

Diagnostic Simulated GAMSAT

**** (Half-length) ****

DO NOT OPEN THE TEST BOOK UNTIL YOU ARE TOLD TO DO SO.

DIRECTIONS

This half-length GAMSAT consists of the following three sections:

Section 1: <i>10 minute break</i>	<i>Reasoning in Humanities and Social Sciences</i>	50 minutes
Section 2: <i>1 hour break</i>	<i>Written Communication</i>	30 minutes
Section 3:	<i>Reasoning in Biological and Physical Sciences</i>	85 minutes

During the time given for a particular section, you may work only on that section. If you finish a section early, you may check your work within that section but **DO NOT GO BACK TO A PREVIOUS SECTION OR AHEAD TO A FORTHCOMING SECTION.**

Separate directions are provided for each section and for each question type. Make sure you understand the directions before answering the questions.

FILLING IN THE ANSWER GRID

1. Place all your answers on the separate answer grid provided. Using a **PENCIL ONLY**, blacken the space corresponding to the letter of the answer choice you have selected. There should only be one answer per question.
2. Be sure your answer mark is dark and fills the space completely. Also, be sure all erasures are complete. The computer may misinterpret an incomplete erasure, and you will lose credit for that question.
3. Use your test booklet for any rough work. **DO NOT MAKE ANY STRAY MARKS ON THE ANSWER GRID.** Erase any such marks.
4. The Answer Document for Section 2 is found in Section 2, herein. Use ink to complete this document.
5. Your score on the GAMSAT is based on the number of correct answers. There is no penalty for incorrect answers or for answers left blank. Therefore, it may be to your advantage to answer every question.



Diagnostic Simulated GAMSAT

**** (Half-length) ****

Section 1

Reasoning in Humanities and Social Sciences

Number of questions: 38
Allotted Time: 50 minutes

DIRECTIONS:

1. You have 5 minutes perusal time.
2. You may take notes on the question paper during that time.
3. You may NOT make any mark on the answer grid during perusal.
4. At the end of 5 minutes, begin the exam.
5. Post-perusal, you have exactly 50 minutes to complete the exam.



UNIT 1

Questions 1 – 6

Two impressive studies have re-examined Eric Williams' conclusion that Britain's abolition of the slave trade in 1807 and its emancipation of slaves in its colonies in 1834 were driven primarily by economic rather than humanitarian motives. Blighted by depleted soil, indebtedness, and the inefficiency of coerced labour, these colonies, according to Williams, had by 1807 become an impediment to British economic progress.

Seymour Drescher provides a more balanced view. Rejecting interpretations based on either economic interest or the moral vision of abolitionists, Drescher has reconstructed the populist characteristics of British abolitionism, which appears to have cut across lines of class, party, and religion. Noting that between 1780 and 1830 antislavery petitions outnumbered those on any other issue, including parliamentary reform, Drescher concludes that such support cannot be explained by economic interest alone, especially when much of it came from the unenfranchised masses. Yet, aside from demonstrating that such support must have resulted at least in part from widespread literacy and a tradition of political activism, Drescher does not finally explain how England, a nation deeply divided by class struggles, could mobilise popular support for antislavery measures proposed by otherwise conservative politicians in the House of Lords and approved there with little dissent.

David Eltis' answer to that question actually supports some of Williams' insights. Eschewing Drescher's idealisation of British traditions of liberty, Eltis points to continuing use of low wages and Draconian vagrancy laws in the seventeenth and eighteenth centuries to ensure the industriousness of British workers. Indeed, certain notables even called for the enslavement of unemployed labourers who roamed the British countryside – an acceptance of coerced labour that Eltis attributes to a preindustrial desire to keep labour costs low and exports competitive. By the late eighteenth-century, however, a growing home market began to alert capitalists to the importance of "want creation" and to incentives such as higher wages as a means of increasing both worker productivity and the number of consumers. Significantly, it was products grown by slaves, such as sugar, coffee and tobacco, that stimulated new wants at all levels of British society and were the forerunners of products intended in modern capitalist societies to satisfy what Eltis describes as "non-subsistence or psychological needs." Eltis concludes that in an economy that had begun to rely on voluntary labour to satisfy such needs, forced labour necessarily began to appear both inappropriate and counterproductive to employers. Eltis thus concludes that, while Williams may well have underestimated the economic viability of the British colonies employing forced labour in the early 1800s, his insight into the economic motives for abolition was partly accurate. British leaders became committed to colonial labour reform only when they became convinced, for reasons other than those cited by Williams, that free labour was more beneficial to the imperial economy.

