**說明：**

1. **本試卷以100分為滿分，皆為單選題，每題題分2分，共50題，題號連續。**
2. **試題分三部分，第一部分 (第 1 題至第 10 題)每題答錯倒扣 0.5 分，倒扣至第一部分零分為止；單題若未作答，不給分亦不扣分。第二部分(第 11 題至第 20 題) 答錯不倒扣、第三部分(第 21 題至第 50 題)答錯不倒扣。**
3. **請將答案寫在「答案卡」上，否則不予計分。**

**I. Vocabulary (20 points):** Choose the best answer to fill in the blank in each of the following sentences to complete the text.

1. British physician Thomas Percival, echoing the words of Francis Bacon, insisted that it was the physician's responsibility to "_____ despair, alleviate pain, and sooth mental anguish."
   (A) deviate (B) bloviate (C) obviate (D) exuviate (E) aviate
2. The term "international medical graduates" (IMGs) is generally understood to _____ a physician who is awarded their medical degree in a country other than the one where they intend to practice medicine.
   (A) denote (B) detect (C) delete (D) detest (E) demand
3. Art as therapy is considered product-oriented because it's satisfying to create a piece of art that is _____ pleasing.
   (A) aerobically (B) atheistically (C) aseptically (D) athletically (E) aesthetically
4. Rural practice is different from urban practice and different from the practices that most physicians might have learned while in _____ training.
   (A) respected (B) recently (C) residency (D) recurrent (E) refectory
5. Doctors are frequently criticized for their lack of "humanity": interest in the symptom rather than the person, a _____ manner and cultivated professional indifference to "difference".
   (A) caique (B) brusque (C) unique (D) plaque (E) torque
6. Good therapeutic relationships were described as having the quality of humility, and remote participants appreciated doctors who were not _____ when patients wished not to be referred to certain specialists perceived to scold them.
   (A) contaminating (B) consolidating (C) condescending (D) convalescing (E) coagulating
7. In some countries, routine episiotomies and the use of oxytocin during a normal labor appeared to _____ women from seeking skilled care during pregnancy, childbirth, and the postpartum period.
   (A) deploy (B) dilute (C) despise (D) deter (E) devise
8. A NSW community-based _____ and hospice care service were comprehensively assessed for sustainability, and several challenges were identified, such as the need to examine models of end-of-life care for rural patients.
   (A) pantheon (B) palliative (C) palpitation (D) pestilence (E) peculation
9. Indigenous people in various industrialized countries tend to have a shorter life _____ and higher mortality rates compared with other ethnic groups.
   (A) enclosure (B) eloquence (C) equilibrium (D) excoriation (E) expectancy
10. To properly diagnose sickle cell disease in rural Kenya, physicians at regional hospitals often strive to be _____ when examining patients and performing predictive testing.
    (A) impartial (B) impecunious (C) fatuous (D) pernicious (E) puerile

**II. Cloze (20 points):** Choose the best answer according to the context.

*Questions 11-15*

In recent years, researchers in emergency rooms have been testing the effects of artificial blood substitutes such as PolyHeme and Hemopure. The development of such a substitute would __11__ a significant achievement with many health benefits. Blood transfusions, __12__, would be easier and safer, as there would be no need to match blood types, and the risk of __13__ viruses would be avoided as well. There would no longer be a shortage of blood in large cities or in rural areas, as artificial blood substitutes can last for two years, much longer than blood can be stored. But the __14__ of this research is questionable because patients who are in need of blood transfusions in the emergency room are often unconscious and therefore do not have the opportunity to __15__ to this research.

| | | | | |
|---|---|---|---|---|
| 11. (A) consecrate | (B) constitute | (C) conscript | (D) conspire | (E) consider |
| 12. (A) actually | (B) however | (C) for example | (D) in fact | (E) in general |
| 13. (A) transmitting | (B) transcribing | (C) transforming | (D) translocating | (E) transplanting |
| 14. (A) ethnic | (B) ethos | (C) ethane | (D) ether | (E) ethics |
| 15. (A) consent | (B) consensus | (C) concord | (D) congruous | (E) continue |

*Questions 16-20*

Mount Isa is a remote mining town in northwestern Queensland. The town has an approximately 17% of aboriginal population. There are many programs designed specifically for the aboriginal population and many health services available in the regional center. __16__, many health practitioners and aboriginal people have expressed concerns over the health and well-being of the aboriginal population, variously as a perceived lack of __17__ or an overburdening of many of these services and programs. Many people __18__ these issues to lack of transportation, lack of money and cultural or language barriers.

An ethnographic study conducted in Mount Isa disclosed health care accessibility issues. Many of the issues identified in interviews __19__ discussion of culture such as taboo and obligation, etiquette, kinship structures, social networks, values and beliefs. Other issues were not specifically cultural, dealt __20__ with structural elements of the health care setting, institution or system itself. Accordingly, issues were categorized as social, cultural and structural to demonstrate the ways that "culture" is inclusive of many categories of phenomena, while also able to be narrowed down to human belief and value systems.

| | | | | |
|---|---|---|---|---|
| 16. (A) Indubitably | (B) Hereafter | (C) Negligently | (D) Nevertheless | (E) Ultimately |
| 17. (A) uptake | (B) usurp | (C) diatribe | (D) diligence | (E) defiance |
| 18. (A) contribute | (B) attribute | (C) indoctrinate | (D) generate | (E) accelerate |
| 19. (A) roused from | (B) arose from | (C) retaliated on | (D) adhered to | (E) afflicted with |
| 20. (A) regardless | (B) et cetera | (C) in vivo | (D) in vitro | (E) instead |

**III. Reading Comprehension (60 points):** Read the passages below and choose the best answer to each question based on the information provided.

