

1. 下列何癌症分期的病人預後最差？  
(A) T4N0M0 (B) T2N2M0 (C) T2N1M1 (D) T1N3M0
2. 慢性胰臟炎的最常見的原因是：  
(A)膽結石 (B)飲酒 (C)遺傳 (D)藥物及化學物質
3. 最常出現脂肪變性的器官是：  
(A)肝臟 (B)腎臟 (C)肺臟 (D)胰臟
4. 下列有關慢性支氣管炎的敘述何者是錯的？  
(A)定義為兩年以上每年三個月以上的咳嗽 (B)抽煙是最重要的危險因子  
(C)空氣污染也是危險因子 (D)病理學的特徵是黏液的過度分泌和慢性發炎
5. 下列何種腫瘤和 Epstein-Barr 病毒感染較無關？  
(A)鼻咽癌 (B) Hodgkin's 淋巴瘤  
(C)鼻子的 T/NK 細胞淋巴瘤 (D)蕁狀肉芽腫(Mycosis fungoides)
6. 在台灣，肺腺瘤最常突變的致癌基因是：  
(A) p53 (B) KRAS (C) EGFR (D) ERBB2
7. Zollinger-Ellison 症候群是因為分泌\_\_\_\_\_的腫瘤所造成。  
(A)胃泌素(gastrin) (B)昇糖素(glucagon) (C)體抑素(somatostatin) (D)皮質素(cortisol)
8. 下列何者生殖細胞腫瘤較會分泌甲胎兒蛋白(alpha-fetoprotein)？  
(A)精細胞瘤(seminoma) (B)胚胎細胞癌(embryonal carcinoma)  
(C)卵黃囊瘤(yolk sac tumor) (D)絨毛膜癌(Choriocarcinoma)
9. 乳癌的小葉癌(lobular carcinoma)常有何種蛋白表現的喪失？  
(A) Cytokeratin (B) E-cadherin (C) Alpha-catenin (D) Beta-catenin
10. 下列何者不是膽固醇結石的好發因子？  
(A) 40-60 歲 (B)女性 (C)肥胖 (D)溶血性疾病
11. 何種微生物感染和胃潰瘍有密切的關聯性？  
(A) *Helicobacter pylori* (B) *Pseudomonas aeruginosa*  
(C) *Clostridium difficile* (D) *Legionella pneumonia*
12. 胃腺瘤的好發因子包括以下因子，除了：  
(A)嗜酸性胃炎 (B)腸化生 (C)飲食中的硝酸鹽或硝酸胺 (D)接受過亞全胃切除
13. 下列何種腫瘤和游離性輻射最有關？  
(A)肺小細胞癌 (B)甲狀腺癌 (C)膽道癌 (D)食道癌
14. 皮膚的蕁麻疹(urticarial)是屬於第幾型過敏反應？  
(A)第一型 (B)第二型 (C)第三型 (D)第四型
15. 維生素 C 不足會造成何種蛋白生成的缺損？  
(A) Fibronectin (B) Integrin (C) Collagen (D) Selectin
16. 黃麴毒素是何疾病的危險因子？  
(A)肝母細胞瘤 (B)肝細胞癌 (C)膽管癌 (D)胰臟癌
17. 唐氏症是哪一個染色體數目增加？  
(A)第十三號染色體 (B)第十七號染色體 (C)第十八號染色體 (D)第二十一號染色體
18. 卡波西氏肉瘤(Kaposi sarcoma)和何種病毒感染有關？  
(A) polyoma virus (B) Human herpes virus 8 (C) adenovirus type 71 (D) picornavirus
19. t(14; 18) 常出現在何種淋巴瘤？  
(A)小細胞淋巴瘤 (B)濾泡性淋巴瘤 (C) T 淋巴母細胞淋巴瘤 (D) Burkitt 氏淋巴瘤
20. 下列何種肝糖儲存症是儲存在溶小體(lysosome)？  
(A)第一型 (B)第二型 (C)第三型 (D)第四型

