

國立臺中教育大學 107 學年度研究所碩士班招生考試

計算機概論試題

適用系所：數位內容科技學系碩士班(A組)

一、選擇題（每題 5%，共 55%）

1. 在 WiFi 中可以啟用以下哪一個作為加密？

- (A) WPA
- (B) NOS
- (C) WAD
- (D) NIC

2. 研究生想在碩士論文中引用他人的著作，是否須徵得著作財產權人的同意？

- (A) 要徵得同意，也要付權利金
- (B) 在合理範圍內可以直接引用，不必付權利金，但要註明出處
- (C) 不必徵得同意，但要付權利金
- (D) 要徵得同意，但不必付權利金

3. Apache 是屬於？

- (A) 網頁伺服器
- (B) 資料庫伺服器
- (C) FTP 伺服器
- (D) SMTP 伺服器

4. 下列哪一項不屬於 BIOS 管理？

- (A) Hard drive
- (B) CPU
- (C) Dynamic Memory Allocation
- (D) RAM

5. 「凱撒密碼」是使用下列哪一種密碼技術？

- (A) 替代
- (B) 換位

- (C)兩者皆是
- (D)兩者皆非

6.負責資料壓縮的是？

- (A)展示層
- (B)會議層
- (C)網路層
- (D)應用層

7.下列何種排序法是穩定的(stable)？

- (A)選擇排序
- (B)插入排序
- (C)快速排序
- (D)堆積排序

8.對於手機體感遊戲功能的設計，哪一項非常適合運用陀螺儀(gyroscope)進行實作？

- (A)偵測玩家是否上下搖動手機
- (B)偵測玩家是否向前行走
- (C)偵測玩家原地旋轉的角度
- (D)偵測玩家目前的所在位置

9. v6 的位址長度為何？

- (A) 128 Bits
- (B) 64 Bits
- (C) 256 Bits
- (D) 512 Bits

10. Internet 所使用的 Protocol 為 TCP/IP，它對應於 OSI 的網路七層，是屬於第幾層？

- (A) 4/3
- (B) 3/4
- (C) 4/5
- (D) 5/6

- 11.使用雲端運算便不需要花錢買 Outlook、Office 等軟體，只要有瀏覽器，就可以利用免費或付費的網路服務開始處理資料。下列選項何者是這個模式的名稱？
- (A) SaaS
 - (B) PaaS
 - (C) IaaS
 - (D) BaaS

二、簡答題 (45%)

- 1.請說明大數據(Big Data)，其資料應該具備哪 4 個 V。(15%)
- 2.請說明人工智慧包含哪些研究領域？並論述你對人工智慧未來發展的期望？(15%)
- 3.請敘述網路應用程式採用 UDP 而不採用 TCP 的原因？(15%)

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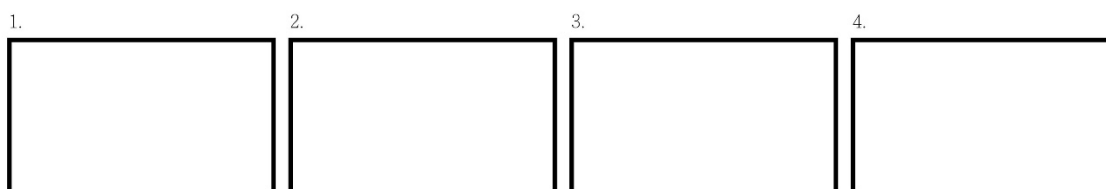
創意思考試題

適用系所：數位內容科技學系碩士班(B組)

一、簡答題(100%)

1. 請在下列畫框分鏡中，以四格畫面表現出「……你上網查榜後知道……錄取本校數位內容科技研究所正取生時」的起承轉合畫面。注意！本題的解答要……越有趣越好。(20%)

(本題得以鉛筆繪圖，請於答案卷最後所附空白頁作答，並標示題號。)