*Questions 21-25 refer to the following passage.*

**PASSAGE 1**

Indigenous social determinants of health, including the ongoing impacts of colonization, contribute to increased rates of chronic disease and a health equity gap for Indigenous people. Globally, type 2 diabetes disproportionately affects Indigenous populations, with documented rates in Canada 3–5 times

higher in Indigenous compared with non-Indigenous populations. Indigenous people tend to acquire diabetes at younger ages, have complications sooner, and have poorer treatment outcomes. In Canada and other countries that share a colonial history, health inequities arising from the effects of colonization include deeply rooted disparities in the social determinants of health, social exclusion, political marginalization, and historical trauma.

Researchers undertook a qualitative examination of Indigenous patients' stories emanating from a sequential focus group method that concerned diabetes care experiences. They found that interactions and engagement with health services were influenced by personal and collective historical experiences with health care providers and contemporary exposures to culturally unsafe health care. Indigenous patients related such experiences to specific health policies and systemic discrimination in health care systems. Specifically, Indigenous patients reported that rushed appointments, writing prescriptions or medicating complaints, not listening, and negative judgments regarding Indigenous customs and communities created a lack of confidence in the health system and provider. These experiences led to Indigenous patients not disclosing all of their symptoms or health behaviors.

Mistrust emerged as a substantial subtheme that stemmed from historical experiences. Some Indigenous patients suspected that during the mid-20th century, Indigenous patients with tuberculosis "were used as guinea pigs", presumably observed or tested upon without access to the same interventions provided to non-Indigenous patients. On the other hand, other Indigenous patients acknowledged that, increasingly, hospitals set aside spaces for the Indigenous ceremony but noted that access to these is not always possible for patients confined to a bed. Likewise, it is not uncommon for Indigenous extended families to come to hospitals in support of a patient.

A considerable challenge identified by Indigenous patients was that each visit to a clinic off-reserve could lead to interacting with a new provider, retelling one's history, and leaving with yet another care plan. A shortage of on-reserve physicians threatened the continuity of care. Consequently, some Indigenous patients questioned doctor–patient ratios for Indigenous people across Canada, arguing that concern over doctor shortages should be amplified for populations with disproportionate rates of diabetes. In addition, the physical space in which clinical interactions took place was important. Indigenous patients often wanted services provided in their communities or in Indigenous health centers. Examination rooms could stir mistrust before a clinical interaction even began.

Health care relationships are central to addressing the ongoing colonial dynamics in Indigenous health care and play a role in **mitigating** past harms. The positive therapeutic relationships described by Indigenous patients involved physicians who showed empathy and patience, and who took a genuine interest in the patient. Attention to antiracism education, structural competency and advocacy for working with Indigenous populations holds great potential to address issues identified, as physicians are also health advocates and should promote health equity.

21. Based on the information in the passage, which of the following is true?

(A) Physicians who paid no attention to antiracism education, structural competency and advocacy emanated from the shortage of on-reserve physicians and space set aside in hospitals for the Indigenous ceremony.

(B) A health equity gap for Indigenous people is evidenced by documented rates of type 2 diabetes in the world approximately a quarter higher in Indigenous compared with non-Indigenous populations.

(C) Doctor–patient ratios for Indigenous people across Canada did not reflect doctor shortages, based on reports of physicians who took a genuine interest in Indigenous patients with disproportionate rates of diabetes.

(D) Rushed appointments and negative judgments regarding Indigenous customs created a lack of confidence in the health system and led to Indigenous patients not disclosing all of their symptoms.
(E) Indigenous patients wanted services provided in their communities or in the examination rooms of hospitals for clinical interactions, as Indigenous families always came to hospitals in support of a patient.

22. According to the passage which of the following is not true?
(A) Health inequities that emerged under the influence of colonization in Canada include differences in the social determinants of health, social exclusion, political marginalization, and historical trauma.
(B) Indigenous patients with type 2 diabetes in Canada did not have access to the same interventions offered to non-Indigenous patients, but it was always possible to practice the Indigenous ceremony in hospitals when confined to a bed.
(C) Negative judgments about Indigenous customs and communities created a lack of confidence in the health system and provider in Canada.
(D) It is not uncommon for Indigenous extended families to visit patients with type 2 diabetes in hospitals in Canada.
(E) Indigenous patients questioned doctor–patient ratios for Indigenous people across Canada, based on their experiences that each visit to a clinic off-reserve could lead to interacting with a new provider, retelling one's history, and leaving with another care plan.