21. 下列何者非副贅瘤症候群？  
 (A) 子宮頸癌病人出現高血鈣 (B) 腎上腺瘤分泌皮質素  
 (C) 大腸癌病人出現黑色素棘皮症 (D) 胰臟癌病人出現血栓體質
22. 下列何種疾病和石棉的曝露最有關？  
 (A) 間皮瘤 (B) 肺腺癌 (C) 肺氣腫 (D) 不明原因肺纖維化
23. 下列毒素，何者最會造成癌症？  
 (A) 鉛 (B) 砷 (C) 鉻 (D) 汞
24. 中大型動脈的肉芽腫性血管炎稱為：  
 (A) Takayasu 動脈炎 (B) 結節性多動脈炎(polyarteritis nodosa)  
 (C) Kawasaki 氏病 (D) Graves 氏病
25. 下列何病可以看到抗基底膜抗體(anti-basement membrane antibody)？  
 (A) Wegener 肉芽腫病(Wegener granulomatosis) (B) Goodpasture 症候群  
 (C) Churg-Strauss 症候群 (D) Henoch-Schonlein 紫斑症
26. Which one is not the typical feature of apoptosis?  
 (A) chromatin condensation (B) cytoplasmic bleb (C) cell shrinkage  
 (D) cell swelling (E) phagocytosed by macrophage
27. Which organelle(s) is/are with double membrane?  
 (A) mitochondria (B) autophagosome (C) endosome (D) lysosome (E) Golgi complex
28. Which description is wrong?  
 (A) An infarct in tissue is an area of ischemic necrosis caused by occlusion of the supplying vessel.  
 (B) The infarct in lung appears as "white infarction".  
 (C) Testicular torsion sometimes causes venous occlusion to result in red infarction.  
 (D) Cardiogenic shock could lead to white infarction of heart.
29. Which description is wrong?  
 (A) Type I hypersensitivity is often due to immediate release of vasoactive amine from B cells.  
 (B) Systemic lupus erythematosus is a disease categorized as type III hypersensitivity.  
 (C) Contact dermatitis is a cell-mediated hypersensitivity caused by activated T lymphocytes.  
 (D) Breakdown of self-antigen tolerance of the immune system is the basis of autoimmune disease.
30. Extracellular deposition of amyloid could damage tissues. Which special stain can be used to show apple-green birefringence in amyloid under polarized light?  
 (A) Hematoxylin & Eosin stain (B) Masson stain (C) Silver stain  
 (D) Congo red stain (E) Gomori-trichrome stain
31. Acquired immunodeficiency syndrome (AIDS) is a disease caused by HIV infection in:  
 (A) CD8+ T cells (B) macrophage (C) CD4+ T cells (D) Bcl-2+ B cells (E) dendritic cells
32. Both chickenpox rash and shingles are caused by infection of:  
 (A) Cytomegalovirus (B) Herpes simplex virus 1 (C) Mumps virus  
 (D) Herpes simplex virus 2 (E) Varicella-zoster virus
33. Tuberculosis is a chronic pulmonary and system disease caused most by:  
 (A) Mycobacteria (B) Gram-positive bacilli (C) Yersinia pestis (D) Aspergillus
34. The specific pathogen you answered in the question (33.) could be highlighted by:  
 (A) Gram stain (B) Acid-fast stain (C) PAS stain (D) Silver stain (E) Masson stain
35. Cor pulmonale results from:  
 (A) pulmonary hypotension (B) pulmonary hypertension  
 (C) pulmonary traumatic injury (D) pulmonary infection
36. Which congenital heart disease would cause right-to-left shunt and cyanosis in early life?  
 (A) atrial septal defect (ASD) (B) ventricular septal defect (VSD)  
 (C) patent ductus arteriosus (PDA) (D) tetralogy of Fallot (TOF)

37. The replacement of a glutamate residue with a valine residue at the 6<sup>th</sup> codon of  $\beta$ -globin could result in:  
(A)  $\beta$  thalassemias (B) sickle cell disease (C)  $\alpha$  thalassemias (D) megaloblastic anemia
38. Pernicious anemia is caused by autoimmune gastritis that impairs the production of intrinsic factor, which in turn affects the uptake of:  
(A) vitamin B<sub>12</sub> (B) iron (C) Mg (D) folic acid
39. Which infection is frequently associated with nasopharyngeal carcinoma?  
(A) Herpes virus (B) enterovirus (C) EBV (D) CMV
40. Chewing betel quid and paan is a major predisposing factor in Asia for:  
(A) oral squamous cell carcinoma (B) aphthous ulcer  
(C) periodontitis (D) nasopharyngeal carcinoma
41. Which description about HCV is INCORRECT?  
(A) HCV genome codes for a single polyprotein that is processed into functional proteins.  
(B) HCV is a double-stranded DNA virus.  
(C) HCV RNA polymerase has low fidelity.  
(D) HCV is inherently unstable and exists as quasispecies.
42. Which lesion is NOT the precursor lesion of hepatocellular carcinoma?  
(A) nodular regenerative hyperplasia (B) small cell change (C) large cell change  
(D) hepatocellular adenoma (E) low grade dysplastic nodule
43. Which is NOT the risk factor for gallstones?  
(A) aging (B) oral contraceptives (C) obesity (D) biliary infection (E) chronic hepatitis
44. Loss of function mutation in PKD1 or PKD2 gene could lead to:  
(A) medullary sponge kidney (B) renal cell carcinoma  
(C) autosomal dominant polycystic disease (D) nephrosclerosis
45. Which infection is highly associated with cervical intraepithelial neoplasia?  
(A) HSV (B) HPV (C) CMV (D) EBV (E) HIV
46. Which description is WRONG?  
(A) Lymphocytic thyroiditis often occurs after a pregnancy.  
(B) Graves disease is the most common cause of endogenous hyperthyroidism.  
(C) Hashimoto thyroiditis is the most common cause of hypothyroidism in regions where dietary iodine levels are insufficient.  
(D) ADH deficiency causes diabetes insipidus.
47. Which is not the contributing factor for osteoporosis ?  
(A) aging (B) lack of physical activity (C) gender difference (D) insufficient Ca intake
48. Gout is a transient attack of acute arthritis initiated by crystallization of:  
(A) calcium phosphate (B) monosodium urate  
(C) glycerol (D) magnesium phosphate around the joint.
49. The most abundant cell type in the brain is:  
(A) neuron (B) oligodendrocyte (C) ependymal cell (D) astrocyte
50. Which disease is not classified as neurodegenerative disease?  
(A) Parkinson disease (B) Alzheimer disease (C) amyotrophic lateral sclerosis  
(D) multiple sclerosis (E) frontotemporal dementia