1 By which of the following is the main point of the passage best stated?

- A Although they disagree about the degree to which economic motives influenced Britain's abolition of slavery, Drescher and Eltis both concede that moral persuasion by abolitionists was a significant factor.
- B Although both Drescher and Eltis have questioned Williams' analysis of the motivation behind Britain's abolition of slavery, there is support for part of Williams' conclusion.
- C Because he has taken into account the populist characteristics of British abolitionism, Drescher's explanation of what motivated Britain's abolition of slavery is finally more persuasive than that of Eltis.
- D Neither Eltis nor Drescher has succeeded in explaining why support for Britain's abolition of slavery appears to have cut across lines of party, class, and religion.

2 Why, most likely, did Eltis cite the views of "certain notables" (line 19)?

- A To support the claim that British traditions of liberty were not as strong as Drescher believed them to be.
- B To support the contention that a strong labour force was important to Britain's economy.
- C To emphasise the importance of slavery as an institution in preindustrial Britain.
- D To indicate that the labouring classes provided little support for the abolition of slavery.

- 3 By which of the following is Williams' position regarding the primary reason for Britain's abolition of the slave trade and the emancipation of slaves in its colonies best stated?
- A British populism appealed to people of varied classes, parties, and religions.
 - B Both capitalists and workers in Britain accepted the moral precepts of abolitionists.
 - C Forced labour in the colonies could not produce enough goods to satisfy British consumers.
 - D The operation of colonies based on forced labour was no longer economically advantageous.
- 4 What, according to Eltis, was the purpose of low wages and Draconian vagrancy laws in seventeenth and eighteenth century Britain?
- A To protect labourers against unscrupulous employment practices.
 - B To counter the move to enslave unemployed labourers.
 - C To ensure a cheap and productive work force.
 - D To ensure that the workforce experienced no unemployment.
- 5 How does the author most likely feel about Drescher's presentation of British traditions concerning liberty?
- A It is accurately stated.
 - B It is somewhat unrealistic.
 - C It is carefully researched.
 - D It is unnecessarily tentative.
- 6 Upon which of the points below does the passage suggest that Eltis and Drescher agree?
- A People of all classes in Britain supported the abolition of slavery.
 - B The motives behind Britain's abolition of slavery were primarily economic.
 - C The moral vision of abolitionists played a vital part in Britain's abolition of slavery.
 - D British traditions of liberty have been idealised by historians.

UNIT 2

Questions 7



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- 7 Which of the following captions ought to be associated with this cartoon to best articulate its social significance with regard to the impact of technology on contemporary learning?
- A Missing school by way of computer.
 - B Reducing education to bits and bytes.
 - C One megabyte in hand is one in the brain?
 - D What happened to pencil and paper?

UNIT 3

Questions 8 – 11

5 All of Françoise Duparc's surviving paintings blend portraiture and genre. Her subjects appear to be acquaintances whom she has asked to pose; she has captured both their self-consciousness and the spontaneity of their everyday activities, the depiction of which characterises genre painting. But genre painting, especially when it portrayed members of the humblest classes, was never popular in eighteenth-century France. The Le Nain brothers and Georges de La Tour, who also chose such themes, were largely ignored. Their present high standing is due to a different, more democratic political climate and to different aesthetic values: we no longer require artists to provide ideal images of humanity for our moral edification but rather regard such idealisation as a falsification of the truth. Duparc gives no improving message and discreetly refrains from judging her subjects. In brief, her works neither elevate nor instruct. This restraint largely explains her lack of popular success during her lifetime, even if her talent did not go completely unrecognised by her eighteenth-century French contemporaries.

8 The passage suggests that which of the following qualities would most likely not be valued by modern viewers of a painting?