2. 冬去春來……南投縣政府預計在 2018 年 12 月 11 日~22 日在合歡山辦理第一屆冬季親子運動會，為了吸引全國民眾的關注，請你以「春神來了」為題，完成兩個不同的吉祥物造型設計提案。接著，請自我評估這兩個提案設計的優缺點，並申論之。(20%)

(本題得以鉛筆繪圖，請於答案卷最後所附空白頁作答，並標示題號。)

3. 請以新媒體藝術的方式表達「沉浸」(Immerse)的概念為何？(可以鉛筆畫草圖輔助說明)。(15%)

4. 請申論數位藝術的「可複製性」與傳統藝術的「獨一無二性」，兩者間的表達形式有何差別？(15%)

5. 請估計一輛公車可以塞下多少顆棒球？(15%)

6. 請設計一款創意吊飾，並以圖示說明(設計過程中必須使用手繪、電腦繪圖軟體及 3D 列印等手法或工具)。(15%)

(本題得以鉛筆繪圖，請於答案卷最後所附空白頁作答，並標示題號。)

國立臺中教育大學 107 學年度研究所碩士班招生考試

語文（英文）試題

適用系所：語文教育學系華語文教學碩士班、區域與社會發展學系碩士班、
數位內容科技學系碩士班

I. Vocabulary and Grammar (Each 1%, Total 20%)

1. The dense pollution caused by the burning coal left grime on Ann's face. As Ann _____ her face with a tissue, she saw a thin layer of black dirt on it.
(A) felled (B) bawled (C) slashed (D) whipped
2. Valentine's Day is around the corner. It is a time when people who love each other make reservations at fancy restaurants. Some restaurants offer candlelight dinners. The light from the candles _____, giving off a warm and romantic ambiance.
(A) flops (B) flosses (C) flickers (D) flinches
3. The protest got out of hand when people started throwing rocks and hitting the police with metal bars. This violent situation _____ the police to use force.
(A) waned (B) waived (C) waggled (D) warranted
4. Jack became bored during math class. So, he started to _____ in his seat. His actions disturbed the students sitting around him.
(A) swarm (B) squad (C) sprain (D) squirm
5. Mom _____ her children for walking on her clean floor and making it dirty. She told the children to go outside and play.
(A) spanned (B) scolded (C) sprawled (D) sprinted
6. As students walked barefooted in the rice _____, squishy mud oozed through their toes and little frogs jumps over their feet.
(A) patio (B) paddy (C) paddle (D) padlock
7. Mary is an _____. She often spends time alone reading fascinating books.
(A) extremist (B) introvert (C) extrovert (D) energizer
8. John is a fun-loving, gregarious person. He makes a great travel _____ because he enjoys interacting with people around him.
(A) craftsman (B) companion (C) coronation (D) compartment

9. For the emperor to create a scheme to perpetuate his dynasty, he needs to develop an ideology that will _____ his power.
(A) slip (B) uphold (C) slacken (D) alliterate
10. Even though many years have _____ since the 921 earthquake, many people jitter when they feel a seismic activity.
(A) elated (B) evaded (C) elapsed (D) eschewed
11. The farmer has many facilities to raise his various farm animals. He has a sheep fold to keep the sheep, a pigsty for the pigs, and a cowshed so that the cows can stay _____. These animals provide a way for the farmer to make a living.
(A) warm and dry (B) warmly and dryly
(C) warming and drying (D) warmness and dryness
12. Many store signs protrude from buildings. Some signs are huge, others are _____, and other ones have vivid colors. These designs are employed to draw people's attention as they go by.
(A) gloss (B) glossy (C) glossily (D) glossiness
13. The landscaper trimmed the bushes in the garden into wonderful shapes with a pair of _____. Passersby admired the beauty of the garden.
(A) shear (B) shorn (C) shears (D) shearing
14. Since the economy _____, the labor union is bargaining with the management to improve the working conditions, provide better benefits, and increase the salaries of the laborers.
(A) bouncing back (B) are bounced back
(C) is bouncing back (D) has been bounced back
15. When the eagle spotted the rabbit, it swooped down and grabbed the rabbit with its claws. Then, the eagle _____ back to its nest to feed its eaglets.
(A) flew (B) flown (C) had flown (D) has been flying
16. The recent _____ in the traditional market has been caused by shoppers who have been buying food, plants, and an assortment of goods as they have been preparing for the coming Chinese New Year.
(A) hustle and bustle (B) hustles and bustles
(C) hustled and bustled (D) hustling and bustling

