# 臺北市 104 學年度市立國民中學正式教師聯合甄選 英語科題本

瞢	`	教	育	專	業	科	目

選擇題 (共 40 題, 每題 1 分, 共 40 分)

(C) 1. 臺北市目前倡導國中應推動共同備課、公開觀課及議課,試問其較不屬於下列何者所強 調的主要理念?

(A)授業研究

(B)學習共同體 (C)翻轉課堂

(D)專業學習社群

(A) 2. 依各級學校防制校園霸凌執行計書之規定,發現校園霸凌情事必須在多久的期限內通

(A) 24 小時 (B) 36 小時

(C) 48 小時

(D) 72 小時

**(B)** 3. 下列何者最能說明教育機會均等的理念?

(A)學生能享有相同的教育資源

(B)學生能享有相同的教育品質

(C)學校普遍受到認同

(D)學生能快樂學習

(C) 4. 國中學生為能在升學得到加分,而到醫院搶當志工,以獲得服務學習的分數,這種現象 較屬下列何種課程探討的範疇?

(A)活動課程

(B)正式課程

(C)潛在課程

(D)空白課程

(B) 5. 孫校長著重以願景目標凝聚共識向心力,藉由儀式與英雄事蹟,建立成員的價值觀與信 念,試問上述情形較屬下列何種概念的重要議題?

(B)組織文化 (C)知識領導

(D)第五級領導

(B) 6. 臺北市宣佈要設立「公立實驗教育」學校,其主要依據的法源為何?

(A)高級中等以下教育階段非學校型態實驗教育實施條例

(B)學校型態實驗教育實施條例

(C)公立國民小學及國民中學委託私人辦理條例

(D)特許學校自治實驗實施條例

(A) 7. 如何協助就讀普通班的特殊學童?

(A)了解學生的特質與相關資料

(B)避免交代特殊學生課堂任務

(C)採用固定的教學策略,以示平等對待

(D)為避免特殊生受同儕欺負,應減少其與同儕互動

(D) 8. 教師若不當體罰學生,根據現行法律規定,可能涉及什麼責任?

(A)刑事責任

(B)行政懲戒

(C)民事責任

(D)以上皆是

**(B)** 9. 下列何者是教育市場化強調的重點?

(A)分權決策

(B)學校本位管理

(C)權變領導

(D)家長合作

(A) 10. 下列何者為科層體制的優點?

(B) 成效

(C)調適

(D)協調

(B) 11. 下列何者為教育倫理義務論的主張?

(A)績效

(B)尊重

(C)平衡

(D)成果

(A) 12. 臺北市國民中學自 103 學年度起推動「以學生為中心」的亮點計畫,對該計畫的執行力 檢核項目中,下列何者較不屬於該方案所強調的重點或亮點?

(A)家長社區的參與

(B)校長課程教學領導

(C)專業社群的運作

(D)資源的整合

(C) 13. 作為一份升學考試用的常模參照測驗試題,應該以具備下列何種特徵為佳?