23. Which of the following instances of unsafe health care is not discussed, either directly or indirectly, in the passage?
(A) Physicians coming and going from community
(B) Denied ability to practice ceremony
(C) Frustration with the daily challenges that affect coping with long queues
(D) Past experiences influenced faith in health care
(E) What used to be hemochromatosis is now the epidemic of asthma and tuberculosis

24. The word "mitigating" as it is used in the final paragraph most nearly means _____.
(A) alleviating (B) inducting (C) instigating (D) invoking (E) militating

25. What is the most likely reason that in the final paragraph the "ongoing colonial dynamics" is mentioned?
(A) to show through a metaphor that reality is, in the findings, such as a senior hospital administrator did not run a lodging service for Indigenous patients
(B) to remind us that Indigenous people tend to acquire diabetes at younger ages and have poorer treatment outcomes in Canada
(C) to reinforce the point that Indigenous patients with tuberculosis were used as guinea pigs during the mid-20th century in Canada
(D) to reinforce the point that the interactions with health services were influenced by personal and collective historical experiences with health care providers
(E) to illustrate the point that new physicians came to Indigenous communities to gain experience with complex and diverse diseases before moving on to better places

*Questions 26-30 refer to the following passage.*

**PASSAGE 2**

George Gordon Byron was born in London on 22 January 1788 with a deformed foot, the nature of which has been disputed. His father, who died when Byron was three years old, labelled his son "club-footed" and evidence from several sources strongly supports that assessment. His mother's description of him aged four, which indicated that his foot "turns inward […] and he walks quite on the side of his foot,"

is consistent with the diagnosis of congenital *talipes equinovarus*, or clubfoot. In fact, *talipes* in Latin means "to walk on the _____."

*Talipes equinovarus*, a congenital abnormality recognized since antiquity, occurs in approximately 1 in 1000 of live births, affects males about twice as frequently as females, and involves both feet in about one half of cases. When unilateral, it is more common on the right than the left.

When George Gordon Byron was aged ten, he became Lord Byron, inheriting the title of the sixth Baron Byron of Rochdale after his great-uncle died. He and his mother moved to Nottingham, near the decaying and debt-ridden estate of Newstead Abbey which he also inherited. There she employed a man known from our sources only by his surname, Lavender, who claimed an ability to cure her son's deformity. Listed in the Nottingham directory as a surgeon, he was actually a maker of medical appliances for the general hospital. His **excruciating** regimen was to rub Byron's foot with oil, twist it, and screw it up in a wooden contraption. His tutor remarked one day how uncomfortable he felt observing his student in such pain. "Never mind, Mr. Rogers," Byron replied, "you shall not see any signs of it in me."

When Byron was taken to London in 1799, Dr Matthew Baillie (1761–1823) thought that early treatment might have greatly or wholly corrected the deformity, but by this time it was too late. Nevertheless, he had the bonesetter Timothy Sheldrake make some instruments for Byron's foot. These were shortly abandoned, however, and he received a boot instead. Later that year, Sheldrake constructed a device that Baillie had designed to straighten the foot. Byron wrote: "My foot goes but indifferently. I cannot see any alteration."

Sheldrake reported that he made plaster casts of the deformity and, in his 1828 account in the medical journal Lancet, appended drawings of them. They indeed indicate a clubfoot, but on the left, not the right, suggesting that the figures were inaccurate, from another patient, or, in fact, genuine representations of Byron's foot, reversed because of the engraving process, which creates mirror images of the original drawings. Shortly before Byron's death in 1824 in Greece, Dr Julius Millingen (1800–78), although also misidentifying which side was affected, commented: "The foot was deformed and turned inwards; and the leg was smaller and shorter than the sound one […] [T]here can be little or no doubt, that he was born club-footed."

26. Based on Byron's mother's description of his deformed foot in paragraph 1, *talipes* in Latin is most likely to mean "to walk on the _____" in English. What is the most appropriate answer to the blank?
(A) soles (B) heels (C) ankles (D) toes (E) knees

27. According to this passage, which of the following is **NOT** a fact about *talipes equinovarus*, or clubfoot?
(A) It affects males more frequently than females.
(B) It is a recognized disease that may affect both feet.
(C) It has been recognized since the ancient time.
(D) It has been recognized as a contagious disease.
(E) It, if only on one side, is more common on the right.

28. Where does the following sentence best belong?
According to his later friend, John Cam Hobhouse (1786–1869), "he wore the instrument with impatience and threw it in the pond."
(A) At the end of paragraph 1
(B) At the end of paragraph 2
(C) At the end of paragraph 3
(D) At the end of paragraph 4
(E) At the end of paragraph 5

29. The word "excruciating" in paragraph 3 is closest in meaning to _____.
(A) advanced (B) agonizing (C) medicinal (D) soothing (E) therapeutic

30. Based on the information in this passage, which of the following is the most correct statement about Byron?
(A) The treatment of his clubfoot was very successful.
(B) He became rich after the death of his great-uncle.
(C) He was a patient diagnosed with a clubfoot on the left.
(D) He refused to see Mr. Roger anymore due to his clubfoot.
(E) His deformed foot had been recognized since his birth.

*Questions 31-35 refer to the following passage.*

**PASSAGE 3**

Much of the research of the past few decades has examined which therapies to use and how to use them. Which medication, what does, for how long? Which procedure? What's the benefit? These are all questions commonly asked and that can now be regularly and reliably answered.

Treatment guidelines for many diseases are published, available, and regularly used. And despite concerns and lamentations about "cookbook medicine," these guidelines, based on a rapidly growing cornerstone of evidence have saved lives. These forms of evidence-based medicine allow patients to benefit from the thoughtful application of what's been shown to be the most effective therapy.