17. This year, the school is offering lessons to teach students to play a _____ instrument. Students can learn to play a violin, cello, double bass, or classical guitar.
(A) strung (B) stringy (C) stringed (D) stringing
18. The iBike stations are set up throughout Taichung, making it convenient for people to exercise, _____ to work and school, and visit hotspots in the city.
(A) commute (B) commuted (C) commuter (D) commuting
19. It is important to sweep and mop the classroom regularly. Everyday bags are left hanging under desks, tissues _____ through the room, and strands of hair are lying on the floor.
(A) strew (B) are strewed (C) is strewing (D) have been strewing
20. Taiwan is located above the equator in a subtropical region. It is an ideal place to grow _____ types of fruits and vegetables.
(A) numeral (B) numerous (C) numerously (D) numerousness

II. Cloze (Each 1%, Total 15%)

21. When you choose a job, at _____ in the early part of your working life, you are probably concerned more with future prospects than with the particular job you are starting in.
(A) last (B) least (C) most (D) best
22. One of the presuppositions of modern thought is that institutions, in order to be understood, must be seen in relation _____ the conditions of time and place in which they appear.
(A) to (B) with (C) of (D) on
23. The liberal democratic faith, _____ expressed in the works of eighteenth- and early nineteenth-century writers, is one of the formulations of the modern doctrine of progress.
(A) so (B) like (C) as (D) for
24. Many writers make frequent use of the words “instinct” and “instinctive,” but, with very _____ exceptions, they use them so loosely that they have almost spoiled them for scientific purposes.
(A) little (B) much (C) many (D) few

(背面尚有試題)

25. _____ possible by changes in the traditional philosophy of life, comfort is now one of the causes of its own further spread.
(A) Made (B) Invented (C) Created (D) Used
26. The controversy over achievement testing starts from a simple fact: Achievement tests reward test-taking skills as _____ as they reward achievement.
(A) soon (B) much (C) long (D) well
27. A lot of us lose life's tougher confrontations by mounting a frontal attack—when a touch of humor might well enable us to chalk _____ a win.
(A) up (B) with (C) out (D) for
28. When the Super Bowl came to Tampa, Florida, in 2001, football players and coaches were not the only people _____ camera.
(A) in (B) at (C) on (D) for
29. Heat from the Earth's core drives convection in the Earth's mantle, _____ like heat from the bottom of your lava lamp drives convection within the lamp.
(A) only (B) as (C) so (D) just
30. A jet's propulsion system basically requires a fluid of some sort to be pushed out the back of a system, and then the system pushing it will move _____.
(A) backward (B) forward (C) toward (D) outward
31. With populations aging worldwide, the effect of loneliness on public health is expected to get _____.
(A) better (B) worse (C) best (D) worst
32. Betty tried her _____ at cooking, but she will need to practice more before her friends eat anything she makes.
(A) hand (B) foot (C) mouth (D) head
33. _____ a time when supermarkets are growing larger and more pervasive, many Taiwanese are choosing to return to the traditional farmers' market.
(A) In (B) By (C) At (D) Once upon
34. The character really came to _____ onstage thanks to the skill of the actor.
(A) living (B) alive (C) live (D) life
35. Being back here brings many unpleasant memories to _____.
(A) head (B) heart (C) mind (D) brain

III. Reading Comprehension (Each 1%, Total 15%)

In the reading test, you will read a variety of texts and answer several different types of reading comprehension questions. Select the best answer for each question.