(A) 難度值高、鑑別度值高

(B) 難度值高、鑑別度值適中

(C)難度值適中、鑑別度值高

(D)難度值適中、鑑別度值適中

(C) 14. 下列四者為教學的基本模式,它的順序應該為何?甲.教學活動 乙.起點行為 丙.教學評 量 丁.教學目標

共9頁 第1頁

全國最大公教職網站 http://www.public.com.tw

公	職王	-歷屆試題 (104 國中教師甄試)		
		$(A)$ 甲 $\rightarrow$ 乙 $\rightarrow$ 丙 $\rightarrow$ 丁 $(B)$ 乙 $\rightarrow$ 甲 $\rightarrow$ 丁 $\rightarrow$ 丙	(C) 丁 → 乙 → 甲 → 丙	(D)丁→丙→甲→乙
(A)	<i>15</i> .	請問你現在所參加的國民中學正式教師聯	<b>静合甄選,是屬於下列</b>	] 何種性質的測驗?
			(C)速度測驗	
(D)	16.	根據皮亞傑 (Piaget, J.) 認知發展階		
Ξ,		種行為特徵?	2000	
		(A)群體互助合作 (B)平衡協調運作	(C) 咸學促動學習	(D)假設演繹推理
(D)	17.	根據維高斯基(Vygotsky, L. S.)的看法		
Ξ,	,	成的部分,這兩者之間的差異稱做什麼?		
		(A)同化 (B)鷹架	(C)後設認知	(D)近側發展區
(D)	18	下列何者為新實用主義的行動?	(0) 12 20 1	
Ξ,		(A)對話 (B)美學	(C) 賦權	(D)反諷
(B)	19.	下列何者為校務權力去集中化的主要原因	111	
(1)	10.	(A)拓展人權 (B)重視品質		(D)深耕道德
(D)	20.	根據柯爾柏格(Kohlberg, L.)的建議,道		
( <b>D</b> )	20.	(A)發現教學法 (B)價值澄清法		
(C)	21	下列何者為女性主義公平的理論基礎?	(0) // 1/2 4/4/2 / 1/2	DITTO APPLIA SOLICIO SING FA
(0)	21.	(A)扎根理論 (B)學習理論	(C) 立場理論	(D)宰制理論
(A)	22	德國華德福學校的辦學理念,係偏屬於下		
(L 1)	LL.	(A)經驗主義取向 (B)精粹主義取向		
(A)	23.	下列哪種隱喻最能說明教育改革成功的		0,4132 - 32 1-13
(L 1)	20.	(A)蝴蝶的飛翔 (B)老鷹的飛翔		(D) 候 島的 飛翔
(B)	24.	如果某教師想得知哪一位學生的學習狀況		•
(1)	27.	的話。請問:老師該實施下列何種評量,		
		(A)安置性評量 (B)形成性評量		
(B)	25.	某老師在介紹「光年」的物理學概念時		
(1)	20,	該教師的教學行為屬於下列哪一項?	7011 1B //C	至你人权。 切物 / 明 / 明
		(A)創造思考 (B)引起動機	(C)引發自學	(D)社會化過程
(B)	26	下列何者為國際教育的核心活動?		
(1)	20.	(A)科際整合的創新活動	(B)跨文化的教育活動	h
		(C)專業學習社群活動		, (D)外語精進的活動
(B)	27	臺北市推動領域備課專業學習社群,要	求教師每學期以專業	
(1)	2	同備課的主要內容涵蓋的範圍不包含下列		
		(A)設計活化教學教案	(B)教師研習活動	
		©學生學習檢核項目	(D)評量方法	
(C)	28	下列何者非教育基本法所規範之中央政府		
(C)	20.	(A)教育制度之規劃設計	(B)教育統計、評鑑與	且政策研究
		•	(D)促進教育事務之國	
(B)	29	國民基本教育之各類學校編制應以小班小		
(1)	20.		(C)幼兒教育及照顧法	
(D)	30	標準本位評量(standard-based assess		
( <b>D</b> )	00.	非其主要可以發揮的功能?	,oo, <u>E</u> /0 , <u>E</u> , G	40 Vevesion 44 v. E. 1 2 1 1 1 1 1
			(B)診斷學生學習的困	引 革作
			(D)設計發展適性的教	
(B)	31	下列何者為教師想要更多課程時數的問題	• • • • • • •	~11
1	J.,	(A)科層 (B)政治	(C)分享	(D)不公平
(B)	32	下列何者是在分組合作學習中,用以協助	• • • • •	
	- <b>-</b> -	(A)配對學習(pair-learning)	(B)學生小組成就區分	
		(C)六六討論(Phillip 66)	(D)問題本位學習(PB	,
,,	0 =	· ·		•