But effective therapy depends on accurate diagnosis. We now have at our disposal a wide range of tools—new and old—with which we might now make a timely and accurate diagnosis. And as treatment becomes more standardized, the most complex and important decision making will take place at the level of the diagnosis.

The patient's story and exam suggest a likely suspect and the technology of diagnosis rapidly confirms and hunch. An elderly man with a fever and a cough has an X-ray revealing a raging pneumonia. A man in his fifties has chest pain that radiates down his left arm and up to his jaw, and an EKG (_____) or blood test bears out the suspicion that he is having a heart attack. A teenage girl on the birth control pill comes in complaining of shortness of breath and a swollen leg, and a CT (Computed Tomography) scan proves the presence of a massive pulmonary embolus. This is the **bread and butter** of medical diagnosis—cases where cause and effect tie neatly together and the doctor can almost immediately explain to patient and family whodunit, how, and sometimes even why.

But then there are the other cases: patients with complicated stories or medical histories; cases where the symptoms are less suggestive, the physical exam unrevealing, the tests misleading. Cases in which the narrative of disease strays off the expected path, where the usual suspects all seem to have alibis, and the diagnosis is elusive. For these, the doctor must don his/her deerstalker cap and unravel the mystery. It is in these instances where medicine can rise once again to the level of an art and the doctor-detective must pick apart the tangled strands of illness, understand which questions to ask, recognize the subtle physical findings, and identify which tests might lead, finally, to the right diagnosis.

31. What can be inferred from the first three paragraphs?
(A) Evidence-based medicine is helpful in some respects.
(B) New tools are more reliable than old tools.
(C) Therapy is more important than diagnosis.
(D) Both treatment and diagnosis should be standardized.
(E) "Cookbook medicine" focuses on individualized care.

32. Where does the following sentence best belong?
Often the diagnosis is straightforward.

(A) At the beginning of paragraph 1
(B) At the beginning of paragraph 2
(C) At the beginning of paragraph 3
(D) At the beginning of paragraph 4
(E) At the beginning of paragraph 5

33. What is the most appropriate answer to the blank in paragraph 4? In other words, what does "EKG" stand for?
(A) electrophysiology
(B) electromyography
(C) electrooculography
(D) electronegativity
(E) electrocardiogram

34. Based on the information in the last two paragraphs, which of the following is true?
(A) Symptoms can always be identified as evidence of particular diseases.
(B) A pulmonary embolus refers to a blockage of an artery in the womb.
(C) Medical diagnosis and criminal investigation are alike to some extent.
(D) A doctor should look after a patient as carefully as a deerstalker.
(E) Standardized treatment is more effective than individualized care.

35. The phrase "bread and butter" in paragraph 4 is closest in meaning to _____.
(A) negotiation (B) foundation (C) resolution (D) plantation (E) annexation

*Questions 36-40 refer to the following passage.*

**PASSAGE 4**

Bipolar Disorder (BD) is one of several serious mental health conditions that has a significant impact on a person's life, and contributes to a high degree of health burden worldwide. Research suggests that some Indigenous populations experience higher community prevalence rates of BD, including Māori the Indigenous peoples of New Zealand. A recent systematic review of BD in Indigenous peoples noted an extremely limited evidence base, recommending Indigenous research designed to identify the impact of systemic factors on current health inequities.

The New Zealand health system, while planning reform, is currently structured hierarchically. This includes: primary care delivered by doctors in General Practice (GPs); community-based services; outpatient and inpatient hospital services delivered regionally by 20 District Health Boards (DHBs); and non-governmental organizations (NGOs). Mental health care for BD generally requires a GP referral to DHB services, and can include periods of inpatient or community-based treatment delivered by multi-disciplinary teams (MDT) within a psychiatric care model. The composition of services and teams can differ between DHBs, meaning experiences of care may change depending on where in New Zealand a person lives.

Based on a qualitative Kaupapa Māori Research methodology, a recent study analyzed critique from Māori patients with Bipolar Disorder (BD) and their *whānau* to identify barriers and propose changes to improve the structure and function of the New Zealand mental health system. Three themes reflected patients' critique of structural features of the New Zealand health system and their impact on service provision for Māori with BD and their *whānau*. The operational-accessibility sub-theme included patients' critique of the hours of service operation, including clinic hours, visitation times, and ward rounds; as well as processes for scheduling appointments, and the impact of these processes on access to BD services for Māori. In addition, patients identified constraints through insufficient resources in specific services or environmental features of facilities that limited their access to culturally safe, competent and equitable health care.

Structural factors also influenced accessibility of staff with specialist skills to treat Māori with BD, like psychiatrists, psychologists and Māori mental health workers. Patients recognized that staffing-accessibility reflected current recruitment and retention priorities, meaning improved accessibility for Māori required prioritization of staff with proven clinical and cultural competencies.

Transformational change therefore requires a commitment to monitor and address institutional racism driving inequitable access to effective care for Māori with BD and their *whānau* in the health system. As New Zealand prepares for significant health system reform, a commitment to equity and implementation of previously recommended structural change is needed, along with ongoing evaluation and **refinement** of structural changes to ensure the efficacy for *whānau* Māori.