- A The technical elements of the painting.
- B The spontaneity of the painting.
- C The moral lesson imparted by the painting.
- D The degree to which the painting realistically depicts its subject.

9 Of the following, which would most likely appear in modern-day critiques of Duparc's work if the history of her artistic reputation paralleled that of the Le Nain brothers and Georges de La Tour?

- A An evaluation that accords high status to her work.
- B Acknowledgement of her technical expertise but dismissal of her subject matter as trivial.
- C Agreement with assessments made in her own time but acknowledgements of the exceptional quality of a few of her paintings.
- D Placement of her among the foremost artists of her century.

10 According to the passage, which of the following would the term "genre painting" most likely describe?

- A A painting depicting a glorious moment of victory following a battle.
- B A painting illustrating a narrative from the Bible.
- C A portrayal of a mythological Greek goddess.
- D A portrayal of a servant engaged in his work.

11 Of the following statements regarding judgements of artistic work, which is best supported by the passage's argument?

- A Aesthetic judgements can be influenced by the political beliefs of those making the judgements.
- B Judgements of the value of an artist's work made by his or her contemporaries must be discounted before a true judgement can be made.
- C Modern aesthetic taste is once again moving in the direction of regarding idealistic painting as the most desirable form of painting.
- D In order to be highly regarded, an artist cannot be solely identified with one particular kind of painting.

UNIT 4

Questions 12 – 19

Wherever the crime novels of P.D. James are discussed by critics, there is a tendency on the one hand to exaggerate her merits and on the other to castigate her as a genre writer who is getting above herself. Perhaps underlying the debate is that familiar, false opposition set up between different kinds of fiction, according to which enjoyable novels are held to be somehow slightly lowbrow, and a novel is not considered true literature unless it is a tiny bit dull.

Those commentators who would elevate James's books to the status of high literature point to her painstakingly constructed characters, her elaborate settings, her sense of place, and her love of abstractions: notions about morality, duty, pain, and pleasure are never far from the lips of her police officers and murderers. Others find her pretentious and tiresome; an inverted snobbery accuses her of abandoning the time-honoured conventions of the detective genre in favour of a highbrow literary style. The critic Harriet Waugh wants P. D. James to get on with "the more taxing business of laying a tricky trail and then fooling the reader"; Philip Oakes in *The Literary Review* groans, "Could we please proceed with the business of clapping the handcuffs on the killer?"

James is certainly capable of strikingly good writing. She takes immense trouble to provide her characters with convincing histories and passions. Her descriptive digressions are part of the pleasure of her books and give them dignity and weight. But it is equally true that they frequently interfere with the story; the patinas and aromas of a country kitchen receive more loving attention than does the plot itself. Her devices to advance the story can be shameless and thin, and it is often impossible to see how her detective arrives at the truth; one is left to conclude that the detective solves crimes through intuition. At this stage in her career P. D. James seems to be less interested in the specifics of detection than in her characters' vulnerabilities and perplexities.

However, once the rules of a chosen genre cramp creative thought, there is no reason why an able and interesting writer should accept them. In her latest book, there are signs that James is beginning to feel constrained by the crime-novel genre. Here her determination to leave areas of ambiguity in the solution of the crime and to distribute guilt among the murderer, victim, and bystanders points to a conscious rebellion against the traditional neatness of detective fiction. It is fashionable, though reprehensible, for one writer to prescribe to another. But perhaps the time has come for P. D. James to slide out of her handcuffs and stride into the territory of the mainstream novel.

- 12 The author's principal conclusion is most accurately given by which of the following?
- A Because P. D. James's potential as a writer is stifled by her chosen genre, she should turn her talents toward writing mainstream novels.
 - B Because the requirements of the popular novel are incompatible with true creative expression, P. D. James's promise as a serious author has been diminished.
 - C The dichotomy between popular and sophisticated literature is well illustrated in the crime novels of P. D. James.
 - D The critics who have condemned P. D. James's lack of attention to the specifics of detection fail to take into account her carefully constructed plots.
- 13 What is the most probable purpose behind the author's reference to the "patinas and aromas of a country kitchen" (line 17)?
- A To illustrate James's gift for innovative phrasing.
 - B To highlight James's interest in rural society.
 - C To allow the reader to experience the pleasure of James's books.
 - D To exemplify James's preoccupation with descriptive writing.
- 14 What is the main function of the second paragraph?
- A To propose an alternative to two extreme opinions described earlier.
 - B To present previously mentioned positions in greater detail.
 - C To contradict an assertion cited previously.
 - D To introduce a controversial interpretation.