Questions 36-39 refer to the following text.

SAVE 30%
It's only a click away
FORMOSA HOTELS

Over 30 five-star hotels all over Taiwan to suit every need of your vacation

Reserve a "Room for the Day", and you will save 20% on all rooms at FORMOSA (excluding tax) by using your credit card.

Due to seasonal demands, the availability of rooms may be subject to each hotel's situation. An advanced reservation, to be made by visiting our website at www.formosahotels.com at least 10 working days before your stay, is required to qualify for the discount.

36. What type of text is this?

- (A) Announcement (B) Advertisement
(C) News report (D) Lecture

37. Which of the following is a condition placed on receiving the discount?

- (A) A guest must use a specific type of credit card to pay for a room.
(B) The booking must be done well in advance of checking into the hotel.
(C) The reservations must be made by calling the toll free number.
(D) Guests must make their payments in cash.

38. What does the discount apply to?

- (A) Accommodations (B) Meals
(C) Transportation (D) Sales tax

39. What can be implied from the text?

- (A) Most travelers don't make a habit of making reservations prior to checking in.
(B) There is no business relationship between any particular credit card companies and the hotel.
(C) The hotel gets very busy during the summer season.
(D) It usually takes a minimum of 10 days for a credit card to clear.

(背面尚有試題)

Questions 40-45 refer to the following narrative.

One day, my car broke down in a remote village. Then I walked up to a nearest family for help. Before I knocked its door, it swung open itself, and a man of about 50 years old holding a length of rope stood in front of me. I explained my situation to him, and he invited me in. Suddenly I didn't find the host because the rooms inside were dark. In a minute, he returned with a candle but scared me because I hadn't heard his footsteps approaching. Then we moved to an open fire, but I noticed that his feet and lower legs were soaking wet. I didn't ask why. Soon, he said he had things to do and suggested me to hit the bed right away.

I woke up early the other morning and couldn't find him. I assumed that he probably had gone out to get some breakfast. Then I went out to check on my car, and I found a farmer looking at it. "Need help?" this farmer asked. "Yes, please," I said. "My car broke down here last night, and I came to this family for help. Then the owner kindly let me stay overnight, but I couldn't find him now." The farmer said, "You must be mistaken about meeting the owner of the cottage – he drowned his wife and then hanged himself seven years ago. It's been empty ever since."

40. Which of these statements is true?

- (A) The author opened the door.
- (B) The owner of the house opened the door before the author knocked.
- (C) The door opened magically on its own.
- (D) The owner of the house heard a knock at the door and opened it.

41. In paragraph 1, what surprised the author at the beginning?

- (A) That the man wasn't friendly.
- (B) That he hadn't heard the host's footsteps while he went for candles.
- (C) That the man was carrying a candle when there was plenty of light.
- (D) That the man lived alone.

42. Which of these statements is true?

- (A) The man was getting wet from the leak of the house.
- (B) The man was getting wet from the flooded water on the floor.
- (C) The man cried too much and wetted his pants.
- (D) The man's pants were dripping water on the floor.

43. What does "hit the bed" mean in the first paragraph?

- (A) Make the bed.
- (B) Change the mattress.

- (C) Go to bed.
- (D) Fix the bed.

44. Next morning, the owner of the cottage _____.

- (A) had gone out to fix the author's car
- (B) was still in bed sleeping
- (C) had disappeared
- (D) was preparing breakfast for the author

45. After reading to the end of the narrative, what can we infer about the host holding a length of rope?

- (A) The host used the rope to tie his cattle
- (B) The host used the rope to hang himself years ago.
- (C) The host was using the rope to decorate his house.
- (D) The host just bought the rope.

Questions 46-50 refer to the following article.

