of the phenotype is much frequently seen in Chinese adult?
A. Le(a+b+) B. Le(a-b+) C. Le(a+b-) D. Le(a-b-)
- Which of the following compound carrying the Lewis Ag could be absorbed to RBCs?
A. glycolipids B. glycoproteins C. polysaccharide D. phosphoprotein
- About Lewis antigens, which of the following is true?
A. well developed at birth B. reversibly adsorbed to red cells from plasma
C. lewis glycosphingolipids could be detected in plasma of newborn D. all of the above
- I and i antigens are present on:
A. secretions B. plasma C. RBC membrane D. all of the above
- For I/i antigen, which one is riched in infant red cells?
A. I antigen B. i antigen C. I and i antigens D. none of the above
- The Donath-Landsteiner antibody is:
A. anti-P₁ B. anti-K C. anti-P₂ D. anti-P
- What is the structure that carries SsU antigen on RBC?
A. glycophorin A B. glycophorin B C. glycophorin C D. glycophorin D
- Among the MNSsU blood system, which one is the most important irregular antibody of blood transfusion in Taiwan?
A. anti-M B. anti-N C. anti-S D. anti-Mi^a
- Which one has the second rated immunogenicity only to D antigen?
A. P antigen B. Lu^a antigen C. K antigen D. Js^a
- Which one is associated with chronic granulomatous disease in young boys?
A. the McLeod phenotype B. k phenotype C. Js^b phenotype D. Kp^b phenotype
- Which blood group phenotype is resistant to malaria infection?
A. Fy (a+b+) B. Kp^a C. Kp^b D. Fy (a-b-)
- Among the Duffy blood group system, what Ag is the most frequently one founded in Taiwan?
A. Fy^a B. Fy^b C. Js^a D. Js^b
- Among the Lutheran blood group system, which phenotype is the most frequently one found in Taiwan?
A. Lu (a+b+) B. Lu (a+b-) C. Lu (a-b+) D. Lu (a-b-)
- Direct antihuman globulin test could be used to detect the following instance except:
A. antibody identification B. autoimmune hemolytic anemia C. transfusion reaction
D. hemolytic disease of newborn
- The RBC Fy^a antigen could be typed by:
A. direct antihuman globulin test B. indirect antihuman globulin test C. both of above
D. none of above
- Which one is the product of choice for increasing oxygen-carrying capacity?
A. fresh frozen plasma B. red blood cells C. whole blood D. platelets E. all of the above
- Which one is the product of choice for preventing patients who have repeated febrile reactions?
A. red blood cells B. fresh frozen plasma C. leukocyte-poor red blood cells D. whole blood
E. granulocytes

臺北醫學大學 89 學年度第 2 學期期中(末)考試命(試)題紙

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21. Which one is the product of choice for treatment of patients with thrombocytopenia ?
A. red blood cells B. whole blood C. plasma D. platelets E. all of the above
22. Which one is the product of choice for patients who have serious bacteria infection because of chemotherapy for leukemia ?
A. lymphocytes B. granulocytes C. red blood cells D. platelets E. fresh frozen plasma
23. Which one is the product of choice for replacing all coagulation factors ?
A. platelets B. cryoprecipitate C. fresh frozen plasma D. red blood cells
E. factor VIII
24. Which one is the product of choice for treatment of patient with von Willebrand syndrome ?
A. cryoprecipitate B. frozen plasma C. plasma pheresis D. albumin E. platelets
25. Of the following, which blood product is selected when a patient can not wait for ABO matched blood ?
A. A type whole blood B. B type whole blood C. AB type red cells D. O type red cells
E. O type whole blood
26. Which type of transplantation requires blood products to be irradiated before transfusion ?
A. renal transplantation B. bone marrow transplantation C. liver transplantation
D. cardiac transplantation E. all of the above
27. Which of the following could cause GVH disease?
A. WBC transfusion B. platelet transfusion C. plasma transfusion D. RBC transfusion
E. all of the above
28. Which of the following is the most common reason that causes immediate intravascular hemolysis?
A. incompatible fluid B. iron overload C. ABO mixup D. attachment of IgG to cells
E. all of the above
29. Which of the following should be performed immediately in laboratory when a suspected transfusion reaction is reported?
A. checking transfusion request B. checking the compatibility test C. checking blood bag
D. checking the identifying information on labels on the postreaction specimen
E. all of the above
30. Which of the following is an immediately immunological effect?
A. GVH disease B. urticaria C. hemolysis D. posttransfusion purpura
E. congestive heart failure
31. Which of the following can be transmitted via transfusion?
A. CMV B. HIV C. HCV D. syphilis E. all of the above
32. Of the following disease, which one is the most relative risk in associating with the HLA-B27 antigen?
A. Reiter's syndrome B. SLE C. rheumatoid arthritis D. multiple sclerosis
E. insulin-dependent diabetes mellitus
33. Which of the following cells do not express HLA class II antigen?
A. B cells B. macrophage C. T cells D. early hematopoietic cells E. dendritic cells
34. The test of choice for HLA class I antigen testing is
A. ELISA B. microlymphocytotoxicity test C. HLA DNA typing D. hemagglutination test
E. fluorescent antibody test
35. The best test of choice for HLA class II antigen testing is
A. microlymphocytotoxicity test B. inhibition test C. mixed lymphocyte culture
D. HLA DNA typing E. ELISA
36. Which of the following consists the HLA class II antigen?
A. $2\alpha_1, 2\beta_1$ B. 3 α chain, 1 β_2 microglobulin C. $\alpha_1, \alpha_2, \beta_1, \beta_2$
D. $\alpha_1, \alpha_2, \alpha_3, \beta_1$ E. non of the above
37. The specific epitopes of HLA class I antigens are expressed in
A. α_1, β_1 B. α_1, α_2 C. α_1, β_2 microglobulin D. α_1, β_2 E. non of the above