- 15 Of the following assertions regarding detective fiction, which is supported by the passage?
- A There are as many different detective-novel conventions as there are writers of crime novels.
 - B Detective fiction has been characterised by extremely high literary quality.
 - C Detective fiction has been largely ignored by literary critics.
 - D Writers of detective fiction have customarily followed certain conventions in constructing their novels.
- 16 What opinion do both Waugh and Oakes hold regarding James's novels?
- A They have too much material that is extraneous to the solution of the crime.
 - B They have too little characterisation to enable the reader to solve the crime.
 - C They have too few suspects to generate suspense.
 - D They have too simple a plot to hold the attention of the reader.
- 17 What, according to the author of the passage, is typical of traditional detective fiction?
- A Concern for the weaknesses and doubts of the characters.
 - B Transparent devices to advance the plot.
 - C The attribution of intuition to the detective.
 - D the straightforward assignment of culpability for the crime.
- 18 The author uses the phrase "inverted snobbery" (line 9) to refer to the position of critics who believe that
- A critics of literature must acknowledge that they are less talented than creators of literature.
 - B critics should hesitate to disparage popular authors.
 - C P. D. James's novels should focus less on characters from the English landed gentry.
 - D detective fiction should be content to remain an unambitious literary genre.
- 19 The "familiar" attitude referred to in line 3 is best exemplified by which of the following quotations about literature?
- A "The fantasy and whimsy characteristic of this writer's novels qualify them as truly great works of literature."
 - B "The greatest work of early English literature happens to be a highly humorous collection of tales."
 - C "A truly great work of literature should place demands upon its readers, rather than divert them."
 - D "Although many critics are condescending about best-selling novels, I would not wish to challenge the opinion of millions of readers."

UNIT 5

Questions 20 – 24

Thus doing, your name shall flourish in the printers' shops; thus doing, you shall be of kin to many a poetical preface; thus doing, you shall be most fair, most rich, most wise, most all; you shall dwell upon superlatives. Thus doing, though you be *libertino patre natus*, you shall suddenly grow

Herculea proles,

5 *Si quid mea carmina possunt.*

10 Thus doing, your soul shall be placed with Dante's Beatrix, or Virgil's Anchises. But if (fie of such a but) you be born so near the dull making cataract of Nilus that you cannot hear the planet-like music of Poetry, if you have so earth-creeping a mind that it cannot lift itself up to look to the sky of Poetry, or rather, by a certain rustical disdain, will become such a Mome as to be a Momus of Poetry; then, though I will not wish unto you the ass's ears of Midas, nor to be driven by a poet's verses (as Bubonax was) to hang himself, nor to be rhymed to death, as is said to be done in Ireland; yet thus much curse I must send you, in the behalf of all poets, that while you live, you live in love, and never get favour for lacking skill of a Sonnet, and, when you die, your memory die from the earth for want of an Epitaph.

20 Of the following, which is closest in meaning to "earth-creeping" (line 8) as it is used in the passage?

- A distracted
- B pedestrian
- C humourless
- D vacuous

21 Of the following, which best paraphrases "that while you live, you live in love, and never get favour for lacking skill of a Sonnet" without losing too much of the meaning?

- A May you be deeply in love, but suffer unrequited because, unable to fashion adequate verse, you cannot gain your beloved's notice.
- B May you love life all your life, but lack the ability to convey your feelings with poetry.
- C While you live may you never understand what it is to love a sonnet.
- D May you live only as long as it takes to write an unskilled sonnet.

22 Of the following, which is also involved in the story to which "the ass's ears of Midas" (line 10) refers?

- A A demi-god whose liver is perpetually torn by vultures.
- B A man condemned to push a rock up a hill *ad infinitum*.
- C A musical contest between a lyricist and a piper.
- D A forbidden box which, when opened, releases evil into the world.