Most scientists believed that man's ancestors lived in the forest and ate nuts and fruit millions of years ago. However, another theory suggests that our early ancestors lived in water. There are lots of facts to support this theory.

First, human babies are able to swim when they are only a few weeks old. Naturally, they know to stop breathing in water. Additionally, they float in water and move their arms to swim.

Second, like the mammals in water, dolphins and whales, human beings have lost almost all body hair. This fact proves that human beings have lived in water and are different from most other mammals on land. Besides, the reason why early ancestors have naked skin is to allow them to swim more easily as it is streamlined. However, hair on human beings' heads has protected them from the sun while they are out of the water.

Third, only human beings walk standing upright compared to other animals in the world. This is probably because human beings have to hold their heads up to breathe while in water, and such standing upright would have helped them balance and support their bodies.

46. Most scientists believe that _____.

- (A) our early ancestors lived in the forest
- (B) our early ancestors could not swim
- (C) our early ancestors had hair
- (D) our early ancestors were vegetarians

(背面尚有試題)

47. According to the passage, what do babies do when they are underwater?
- (A) They cry.
 - (B) They stop breathing.
 - (C) They like to drink water.
 - (D) They go scuba diving.
48. Compared to other mammals on land, human beings _____.
- (A) have lost hair in order to swim faster in water
 - (B) have contained more fat to keep warm
 - (C) have practiced better swimming skills
 - (D) have learned how to fly
49. Based on another theory of where human beings come from, why do human beings still need hair on their heads?
- (A) To keep them warm.
 - (B) To hide their ears.
 - (C) To look beautiful.
 - (D) To protect their heads from the sun.
50. According to the passage, the reason why early ancestors might have stood up is probably because _____.
- (A) they have to hold their heads up above water in order to breathe
 - (B) they want to reach into the trees
 - (C) they have long legs
 - (D) they have to watch other predators

國立臺中教育大學107學年度研究所碩士班招生考試

語文（國文）試題

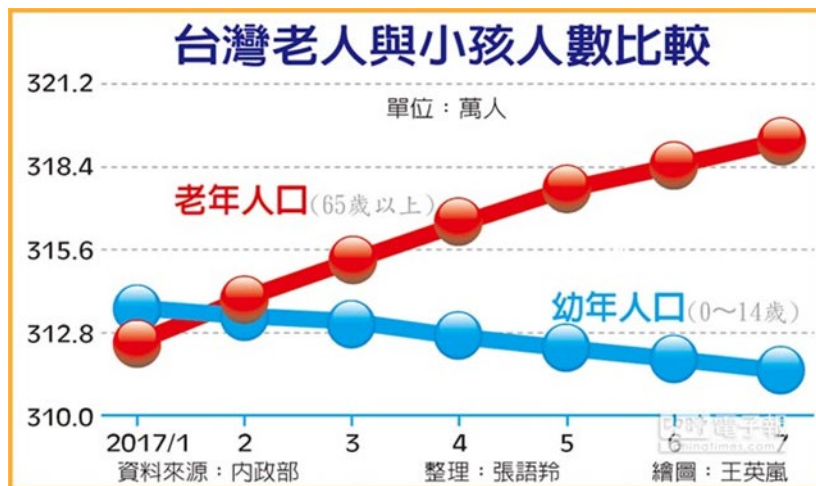
適用系所：語文教育學系華語文教學碩士班、區域與社會發展學系碩士班、
數位內容科技學系碩士班

一、基本語文能力測驗：(單選題，每題 2%，共 10%)

1.《教育部國語辭典簡編本》網站羅列出「發」的字詞釋義為：①放射②散開③開始行動或啟動④交付⑤揭露⑥顯現在外⑦表達⑧一種食物處理方法⑨興旺⑩量詞。請問，〈學記〉：「發慮憲，求善良，足以諷聞，不足以動眾……。」中的「發」字，應為何義？