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38. The two haplotypes present in one individual constitute the HLA:
 A. haplotype B. complotype C. phenotype D. genotype E. non of the above
39. By employing HLA-A and HLA-B locus typing to resolve cases of disrupted paternity.
 Child's phenotype A1,A32; B18,B35
 Mother's phenotype A1,A30; B7,B18
 Child's maternal haplotype A1,B18
 Which of the following is not putative father's phenotype?
 A. A1, A32; B7,B35 B. A1, A24; B7,B8 C. A1, A32; B18,B35
 D. A2,A32; B6,B35 E. non of the above
40. Which of the following is not a required test for donor blood?
 A. Anti-EBV B. Anti-HTLV-1 C. Anti-HCV D. ABO typing
 E. serologic test for syphilis
41. Which of the following should be required for donating blood in Taiwan?
 A. body weight : at least 45 kg for female
 B. blood pressure : systolic 80-170 mmHg, diastolic 60-80 mmHg
 C. oral temperature not exceed 37°C D. Hb: 13.5g/dl for male, 12.5g/dl for female
 E. all of the above
42. Which of the following can be used to correction of factor VIII deficiency?
 A. WBC concentrate B. packed RBC C. cryoprecipitate D. frozen plasma
 E. all of the above
43. Which of the following cannot transmit hepatitis or HIV infection?
 A. single donor plasma B. thawed frozen red blood cells C. packed RBC
 D. normal serum albumin E. cryoprecipitate
44. Which of the following can be used for correction of symptomatic anemia?
 A. Fresh frozen plasma B. Platelet concentrate C. Packed RBCs D. Cryoprecipitate
 E. All of the above
45. Which of the following is the most common transfusion reaction reported to the blood bank?
 A. Bacteria contamination B. Febrile nonhemolytic reaction C. Anaphylaxis D. Hepatitis C
 E. Hemolysis with symptom
46. Which of the following is not an immediately immunologic effect?
 A. Urticaria B. Anaphylaxis C. Hemolysis with symptoms D. Post-transfusion purpura
 E. All of the above
47. The HLA genes are located on chromosome number
 A.6. B. 2. C. 17 D. 14 E. 23.
48. Which of the following cells do not express HLA antigens?
 A. Monocytes B. Lymphocytes C. Granulocytes D. Platelets E. Mature RBCs

II. Description:

1. Please describe the principle of the Manual polybrene test (4%).

Answer:

1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____
 11. _____ 12. _____ 13. _____ 14. _____ 15. _____ 16. _____ 17. _____ 18. _____ 19. _____ 20. _____
 21. _____ 22. _____ 23. _____ 24. _____ 25. _____ 26. _____ 27. _____ 28. _____ 29. _____ 30. _____
 31. _____ 32. _____ 33. _____ 34. _____ 35. _____ 36. _____ 37. _____ 38. _____ 39. _____ 40. _____
 41. _____ 42. _____ 43. _____ 44. _____ 45. _____ 46. _____ 47. _____ 48. _____ 49. _____ 50. _____