36. Which of the following best describes what the passage is about?
(A) Structural Barriers and Solutions in the New Zealand Mental Health System
(B) Bipolar Disorder Symptoms of Māori in New Zealand
(C) Staffing-Accessibility in the New Zealand Health System
(D) Indigenous Populations and Institutional Racism in New Zealand
(E) Transformational Change of District Health Boards in New Zealand

37. Which of the following could best replace the word "*whānau*" as used in paragraphs 3 and 5?
(A) structural reforms
(B) community-based treatment
(C) mental health conditions
(D) health inequities
(E) family or support networks

38. The word "refinement" as it is used in paragraph 5 most nearly means _____.
(A) reduction (B) cultivation (C) refutation (D) denotation (E) deterioration

39. Based on the information in the passage, which of the following is **NOT** true?
(A) Mental health care for BD generally requires DHB services and can include periods of inpatient or community-based treatment delivered by MDT within a psychiatric care model.
(B) Indigenous populations experience higher community prevalence rates of BD, including Māori the Indigenous peoples of New Zealand.
(C) BD patients criticized the clinic hours, visitation times and ward rounds, and all the BD patients went through the same processes for scheduling appointments in New Zealand.
(D) The composition of services and teams can differ between DHBs, and experiences of care may change depending on where a BD patient lives in New Zealand.
(E) Clinical and cultural competencies of psychiatrists and psychologists influenced accessibility of staff with specialist skills to treat Māori with BD.

40. Based on the information in the passage, which of the following is true?
(A) There is good evidence that institutional racism drives inequitable access to effective care for Māori with BD in paragraph 1.
(B) It can be inferred that access to equitable health care as described in paragraph 3 is limited for Māori due to the lack of resources for particular services or the environmental features.
(C) Information about structural features of the New Zealand health system is not constrained by accessibility through insufficient resources in specific services in paragraph 3.
(D) In the major health system reforms in New Zealand described in paragraph 4, accessibility has been provided for Māori and staff are now clinically and culturally competent.
(E) The staffing-accessibility described in paragraph 5 suggests that institutional racism does not drive inequity in access to effective care for Māori with BD.

*Questions 41-45 refer to the following passage.*

**PASSAGE 5**

In spring 2008, the possible subject matter for picture books expanded into a new realm with the publication of *My Beautiful Mommy*. Written by Michael Salzhauer and illustrated by Victor Guiza, the narrative is **billed** as the first picture book to address the subject of cosmetic surgery.

Told from a first-person perspective, *My Beautiful Mommy* relays the experiences of a young girl whose mother is about to undergo multiple elective aesthetic procedures. Although the story is fictional, it takes an informational rather than imaginative approach: the narrative provides young readers with a type of "guided tour" or instructive overview of the process.

*My Beautiful Mommy* begins with the mother's initial consultation at the doctor's office, progresses to the day of her surgery, discusses the period of her _____, and ends with the removal of her bandages and the unveiling of her new, cosmetically altered self. To help explain the entire cosmetic surgery experience to child readers, the book appropriates a common metaphor from nature: it compares the mother's transformation to that of a caterpillar into a butterfly, complete with even likening her bandages to a cocoon.

The mother in *My Beautiful Mommy* is undergoing not simply a random cluster of cosmetic surgery procedures, but a specific grouping known as the "mommy makeover." Comprised of a tummy _____, liposuction, and a breast lift (with or without implants), it is a designed to help mothers regain their pre-pregnancy form. Given the growing number of women undergoing cosmetic surgery, coupled with the growing societal belief that parents ought to be more honest and open with their children, there was a growing need to have such procedures explained in a manner that young people could understand.

As Abigail Jones aptly observed, while much attention has been paid to "the emotional effects plastic surgery can have on patients," few have addressed the question "how does a mother's plastic surgery affect her kids?". *My Beautiful Mommy* seeks to do just that. Released on the symbolic date of Mother's Day in 2008, the picture book is aimed at children ages four through seven, and it is intended to ease the fear and anxiety that children experience when a parent undergoes cosmetic surgery.

41. What can be inferred from the first three paragraphs?
(A) The author of this passage is known as a pioneer in cosmetic surgery study.
(B) *My Beautiful Mommy* is a first-person narrative, told from a mother's perspective.
(C) The most appropriate answer to the blank in paragraph 3 is "recuperation".
(D) Cosmetic surgery is as compulsory as an entomological transformation.
(E) *My Beautiful Mommy* is a fictional picture book, so its content is unreliable.

42. What is the most appropriate answer to the blank in paragraph 4?
(A) tank　(B) tuck　(C) tube　(D) tame　(E) turn

43. Based on the information in this passage, which of the following statements about *My Beautiful Mommy* is **NOT** true?
(A) It is a book written for children aged from 4 to 7.
(B) It is an illustrated medical guide for cosmetic surgeons.
(C) It is a book for parents and kids to read together.
(D) It is the first picture book on cosmetic surgery.
(E) It is a picture book referring to "mommy makeover."

44. Which of the following statements comes closest to this passage's argument?
(A) Cosmetic surgery shouldn't be performed on women with children.
(B) It's better for women to undertake cosmetic surgery before pregnancy.
(C) Children should be properly informed of their parents' cosmetic surgery.
(D) "Mommy makeover" should be banned because it is harmful to children.

(E) Parents' cosmetic surgery brings more joy than fear to their children.