共 9 頁 第 2 頁 全國最大公教職網站 http://www.public.com.tw

公	職王	歷屆試題 (104	國中教師甄試)		
(B)	33.	請問:當前各國民	中學常進行的校園美	化、主題活動情境布	置、公共藝術造型設計等普
		遍措施,是屬於下3	列哪一類課程設計?		
		(A)正式課程	(B)潛在課程	(C)懸缺課程	(D)非正式課程
(A)	<i>34</i> .	下列何項法令為實施	施十二年國民基本教	育提供法源依據?	
		(A)高級中等教育法	(B)教育基本法	(C)國民教育法	(D)終身教育法
(D)	<i>35</i> .	下列何者為教育政策	<b>策的研究方法?</b>		
		(A)科學	(B)批判	(C)冒險	(D)以上皆是
(C)	<i>36</i> .	下列哪種理論認為了	力利是真理?		
		(A)邏輯實證論	(B)詮釋學	(C)批判理論	(D)後現代主義
(B)	<i>37</i> .	主張「沒有教不會」	的學生,只有不會教	的老師」這種教育格	言者,其哲學思考歷程比較
		傾向下列何者?			
		(A)反省批判取向	(B)觀念分析取向	(C)去中心化取向	(D)互為主體取向
(C)	<i>3</i> 8.	下列何者非分組合何	乍學習(team-based	learning)的共同特徵	:?
		(A)經常採取異質性?	分組	(B)強調成功機會均等	<b>\$</b>
		(C)學習結果由小組	負責	(D)強化社會合作技工	5
(C)	39.	在美國盛行的「特言	许學校」(charter so	chool)的理念,較屬於	会我國剛通過的「實驗教育三
		法」中何者的規範氧	節疇?		
		(A)高級中等以下教	育階段非學校型態實際	驗教育實施條例	
		(B)學校型態實驗教]	育實施條例		
		(C)公立國民小學及[	國民中學委託私人辨	理條例	
		(D)特許學校自治實際	<b><u></u> </b>		
(A)	<i>40</i> .	·			教師若非初任教師,且缺乏
		自我視導與同僚視	尊的能力或意願時,	較適合採取下列何種社	見導方式?
		(A)行政督導		(B)自我指導專業發展	夷
		(C)合作式專業發展		(D)臨床視導	
貳	、專業	<b></b>			
選扎	睪題	(共 40 題,每題 1.	.5 分,共 60 分)		
I.	Voca	bulary			
(D)	41.	Hundreds of the	ousands of people	were leaving with	just the clothes they had
		on their backs. It	felt as if the whole	e valley were on the	e move. It was the biggest
		in Pasht	3		
		(A) reprisal		(C) overture	
(B)	<i>42</i> .				story about high crime
			_	nad been reported.	
(-)		(A) contending	C	(C) receding	<u> </u>
(C)	<i>43</i> .	Kelly he	er colleagues to ge	t a top position in t	the company.
(1)		•	/\ •		<u> </u>
(A)		(A) expedited		© outmaneuvere	ed (D) vindicated
	44.	(A) expedited		© outmaneuvere	<u> </u>
	44.	(A) expedited A successful car sexes.	ndidate will do his	(C) outmaneuveres or her utmost to	ed (D) vindicated  o voters of both
(D)		(A) expedited A successful car sexes. (A) woo	ndidate will do his (B) warrant	(C) outmaneuveres or her utmost to (C) consult	ed (D) vindicated  o voters of both  (D) cavil
(B)		<ul><li>(A) expedited</li><li>A successful car sexes.</li><li>(A) woo</li><li>The young actor</li></ul>	ndidate will do his (B) warrant wished that his o	(C) outmaneuveres or her utmost to (C) consult	ed (D) vindicated  o voters of both
(B)		<ul><li>(A) expedited</li><li>A successful car sexes.</li><li>(A) woo</li><li>The young actor great acting ability</li></ul>	ndidate will do his  (B) warrant  wished that his o	(C) outmaneuveres or her utmost to (C) consult debut on Broadway	ed (D) vindicated  o voters of both  (D) cavil  y would out his
	45.	<ul><li>(A) expedited</li><li>A successful care sexes.</li><li>(A) woo</li><li>The young actor great acting ability</li><li>(A) shun</li></ul>	ndidate will do his  (B) warrant  wished that his o  ty.  (B) blazon	(C) outmaneuveres or her utmost to (C) consult debut on Broadway (C) fledge	ed (D) vindicated  o voters of both  (D) cavil  y would out his  (D) exhume
(B)		<ul><li>(A) expedited</li><li>A successful car sexes.</li><li>(A) woo</li><li>The young actor great acting ability</li><li>(A) shun</li><li>Survivors of the sexes.</li></ul>	ndidate will do his  (B) warrant wished that his o ty.  (B) blazon storm for	(C) outmaneuvered sor her utmost to (C) consult debut on Broadway (C) fledge food in the wreckas	ed (D) vindicated  o voters of both  (D) cavil  y would out his  (D) exhume ge of their village.
(D)	<i>45. 46.</i>	(A) expedited A successful car sexes. (A) woo The young actor great acting abilit (A) shun Survivors of the s (A) emulated	(B) warrant wished that his oty. (B) blazon storm for (B) derided	(C) outmaneuvered sor her utmost to (C) consult debut on Broadway (C) fledge food in the wreckas (C) rebuked	ed (D) vindicated  (D) cavil  (D) cavil  (D) would out his  (D) exhume  (D) exhume  (D) foraged
	<i>45. 46.</i>	<ul> <li>(A) expedited</li> <li>A successful care sexes.</li> <li>(A) woo</li> <li>The young actor great acting ability</li> <li>(A) shun</li> <li>Survivors of the sexification</li> <li>(A) emulated</li> <li>Daniel's life has</li> </ul>	(B) warrant wished that his ofty. (B) blazon storm for (B) derided s been in a	(C) outmaneuvered sor her utmost to (C) consult debut on Broadway (C) fledge food in the wreckas (C) rebuked _ since he broke up	ed (D) vindicated  o voters of both  (D) cavil  y would out his  (D) exhume  ge of their village.  (D) foraged  p with Jane. All he wants
(D)	<i>45. 46.</i>	(A) expedited A successful car sexes. (A) woo The young actor great acting ability (A) shun Survivors of the sexical car sexes. (A) emulated Daniel's life has to do now is to put	(B) warrant wished that his oty. (B) blazon storm for (B) derided s been in a ut the pieces back	(C) outmaneuvered sor her utmost to (C) consult debut on Broadway (C) fledge food in the wreckas (C) rebuked _ since he broke up together and try to	cd (D) vindicated  (D) cavil  (D) cavil  (D) exhume  (D) exhume  (D) foraged  (D) foraged  (D) with Jane. All he wants  (D) regain inner tranquility.
(D) (C)	45. 46. 47.	<ul> <li>(A) expedited</li> <li>A successful care sexes.</li> <li>(A) woo</li> <li>The young actor great acting ability</li> <li>(A) shun</li> <li>Survivors of the sexification</li> <li>(A) emulated</li> <li>Daniel's life has</li> </ul>	(B) warrant wished that his o ty. (B) blazon storm for (B) derided s been in a ut the pieces back (B) truce	(C) outmaneuvered sor her utmost to (C) consult debut on Broadway (C) fledge food in the wreckas (C) rebuked since he broke up together and try to (C) turmoil	cd (D) vindicated  (D) cavil  (D) cavil  (D) exhume  (D) exhume  (D) foraged  (D) foraged  (D) with Jane. All he wants  (D) regain inner tranquility.