23 Of the following, which best describes the tone of the passage?

- A It parodies the scholarly writing of the period through the use of needlessly complicated syntax and diction as well as obscure and erudite references (sometimes in the original Latin).
- B It moves from a light-hearted mocking tone of praise, to one that by the passage's end is in deadly earnest.
- C It presents itself as objective at first, but then frankly exposes the author's bias with a tone first of displeasure and finally of open contempt.
- D It humorously uses ironically hyperbolic praise and scorn to offset the author's genuine passion for his subject.

- 24 What is the function of “the planet-like music of Poetry” (lines 7 – 8)?
- A It synaesthetically suggests poetry sounds as lovely as planets are huge.
 - B It refers to a model of the universe in which the movements of the stars and planets around the earth create a celestial music.
 - C It implies a comic misinterpretation of the theories of Kepler and Copernicus.
 - D It makes a humorously inept comparison between the majestic silence of the planets in space and the musical sound of poetry.

UNIT 6

Questions 25 – 30

To optimise office efficiency, each of six workers – P, Q, R, S, T, and U – is placed in a different one of seven offices numbered consecutively 1 through 7 from left to right. The offices are evenly spaced and arranged in a straight line. The placement of the workers is subject only to the following conditions:

- The distance separating P from Q must be the same as the distance separating R from S.
- T must be in an office immediately adjacent to the office that U is in.
- The leftmost office cannot be the office that is left empty.

- 25 Which of the following placements of workers in offices 1 through 7, respectively, adheres to the rules set out above?
- A Q, empty office, P, T, U, S, R
 - B Q, R, empty office, S, P, U, T
 - C S, T, Q, R, U, empty office, P
 - D S, R, U, T, P, Q, empty office
- 26 Of the following, which is necessarily true if U is in office 2?
- A P is in office 3.
 - B Q is in office 4.
 - C R is in office 5.
 - D T is in office 1.
- 27 Of the following, which is necessarily true if U, P, and R are in offices 5, 6, and 7 respectively?
- A S is in office 1.
 - B S is in office 2.
 - C Q is in office 2.
 - D Q is in office 3.
- 28 If P and R are in offices 1 and 3 respectively, the empty office must be either
- A 2 or 4.
 - B 2 or 6.
 - C 4 or 5.
 - D 5 or 7.
- 29 Of the following, which might be true if P and Q are in offices 2 and 4 respectively?
- A R is in office 3.
 - B R is in office 5.
 - C S is in office 6.
 - D U is in office 1.
- 30 Which of the following could be the office that is left empty?
- A 1
 - B 2
 - C 3
 - D 4

UNIT 7

Questions 31 – 38

5 I had been hungry all the years;
My noon had come, to dine;
I, trembling, drew the table near,
And touched the curious wine.
‘Twas this on tables I had seen,
When turning, hungry, lone,
I looked in windows, for the wealth
I could not hope to own.
10 I did not know the ample bread,
‘Twas so unlike the crumb
The birds and I had often shared
In Nature’s dining room.
The plenty hurt me, ‘twas so new --
15 Myself felt ill and odd,
As berry of a mountain bush
Transplanted to the road.
Nor was I hungry; so I found
That hunger was a way
20 Of persons outside windows,
The entering takes away.

- 31 The main point of the poem is best articulated by which of the following?
- A Aspiration can sometimes frustrate genuine proclivity.
 - B Aspiration can open many unpredictable avenues.
 - C The process of endeavour is more satisfying than the moment of achievement.
 - D The distance between aspiration and competence measures discontent.
- 32 Of the following statements, which is most likely true of the ‘bread’ and ‘wine’ cited in the poem?
- A They are her articles of endurance.
 - B They represent the material components of an otherwise spiritual life.
 - C They symbolise nature’s betrayals.
 - D They represent her objectives.
- 33 What is the organising principle of the poem?
- A A classification of various attitudes of mankind towards nature.
 - B A proof by way of example.
 - C A linear chronology of events.
 - D A concrete situation that reveals a lesson.
- 34 What mood is created by the poem in lines 8-11?
- A Jealousy.
 - B Longing.
 - C Delight.
 - D Despair.