45. The word "billed" in paragraph 1 is closest in meaning to _____.
(A) advertised (B) amended (C) abhorred (D) abandoned (E) appended

*Questions 46-50 refer to the following passage.*

**PASSAGE 6**

Minority populations more often have limited English proficiency compared to their White counterparts in the United States. Individuals of Asian origin or Hispanic are especially likely to face language difficulties, with about 40% of each of these ethnic groups speaking English less than very well, compared to less than 2% among non-Hispanic Whites. About 15% of Native Hawaiians and other Pacific Islanders and 10% of American Indians and Alaska Natives have limited English proficiency. Only 2.5% of non-Hispanic Blacks have limited English proficiency. Consequently, differences in English fluency across these groups help to explain ethnic disparities in certain dimensions of access to care.

Language barriers to care exist in both primary and acute care settings. In primary care settings, patients with limited English proficiency are less likely to report having a regular source of care, continuity of care, or receipt of screening services, and more likely to report long waits in the waiting room and difficulty obtaining information or advice over the telephone, compared to English-proficient patients. When professional medical interpreter services are provided, language barriers are reduced. However, many community-based clinics and small, private practices do not make use of professional interpreters due to the high cost and inconvenience. Similar barriers exist in acute care settings, such as hospital emergency departments. At both the national and state levels, various guidelines and legislative mandates have been implemented regarding the provision of culturally and linguistically appropriate care. These laws and recommendations typically apply to health care settings which receive public funding, and in theory should reduce or eliminate language barriers to care. Yet professional interpreter services are underused in these settings, even when mandated by law.

There are statistically significant differences regarding access to health care between the proficient group and the limited proficiency group. Compared to English proficient individuals, more individuals with limited English proficiency experience forgone care and fewer report health care visits. In addition, fewer non-English-speaking individuals own their home, and more non-English-speaking individuals have less education and live in poverty or near poverty. Hispanics make up the vast majority of the population with limited English proficiency, with non-Hispanic Whites and Asians making up most of the **remainder**.

Researchers found that English language proficiency was associated with health care visits but not with delayed or forgone medical care. Measuring visits to a health professional may more directly capture the communication challenges that patients face in health care settings. The reliance on communication presents a potential barrier to care if the patient has limited English proficiency. In addition, individuals who perceive themselves as English-proficient may actually have inadequate levels of English health literacy, thus limiting the potential for dialogue with health care providers. Individuals with limited English proficiency may have more difficulty acquiring health information about important health care services and relevant disease symptoms, thus **attenuating** the potential relationship between language proficiency and the measures of health care access.

Language barriers to health care is also relevant to other multilingual and multicultural countries, such as Australia and Taiwan. Providers, researchers, and policy makers in international settings must also meet the health care needs of increasingly diverse populations. Language barriers in accessing medical care, such as communication difficulties due to discordant languages between patients and health care providers, and previous negative medical experiences that dissuade future attempts to obtain medical attention can be partially explained by socioeconomic and health status factors.

46. What is the main purpose of the first paragraph?
(A) To remind us that any laws and recommendations applying to health care settings should eliminate language barriers to care in hospital emergency departments
(B) To introduce the main topic—ethnic equalities in the United States, a multilingual and multicultural country
(C) To convey that minority populations with limited English proficiency may have unequal access to health care
(D) To illustrate the point that professional medical interpreter services are provided in many community-based clinics
(E) To reinforce the idea that numerous non-Hispanic Blacks have limited English proficiency

47. Which of the following could best replace the word "remainder" as used in paragraph 3?
(A) raiment (B) residual (C) regimen (D) rejoinder (E) reparation

48. The word "attenuating" as it is used in paragraph 4 most nearly means _____.
(A) augmenting (B) warranting (C) wrenching (D) weakening (E) ascertaining

49. According to the passage, which of the following is **NOT** true?
(A) People with limited English proficiency may have more difficulty accessing health information about important health care services and related disease symptoms.
(B) Language barriers in access to care include issues such as communication difficulties due to discordant languages between patients and health care providers.
(C) Professional medical interpreter services can reduce language barriers, although these services can be expensive and inconvenient in community-based clinics.
(D) English-speaking patients may not actually have an adequate level of English health literacy, thus limiting the possibility of dialogue with health care providers.
(E) Professional interpreter services are underutilized in primary care settings, even when required by law, but private practices use professional interpreters in acute care settings.

50. Which of the following would be the most appropriate title for this passage?
(A) Medical Communication in the United States, Australia, and Taiwan
(B) Impact of English Proficiency on Access to Health Care Services
(C) Language Barriers of Hispanics, Non-Hispanic Whites, and Asians
(D) Communication Reliance and Forgone Medical Care
(E) Public Health Care Services and Professional Interpreter Services