題技

八十九學年度第二學期臨床微生物期末考

姓名_____ 學號_____

1. *Bacteroides fragilis* group 在 BBE agar 上其菌落周圍呈
 - A. 黑褐色
 - B. 透明
 - C. 黃色
 - D. 綠色
2. 有關 *Clostridium perfringens* 的特性何者錯誤
 - A. 菌體呈 tennis racket appearance
 - B. 在厭氧 BAP 上呈雙重溶血圈
 - C. Nagler 試驗呈陽性反應
 - D. 會產生 lecithinase
3. *Prevotella* 等革蘭氏陰性厭氧性桿菌，欲觀察其色素的產生，最適當的培養基為
 - A. BBE (*Bacteroides bile esculini*) agar
 - B. Egg Yolk agar
 - C. LKV (laked kanamycin vancomycin blood) agar
 - D. LD esculin agar
4. 引起 pseudomembranous colitis (PMC) 最常見之病原菌為
 - A. *Clostridium perfringens*
 - B. *Clostridium difficile*
 - C. *Clostridium botulinum*
 - D. *Clostridium tetani*
5. 厭氧性球菌中何者在 UV 照射下具有紅色的螢光
 - A. *Veillonella* sp.
 - B. *Peptostreptococcus* sp.
 - C. *Acidaminococcus* sp.
 - D. *Megasphaera* sp.
6. Cycloserine cefoxitin fructose agar 上下列何種細菌呈黃色毛玻璃狀的菌落
 - A. *Clostridium perfringens*
 - B. *Clostridium difficile*
 - C. *Clostridium botulinum*
 - D. *Clostridium tetani*
7. Acute Glomerulonephritis 與下列何種細菌感染有關？
 - A. *Staphylococcus aureus*
 - B. *Streptococcus pyogenes*
 - C. *Mycobacterium tuberculosis*
 - D. *Staphylococcus epidermidis*
8. 由鏈球菌所釋放出來，對氧氣不安定，會引起完全溶血之物質為
 - A. Streptolysin O
 - B. Streptolysin S
 - C. β -lysin
 - D. Protein A
9. 易引起年輕婦女尿道感染，且對 Novobiocin 紙錠呈抗藥性為下列何種細菌？
 - A. *Staphylococcus aureus*
 - B. *Staphylococcus saprophyticus*
 - C. *Staphylococcus warneri*
 - D. *Staphylococcus epidermidis*
10. 下列何種細菌可在 6.5%NaCl Agar 及 Bile-Esculin Agar 生長，且 PYR 試驗呈陽性反應
 - A. *Streptococcus pyogenes*
 - B. *Enterococcus faecalis*
 - C. *Streptococcus bovis*
 - D. *Staphylococcus aureus*
11. 下列何者會引起食物中毒
 - A. *Staphylococcus aureus*
 - B. *Staphylococcus saprophyticus*
 - C. *Streptococcus mutans*
 - D. *Streptococcus bovis*
12. 下列哪一隻細菌會引起人畜共同感染病，在 bicarbonate agar 上會形成 capsule，在 BAP 上無溶血
 - A. *Bacillus anthracis*
 - B. *Bacillus subtilis*
 - C. *Bacillus mycoides*
 - D. *Bacillus cereus*
13. 細菌的芽胞 (spore) 經革蘭氏染色呈
 - A. 紫紅色
 - B. 粉紅色
 - C. 藍色
 - D. 無色
14. Gonococci 常用的特殊培養基為何
 - A. Bordet gengous medium
 - B. Loeffler medium
 - C. Thayer-Martin medium
 - D. Lowenstein-Jensen medium
15. Pelvic inflammatory disease (PID) 常由下列何種病原菌感染造成
 - A. *Chlamydia*
 - B. *Treponema*
 - C. *Syphilis*
 - D. *Haemophilus*
16. 下列何種感染和婦女不孕症有密切關係
 - A. *Chlamydia*
 - B. *Mycoplasma*
 - C. *Herpes simplex virus*
 - D. *Syphilis*
17. Cervical cancer 和下列何種感染有關
 - A. *Herpes simplex virus*
 - B. *Syphilis*
 - C. HIV
 - D. HPV
18. Congenital infection 中所指的“TORCHS”不包括下列何者
 - A. *Toxoplasma*
 - B. *Rubella*
 - C. *Chlamydia*
 - D. *Herpes simplex virus*
19. Neonatal infection 中，造成 0 至 4 天 (early infection) 主要是由何種引起
 - A. *Strep. group B*
 - B. *Stap. aureus*
 - C. *Strep. group A*
 - D. *Kebsiella pneumoniae*
20. CSF 檢查中，發現淋巴球增加、protein 增加、而 sugar 下降，可推測可能為
 - A. Viral infection
 - B. *Stap. aureus*
 - C. *Strep. group A*
 - D. *Kebsiella pneumoniae*
21. 下列何者最常見於 CNS 感染的進入方式
 - A. Hematogenous
 - B. Neural
 - C. Direct
 - D. Olfactory route
22. Skin infection 中引起 staphylococcal scalded skin syndrome (SSSS) 是由何者所造成
 - A. exotoxin
 - B. endotoxin
 - C. degradative enzyme
 - D. cell wall