公耳	哉王	.歷屆試題 (104 國中教師甄試)
(B)	<i>4</i> 8.	The volcanic eruption did damage to the island; it would take a long
		time to bring back its prosperous tourism business.
		(A) sporadic (B) unprecedented (C) constituent (D) commensurate
$(\mathbf{B})$	49.	Dianna and Joanna are different as and cheese.
		(A) biscuits (B) chalk (C) ham (D) jam
(A)	<i>50</i> .	Ben used a stylus to the tablet's menus and he felt impressed by
		the new technological invention.
		(A) navigate (B) subordinate (C) fabricate (D) bolster
(A)	51.	Beneath his attitude, he is still a little boy inside. Don't be deceived
		by his loud and hasty talk.
(4)	<b>50</b>	(A) brash (B) dispensable (C) fraudulent (D) oblivious
(A)	52.	All the sophisticated procedures in government agencies ought to be
		to enhance efficiency.  (A) streamlined (B) vernished (C) placing and (D) obfusested
<b>(D)</b>	<b>5</b> 2	(A) streamlined (B) varnished (C) plagiarized (D) obfuscated
<b>(B</b> )	53.	Tammy told her son to wash his hands before dinner because he just
		came home from a basketball game with his classmates.  (A) opulent (B) grubby (C) abrasive (D) obnoxious
(C)	<i>54</i> .	We the time it would take to get there, so when we arrived at the
(C)	υ <b>τ.</b>	market it was closed.
		(A) intimidated (B) implemented (C) underestimated (D) evacuated
(B)	<i>55</i> .	It was just not for John to manage the hostel business on a part-
(2)		time basis, so he quit his teaching job to become a full-time hostel manager.
		(A) despicable (B) feasible (C) trivial (D) frail
(D)	<i>56</i> .	The acrobat pulled off an amazing for the audience and received
		standing ovation.
		(A) canopy (B) onslaught (C) deputy (D) stunt
(C)	<i>57</i> .	The new manager's challenge is to fire the employees so that the
		company can reduce its deficit.
		(A) diplomatic (B) valiant (C) redundant (D) vulgar
(A)	58.	Knowing that exposure to the sun can the ageing process, Jane tries
		to stay indoor all the time.
		(A) accelerate (B) commemorate (C) allocate (D) retaliate
( <b>D</b> )	59.	The singer in several Grammy categories; he was the biggest winner
		at the ceremony.
		(A) went above the board (B) went by the board
(A)	00	(C) took on board (D) swept the board
(A)	60.	John: I guess we won't be spending Saturday together. We could still meet for
		dinner, though. Where do you want to meet up then? Susan: I don't have any
		preferences. Whatever is fine with me.  (A) floats your boat  (B) depends on you
		(C) vents your spleen (D) is across the board
H	Clo	
11.		As the media's infatuation with massive open online courses (MOOCs) continues
una		ed, some academics seem to be succumbing to the hand-wringing about whether
		vill destroy higher education as we know it (see "Will MOOCs Destroy Academia?"
		ne Vardi in the November 2012 issue of Communications). Is it a bad thing that
		ave let the genie out of the bottle," as Vardi suggested in his Editor's Letter
		e that aclose, systematic, and sustained look at how MOOCs are actually being