# 國立中興大學 112 學年度醫學院學士後醫學系招生考試

## 選擇題參考答案

**科目：英文**

| 題號 | 答案 | 題號 | 答案 | 題號 | 答案 | 題號 | 答案 | 題號 | 答案 | 題號 | 答案 | 題號 | 答案 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | C | 16. | D | 31. | A | 46. | C | 61. | | 76. | | 91. | |
| 2. | A | 17. | A | 32. | D | 47. | B | 62. | | 77. | | 92. | |
| 3. | E | 18. | B | 33. | E | 48. | D | 63. | | 78. | | 93. | |
| 4. | C | 19. | B | 34. | C | 49. | E | 64. | | 79. | | 94. | |
| 5. | B | 20. | E | 35. | B | 50. | B | 65. | | 80. | | 95. | |
| 6. | C | 21. | D | 36. | A | 51. | | 66. | | 81. | | 96. | |
| 7. | D | 22. | B | 37. | E | 52. | | 67. | | 82. | | 97. | |
| 8. | B | 23. | E | 38. | B | 53. | | 68. | | 83. | | 98. | |
| 9. | E | 24. | A | 39. | C | 54. | | 69. | | 84. | | 99. | |
| 10. | A | 25. | D | 40. | B | 55. | | 70. | | 85. | | 100. | |
| 11. | B | 26. | C | 41. | C | 56. | | 71. | | 86. | | | |
| 12. | C | 27. | D | 42. | B | 57. | | 72. | | 87. | | | |
| 13. | A | 28. | D | 43. | B | 58. | | 73. | | 88. | | | |
| 14. | E | 29. | B | 44. | C | 59. | | 74. | | 89. | | | |
| 15. | A | 30. | E | 45. | A | 60. | | 75. | | 90. | | | |

# 國立中興大學 112 學年度學士後醫學系招生考試

# 試題參考答案疑義釋疑公告

| 科目 | 題號 | 疑義答覆 | 釋疑結果 |
|---|---|---|---|
| 英文 | 32 | 本題重點為測試考生篇章結構能力，第 4 段開頭的句子倒數第 2 個字是否誤植，並不影響答案為 D 的明確性，本題問題為“Where does the following sentence best belong?”, 故考生應在所列選項中選出最適合的選項，又因“Often the diagnosis is straightforward.”無法放置於篇章當中第四段以外的其他段落，因此不變更參考答案。 | 維持原答案(D) |

| 科目 | 題號 | 疑義答覆 | 釋疑結果 |
|---|---|---|---|
| 物理 | 1 | 考題為單選題，且一般而言，汽車的質量(~1000-1500 公斤)跟兩個人的質量差(<30 公斤)相差很多，若把此誤差考慮進去，答案還是(C)。 | 維持原答案(C) |
| | 6 | $F=m*R*\varpi^2$<br>$m=900[N]/10[m/s^2]=90kg$<br>$F=1000[N]$<br>$R=F/(m*\varpi^2)=1000/(90*(2\pi*100/3600)^2)\approx360$<br>答案為(B)。 | 維持原答案(B) |
| | 10 | 答案會因取重力加速度的不同有所不同，但答案(B)誤差在範圍之內，且其他答案已設計與(B)有很大的差距，故維持正確原答案(B)。 | 維持原答案(B) |
| | 15 | 本題未提供聲速 344m/s，本題送分。 | 本題送分 |
| | 38 | The key sentence is “the volume charge density does **increase** with distance from the sphere center”.<br>From Gauss’s law:<br>$4\pi r^2 \cdot E(r) = \frac{1}{\epsilon}\int_0^r 4\pi r'^2 dr' \rho(r')$<br>Therefore, outside the sphere, the E field falls like the square of the distance from the center. By Gauss’ law, if the charge distribution were constant, then the E field would rise linearly from the center (Qenc $\propto r^3$and E = kQenc /$r^2$ ). However, here the volume charge density increases with distance from the center, therefore the enclosed charge rises more slowly from the center, which is described only by (D). | 維持原答案(D) |
| | 39 | Electric potential difference is defined as the potential difference between **two points.** | 維持原答案(D) |

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| 物理 | | However, problem 39 is not the case, it asked for a general form of electric potential,<br>and no any two points were mentioned. | |
| | 49 | 本題為正確答案誤植，答案更正為(B)。 | 答案更正為(B) |

| 科目 | 題號 | 疑義答覆 | 釋疑結果 |
|---|---|---|---|
| 化學 | 33 | 根據題意上說明，正確答案應為(C)而非(D)。 | 答案更正為(C) |
| | 47 | 根據題意上說明，正確答案應為(C)或(D)或(E),三者任一皆可給分。 | 答案更改為(C)或(D)或(E) |

| 科目 | 題號 | 疑義答覆 | 釋疑結果 |
|---|---|---|---|
| 普通生物及生化概論 | 8 | 2,3-BPG 是 Hb 的 inhibitor，會抑制 Hb 結合氧氣。新生胎兒的 Hb 的 His143 易突變為 Ser，造成新生兒 Hb 對 2,3-BPG 結合力下降，反而會造成新生兒 Hb 對氧氣的親和力上升。 | 維持原答案(B) |
| | 9 | 一般來說，Keratin 5 及 14 蛋白突變會發生 Epidermolysis bullosa，但近年文獻指出 Keratin K18 突變會造成 cystic fibrosis. | 答案更改為(A)或(C) |
| | 10 | 在無氧呼吸(anaerobic respiratory)的狀態下，葡萄糖會先經過 Glycolysis 轉換成 pyruvate，並產生兩個 ATP 分子。隨後 pyruvate 會被 LDH 酵素催化還原成 lactate，並產生氧化態 NAD+。LDH 也會逆向反應將 lactate 氧化成 pyruvate，但前提是 NAD+及 lactate 的濃度夠高的狀態，此過程的條件並非是氧氣濃度高所造成。故第 10 題答案仍維持(C)。 | 維持原答案(C) |
| | 11 | slope 單位分子分母寫反，故此題無正確答案。 | 本題送分 |
| | 16 | phospholipids, sphingolipids, and cholesterol 為兩性分子，並且皆存在於細胞膜。 | 答案更改為(A)或(C) |
| | 19 | AChR 可以分為 nAChR 及 mAchR，前者為 channel，後者為 GPCR。 | 答案更改為(A)或(B) |
| | 20 | 本題 D 選項的敘述，最大的問題點在於 G protein 在訊息傳遞的機制中，會停留在細胞膜上，不是扮演細胞內訊號分子(intracellular signalling molecules)的角色。故不選 D。 | 維持原答案(C) |
| | 31 | 根據所提供之課本圖例下方之說明（1）已 | 維持原答案(A) |