- (A)散開
- (B)開始行動或啟動
- (C)顯現在外
- (D)一種食物處理方法

2.下圖中，2017年7月臺灣老人和小孩人數相差多少人？



- (A) 80 萬
- (B) 30 萬
- (C) 8 萬
- (D) 2 萬

(背面尚有試題)

3. 「都道是金玉良姻，俺只念木石前盟。空對著，山中高士晶瑩雪；終不忘，世外仙姝寂寞林；歎人間，美中不足今方信。縱然是齊眉舉案，到底意難平。」以曲文內容來看，應出自哪部名著？
- (A)鏡花緣
 - (B)西廂記
 - (C)紅樓夢
 - (D)牡丹亭
4. 「鯨吞蠶食」中的「鯨」、「蠶」二字在修辭法上屬於何者？
- (A)轉化
 - (B)借代
 - (C)轉品
 - (D)映襯
5. 漢語構詞法有一種詞是利用聲音，表示狀態或事物命名，它不能拆開解釋，這種詞稱之為聯綿詞，如「螃蟹」。下列選項中的例詞何者都屬聯綿詞？
- (A)迤邐、漣漪、牡丹、躑躅
 - (B)冰淇淋、蝌蚪、地震、顏色
 - (C)蜻蜓、輾轉、聆聽、芷若
 - (D)翩翩、蚱蜢、組織、馨香

二、閱讀理解能力測驗：(單選題，每題 2%，共 20%)

(一)請閱讀下文，並回答 6-10 題。

江海所以能為百谷之王者，以其善下之，故能為百谷王。是以聖人欲上民，必以言下之；欲先民，必以身後之。是以聖人處上而民不重，處前而民不害。是以天下樂推而不厭。以其不爭。故天下莫能與之爭。(《老子》)

6. 天下之人所以無法與聖人相爭之因為何？
- (A)聖人的領導能力強
 - (B)聖人不和任何人相爭
 - (C)聖人的才學在眾人之上
 - (D)支持聖人者眾多
7. 「欲上民」和「是以處上而民不重」兩句的「上」字，下列何者為是？
- (A)前者為動詞，後者為名詞
 - (B)二者皆為動詞

- (C)二者皆為代名詞
(D)前者為形容詞，後者為動詞

8. 「以其善下之」句意為何？
(A)由於江海善於下令指揮
(B)百川善於處在江海之下
(C)江海善於自處低下的地位
(D)百川善於奔流下注
9. 「以其善下之」、「必以言下之」、「必以身後之」、「故天下莫能與之爭」，以上四句的「之」，所指稱的對象共有幾種？
(A)一種
(B)二種
(C)三種
(D)四種
10. 依據本文，江海所以能成為百川之王的原因為何？
(A)胸懷器度深廣，能自處卑下
(B)造物者的支配使然
(C)法力無邊，百川畏懼
(D)威迫利誘，百川自投羅網

(二)請閱讀下文，並回答 11-15 題。

五月 林煥彰	五月是一首 兒歌。我們唱了又唱； 從遙遠的年代， 遙遠的故鄉， 故鄉的一條河，彎彎曲曲 流下來，流下來 流入我的每一根脈管。 而我 我不知是第幾支 支流，擱在臺灣的一個鄉村 小小的，每一寸 都迴響著，迴響著 媽媽的聲音。
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11. 「五月是一首/兒歌。我們唱了又唱」下列選項中，何者與本句表現手法相近？
(A)細看來，不是楊花，點點是離人淚。(蘇軾〈水龍吟〉)
(B)青青河畔草，綿綿思遠道。遠道不可思，宿昔夢見之。(無名氏〈飲馬長

(背面尚有試題)

城窟行》)

(C)老客天涯心尚孩，惜春直欲挽春回。長繩縱繫斜陽住，右手難移故國來。

(陸游《春晚書懷》)