used should persuade the careful observer that tasteful use of MOOC technology can strengthen academia.

Note I do not say "MOOCs will strengthen academia." They certainly can, but whether they do depends on how they are received and used by academics. Full disclosure: \_\_61\_ being a MOOC instructor myself, I am the recently appointed faculty director of Berkeley's MOOCLab, \_\_62\_ extends Berkeley's existing online education programs with MOOC research and practice. But I am not cheering for MOOCs because I have this position; \_\_63\_ , I agreed to take the position because I am excited about the possibilities of MOOCs and other online education. In particular, 64\_ MOOCs are used as a supplement to classroom teaching rather than being viewed a replacement for it, they can increase instructor leverage, student throughput, student mastery, and student engagement. I call this model the SPOC: small private online course.

(D) 61. (A) so (C) upon (B) on behalf of (D) besides (C) 62. (A) it (B) and (C) which (D) where (D) 63. (A) in consequence (B) in spite of that (D) rather (C) though 64. (A) so (B) if (C) although **(B)** (D) all (B)

For decades, the fortunes of the Texan economy were tied to oil. In the mid-1980s, after an oil-price crash, the state suffered the savings and loan debacle, big house-price declines and a deep recession. Unemployment 65 from 6% to 9%, even though it was falling across the country as a whole.

Since then, say many Texans, the state has shed its reliance on black gold. Government finances are in better shape: 66 in the early 1980s 10% of tax revenues came from oil production, today it 67 less than 5%. The banking sector has grasped the importance of diversification: there are more interstate firms, which means that credit losses in Texas are spread more broadly across the country. Low taxers and stable regulations have encouraged many corporate giants, such as Toyota, a carmaker, to move their American headquarters to the state. The Dallas area thrives 68 telecoms, aerospace and banking. Houston has lots of oil, but also NASA.

(D) 65. (A) lifted (B) raised (C) risen (D) rose (A) 66. (A) whereas (B) because (C) however (D) simply 67. (A) counts down (B) counts for (C) accounts in (D) accounts for (D)68. (A) by (B) in (C) at (D) without

III. Reading Comprehension

(A) Cyber-security is now part of all our lives. "Patches" and other security updates arrive for phones, tablets and PCs. Consultants remind us all not to open unknown files or plug unfamiliar memory sticks into our computers. The bosses of some Western firms throw away phones and laptops after they have been to China assuming they have been hacked. And yet, as our special report this week points out, digital walls keep on being breached. Last year more than 800m digital records, such as credit—and debit—card details, were pinched or lost, more than three times

as many as in 2012. According to a recent estimate by the Centre for Strategic and International Studies, a think-tank, the cost to the global economy of cybercrime and online industrial espionage stands at \$445 billion a year—about as much as the GDP as of Austria.