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|---|---|---|---|
| 普通生物及生化概論 | | 經很清楚的註明為 cytosol 了，所以答案（B）並無不妥，因此答案仍維持為所公布之參考答案（A）為唯一選項。 | |
| | 46 | 本題所列選項嚴格來說並無正確的答案<br>由於亦無以上皆非之選項，所以本題建議送分。 | 本題送分 |
| | 55 | 選項 B DNA duplication occurs during prophase before mitosis and meiosis I，DNA 複製發生在 interphase，此選項非正確答案。故此題無正確答案。 | 本題送分 |
| | 59 | 選項 C 異形核子通常不具有貧血的病徵，僅有在極端環境，如高海拔才會影響血紅素攜帶氧氣的能力。因而，一般情形下，異形核子通常不會患有鐮刀型貧血症並且可以正常生活。此外，sickle cell trait 並非一種疾病，而是泛指帶有鐮刀型貧血症基因的異形核子族群。故選項 C 非正確答案。<br>選項 E 鐮刀型貧血患者如果有嚴重貧血，通常會在年輕的時候因為貧血緣故早逝。因而選項 E 並非答案。鐮刀型貧血患者並非全部患有嚴重貧血，患者可能會隨著年紀增長貧血情形漸趨嚴重。就 E 選項敘述 severe symptoms lead to death at the elderly population，先決條件是假設患有嚴重貧血的話，患者通常無法活到老年，而是在年輕就病逝，因而 E 選項並非正確答案。 | 維持原答案(B) |
| | 60 | 選項(D) a useful tool for specific gene knockdown，綜觀期刊論文研究，利用 CRISPR-Cas9 進行 gene knockdown 是可行的。在細胞模式中有其他方法可以取代 CRISPR-Cas9 來執行 gene knockdown，可以利用 siRNA 或是 shRNA 達到一樣的效果。現行 CRISPR-Cas9 為一有效率進行基因剔除 (gene knockout) 的方法，並且為大多數人所利用，但 CRISPR-Cas9 在 gene knockdown 研究也提供一種新的方式進行此實驗。但就效率而言，CRISPR-Cas9 需要花費較久的時間，對比 siRNA 或是 shRNA 則是可以快速達到 gene knockdown 的 | 答案更正為(E) |

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|---|---|---|---|
| 普通生物及生化概論 | | 目的。就實驗目的而言，CRISPR-Cas9 是針對 genome 進行改造，而 siRNA 及 shRNA 的目標是 mRNA，所以就僅有 CRIPSR-Cas9 系統改造過後的細胞能夠保有 gene knockdown 特徵的遺傳物質，不會因為細胞複製而喪失。 | |
| | 65 | 基本四大組織為上皮組織、結締組織、肌肉組織以及神經組織。雖然脂肪組織為結締組織的一種，但題目有明確指出下列何者並非四種基本組織，因而選項僅有脂肪組織符合題意所圈選出的答案。 | 維持原答案(C) |
| | 71 | All of the above factors can contribute to genetic variation in a population, making option E the correct answer. (D 負面的影響也是影響)。 | 維持原答案(E) |
| | 72 | Option A is incorrect because seed plants did not evolve from ferns. Instead, both groups evolved from a common ancestor but diverged into distinct lineages. | 維持原答案(C) |
| | 73 | Answer: E is incorrect because although some fungi are single-celled, others have complex multicellular structures. But Its life cycle is not single-celled. | 維持原答案(C) |
| | 76 | Answer: B. 0.2<br>Explanation: The frequency of the resistance gene in the population can be calculated as the number of individuals with the gene divided by the total number of individuals in the population. In this case, there are 10 individuals with the gene, and a total of 50 individuals in the population.<br>Therefore, the frequency of the gene is:<br>Frequency = Number of individuals with gene / Total number of individuals Frequency = 10 / 50<br>Frequency = 0.2<br>Therefore, the frequency of the gene in the population is 0.2, or 20%.<br>未明確說明是「同型合子」或「異型合子」，故 A、B 兩個答案都給分。 | 答案更正為(A)或(B) |
| | 77 | C: It’s not only at the tips of stems and roots | 答案更正為(C)或(E) |

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|---|---|---|---|
| | 78 | 本題因考題資訊不足，本題送分。 | 本題送分 |
| | 79 | 題目已經明確告知 A, B 兩物種的染色體數目，而且已告知為單選，故認為仍維持原答案。 | 維持原答案(C) |