(D)雲深驃騎幕，夜隔孝廉船，却寄雙愁眼，相思淚點懸。(杜甫《得廣州張判官叔卿書使還以詩代意》)

12.「詩」講究意象。意象是指：以具體形象表達抽象情感。本詩主要的具體形象為何？

(A)兒歌

(B)河流

(C)脈管

(D)鄉村

13.本詩反覆使用一種修辭法，以營造想念綿延不絕的情感。請問下列哪一種修辭法屬之？

(A)比喻

(B)擬人

(C)白描

(D)頂真

14.詩人說：「故鄉的一條河，彎彎曲曲/流下來，流下來/流入我的每一根脈管」其中，「脈管」一詞的言外之意為何？

(A)詩人的想念就像血液一般奔騰

(B)故鄉的河流正沖刷著詩人的脈管

(C)河流之於臺灣，一如脈管之於詩人

(D)故鄉與母親一樣，與詩人有斷絕不了的血親

15.下列哪一首詩所表達的情感，與本詩詩人的情感最接近？

(A)南有喬木，不可休思；漢有遊女，不可求思。(《詩經·漢廣》)

(B)慈母手中線，遊子身上衣，臨行密密縫，意恐遲遲歸，誰言寸草心，報得三春暉。(孟郊《遊子吟》)

(C)故人西辭黃鶴樓，煙花三月下揚州。孤帆遠影碧空盡，唯見長江天際流。(李白《送孟浩然之廣陵》)

(D)木落雁南度，北風江上寒。我家襄水上，遙隔楚雲端。鄉淚客中盡，孤帆天際看。迷津欲有問，平海夕漫漫。(孟浩然《早寒江上有懷》)

三、語文摘要能力測驗：(20%)

請閱讀下列文章，摘錄本文重點。(300字以內)

不管你喜不喜歡費德勒，這個名字之於網球，就是一個傳奇的存在。

一個又一個大滿貫冠軍的紀錄，他築起了難以企及的障礙，但是在他閃閃發光的網球生涯，失敗卻是比勝利更常見的。

1998年，16歲拿下溫布頓青少年組單打冠軍。當年還是小男孩的費德勒，輸球時常常躲在裁判椅後哭泣，到了青春期，這樣的敏感，轉成鬧脾氣的火爆少年。當時旁觀的父母會被他趕走，血氣方剛地憤怒，他的球拍不只一次被自己砸壞。他還曾經因為怒砸球拍，弄壞了瑞士國家網球中心的設施，被罰掃了一個禮拜的廁所。

脾氣反應在比賽的不穩定，如果交手超過兩小時，他往往就心浮氣躁開始亂打。

比賽時看來總是很從容移動步伐，優雅地用護腕擦汗，費德勒其實花了很長的時間來調伏自己的心緒。

輸球的時候，大家總認為就是他狀況不好，贏球的時候，他輕輕鬆鬆地像是理所當然。因為費德勒的風格始終不是大汗狂流，他不是咬牙切齒要打爆對手的人，從容不迫的樣子，總像是沒有歷經艱苦，也不夠用力。

大家往往都只注意他神乎其技的技能，很少看到他堅韌的那一面。

2009年溫網冠軍，這是費德勒的第15個大滿貫，他打破了山普拉斯保持多年的紀錄，他稱這次是他自己「最偉大的勝利」。

2017年，費德勒以35歲「高齡」，再拿下澳網與溫網冠軍，大滿貫推進到19個。「相信、努力、堅持！」費德勒說：「表面上，大家看到我的技術，我怎麼打，一切看來好像很自然，但對我來說，這個勝利意義非凡，特別是在經歷了低潮的2016。」

「我重回球場，但我也老了。老實說，我沒有想過我真的可以贏。」

2017年，他展現了不可能的重生，當年的奇蹟少年，繼續寫著奇蹟。

2018年，費德勒，繼續戰鬥！

節選自《天下雜誌》〈一次又一次證明自己，費德勒沒有極限！〉