Now a new phase in this contest is emerging: "the Internet of things". This involves embedding miniature computers in objects and connecting them to Internet

using wireless technology. Cisco, a technology company, predicts that 50 billion connected devices will be in circulation by the end of the decade, up from 11 billion last year. Web-connected cars and smart appliances in homes are becoming more common, as are medical devices that can be monitored by doctors many miles from their patients. Tech companies are splurging cash: witness Google's punt on driverless cars and the \$3.2 billion it has spent buying Nest, a maker of smart thermostats. (From The Economist July 12th 2014)

- (B) 69. What does the word "Patches" in line 1 mean?
  - (A) Pieces of cloth to fix a computer program
  - (B) Software to improve a computer program
  - (C) Hacking devices

- (D) Scams for commercial purposes
- (B) 70. According to the passage, which of the following statements is NOT true?
  - (A) Computer consultants warn users not to plug unknown devices into our computers
  - (B) Western businessmen do not buy cell phones and laptops made in China
  - (C) No firewalls are powerful enough to withstand all hackers
  - (D) More and more personal information online have been stolen every year
- (A) 71. Based on the passage, what in future is NOT predicted?
  - (A) Almost five times more of such internet of things will be produced by 2015
  - (B) Cars will be driven without drivers
  - (C) Home appliances can be remote controlled from your office
  - (D) Medical devices can be monitored by doctors far away
- (C) 72. What is most likely the topic of the paragraph following this one?
  - (A) How Google decided its next investment
  - (B) The hope of wireless technology
  - (C) The security of the Internet of things
  - (D) The miracle of smart thermostats

(B)

In most earthquakes the Earth's crust cracks like porcelain. Stress builds up until a

fracture forms at a depth of a few kilometers and the crust slips to relieve the stress. Some earthquakes, however, take place hundreds of kilometers down in the Earth's mantle, where high pressure makes rock so ductile that it flows instead of cracking, even under stress severe enough to deform it like putty. How can there be earthquakes at such depths?

That such deep events do occur has been accepted only since 1927, when the seismologist KiyooWadati convincingly demonstrated their existence. Instead of comparing the arrival times of seismic waves at different locations, as earlier researchers had done, Wadati relied on a time difference between the arrival of primary (P) waves and the slower secondary (S) waves.

Because P and S waves travel at different but fairly constant speeds, the interval between their arrivals increases in proportion to the distance from the earthquake focus, or rupture point.

For most earthquakes, Wadati discovered, the interval was quite short near the epicenter, the point on the surface where shaking is strongest. For a few events, however, the delay was long even at the epicenter. Wadati saw a similar pattern when he analyzed data on the intensity of shaking. Most earthquakes had a small area of intense shaking, which weakened rapidly with increasing distance from the epicenter,

but others were characterized by lower peak intensity, felt over a broader area. Both the P-S intervals and the intensity patterns suggested two kinds of earthquakes: the more common shallow events, in which the focus lay just under

the epicenter, and deep events, with a focus several hundred kilometers down.

The question remained: how can such quakes occur, given that mantle rock at a depth of more than 50 kilometers is too ductile to store enough stress to fracture? Wadati's work suggested that deep events occur in areas (now called Wadati-Benioff zones) where one crustal plate is forced under another and descends into the mantle. The descending rock is substantially cooler than the surrounding mantle and hence is less ductile and much more liable to fracture.

- (C) 73. The passage is primarily concerned with\_\_\_\_\_.
  - (A) demonstrating why the methods of early seismologists were flawed
  - (B) arguing that deep events are poorly understood and deserve further study
  - (C) defending a revolutionary theory about the causes of earthquakes and methods of predicting them
  - (D) discussing evidence for the existence of deep events and the conditions that allow them to occur.
- (C) 74. The method used by Wadati to determine the depths of earthquakes is most like which of the following?
  - (A) Determining the depth of a well by dropping stones into the well and timing how long they take to reach the bottom
  - (B) Determining the height of a mountain by measuring the shadow it casts at different times of the day
  - (C) Determining the distance from a thunderstorm by timing the interval between the flash of a lightning bolt and the thunder it produces
  - (D) Determining the distance between two points by counting the number of paces it takes to cover the distance and measuring a single pace
- (D) 75. The passage supports which of the following statements about the relationship between the epicenter and the focus of an earthquake?
  - (A) P waves originate at the focus and S waves originate at the epicenter.
  - (B) In deep events the epicenter and the focus are reversed.
  - (C) In shallow events the epicenter and the focus coincide.
  - (D) In both deep and shallow events the focus lies beneath the epicenter.
- (A) 76. The passage suggests which of the following about the views held by researchers before 1927?
  - (A) Some researchers did not believe that deep events could actually occur.
  - (B) Many researchers rejected the use of P-S intervals for determining the depths of earthquakes.
  - (C) Some researchers doubted that the mantle was too ductile to store the stress needed for an earthquake.
  - $(\!D\!)$  Few researchers accepted the current model of how shallow events occur.

**(C)** 

The promise of finding long-term technological solutions to the problem of world food shortages seems difficult to fulfill. Many innovations that were once heavily supported and publicized, such as fish-protein concentrate and protein from algae grown on petroleum substrates, have since fallen by the wayside. The proposals themselves were technically feasible, but they proved to be economically unviable and

to yield food products culturally unacceptable to their consumers. Recent innovations such as opaque-2 maize, Antarctic krill, and the wheat-rye hybrid triticale seem more promising, but it is too early to predict their ultimate fate.

One characteristic common to unsuccessful food innovations has been that, even with extensive government support, they often have not been technologically adapted or culturally acceptable to the people for whom they had been developed. A successful new technology, therefore, must fit the entire sociocultural system in which it is to find a place. Security of crop yield, practicality of storage, palatability, and costs are much more significant than had previously been realized by the advocates of new technologies. For example, the better protein quality in tortillas made from opaque-2 maize will be of only limited benefit to a family on the margin of subsistence if the new maize is not culturally acceptable or is more vulnerable to insects.

The adoption of new food technologies depends on more than these technical and cultural considerations; economic factors and governmental policies also strongly influence the ultimate success of any innovation. Economists in the Anglo-American tradition have taken the lead in investigating the economics of technological innovation. Although they exaggerate in claiming that profitability is the key factor guiding technical change—they completely

disregard the substantial effects of culture—they are correct in stressing the importance of profits. Most technological innovations in agriculture can be fully used only by large landowners and are only adopted if these profit-oriented business people believe that the innovation will increase their incomes. Thus, innovations that carry high rewards for big agribusiness groups will be adopted even if they harm segments of the population and reduce the availability of food in a country. Further, should a new technology promise to alter substantially the profits and losses associated with any production system, those with economic power will strive to maintain and improve their own positions. Since large segments of the populations of many developing countries are close to the subsistence margin and essentially

powerless, they tend to be the losers in this system unless they are aided by a government policy that takes into account the needs of all sectors of the economy. Therefore, although technical advances in food production and processing will perhaps be needed to ensure food availability, meeting food needs will depend much more on equalizing economic power among the various segments of the populations within the developing countries themselves.

- (C) 77. Which of the following best describes the organization of the first paragraph?
  - (A) A suggestion is made and arguments in its favor are provided.
  - (B) A criticism is levied and an alternative proposal is suggested.
  - $(\!C\!)$  A generalization is advanced and supporting evidence is provided.
  - $\langle D \rangle$  An example is analyzed and general conclusions are derived from it.
- (B) 78. According to the passage, the use of Antarctic krill as a food is an innovation whose future is\_\_\_\_\_.
  - (A) basically gloomy but still uncertain
  - (B) somewhat promising but very tentative
  - (C) generally bright and virtually assured
  - $(\!D\!)$  tied to the success of opaque-2 maize
- (A) 79. It can be inferred from the passage that the author would be most likely to agree with which of the following statements concerning the solution to food shortages in developing countries?

- (A) The introduction of technological innovations to reap profits might alleviate food shortages to some degree, but any permanent solution can come only from effective governmental intervention in the socioeconomic system.
- (B) Long-lasting solutions will not be found until large landowners adopt improvements that will make production more efficient and thus more profitable.
- (C) In order to achieve a meaningful solution to the problem of food shortages, the tastes of the general population must be educated to accept the new food products of modern agricultural technology.
- (D) Although a short-term solution to food shortages can be achieved by importing food from other countries, a long-term solution requires a restructuring of the countries' socioeconomic system.
- (D) 80. The author provides a sustained argument to support which of the following assertions?
  - (A) Profitability is neither necessary nor sufficient for a new technology to be adopted.
  - (B) Profitability is the key factor guiding technological change.
  - (C) Economic factors and governmental policies strongly influence the ultimate success of any innovation.
  - (D) Opaque-2 maize is of limited benefit to poor families in developing countries.