- 35 What does line 2 of the poem insinuate?
- A Achievement came abruptly.
 - B Achievement followed tenacious endeavour.
 - C Achievement came too late.
 - D Despair rather than achievement followed tenacity.
- 36 What is the poet's main purpose in contrasting the poet with birds in lines 11-12?
- A To cast doubt on the poet's intimacy with nature.
 - B To underscore the implied contrast between nature's vastness and mankind's fathomless potential.
 - C To accentuate the implied contrast between nature's vastness and mankind's impotence.
 - D To generate a cognitive dissonance in the reader's mind between mankind and nature.
- 37 What is the poet's main purpose in contrasting the poet with the berry of a mountain bush in the fourth stanza?
- A To underscore the personal struggles that tenacity can invite.
 - B To cast doubt on the importance of endeavour.
 - C To emphasise the insignificance of achievement.
 - D To accentuate the transformation in conditions.
- 38 What is the main concern of the poem?
- A To reveal the charm and majesty of nature.
 - B To commune with the reader to share an insight.
 - C To proclaim a heart-felt sentiment.
 - D To address a subtle social problem.

Diagnostic Simulated GAMSAT

**** (Half-length) ****

Section 2

Written Communication

Number of questions: 1
Allotted Time: 30 minutes

DIRECTIONS:

1. You have 5 minutes perusal time.
2. You may take notes on the question paper during that time.
3. You may NOT make any mark on the answer grid during perusal.
4. At the end of 5 minutes, begin the exam.
5. Post-perusal, you have exactly 30 minutes to complete the exam.



WRITING TEST

Consider the following comment and develop a piece of writing in response to it.

One cannot subdue a man by holding back his hands. Lasting peace comes not from force.

- *David Borenstein*

WRITING TEST: ANSWER DOCUMENT

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WRITING TEST: ANSWER DOCUMENT

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Diagnostic Simulated GAMSAT

**** (Half-length) ****

Section 3

Reasoning in Biological and Physical Sciences

Number of questions: 55
Allotted Time: 85 minutes

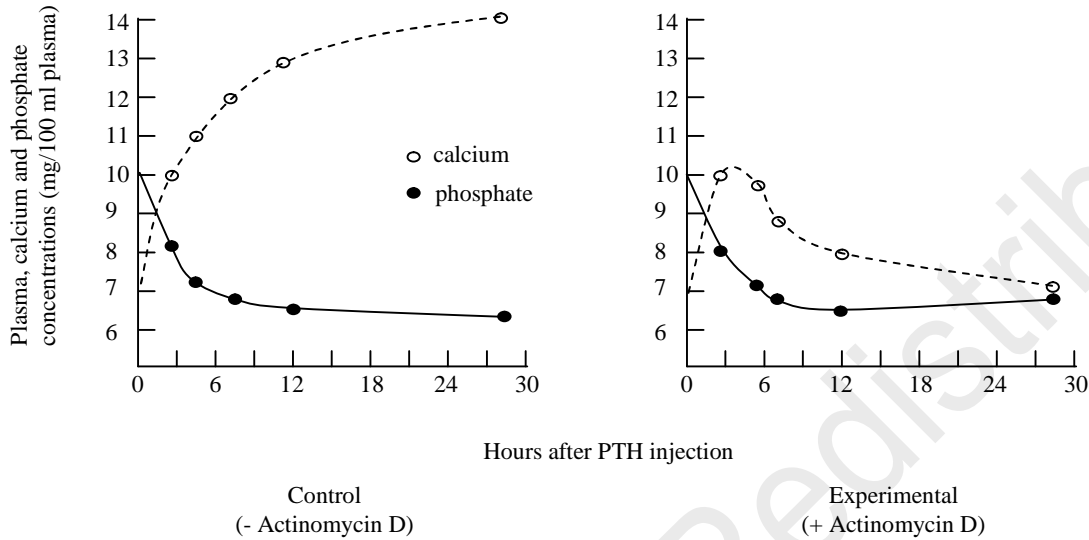
DIRECTIONS:

1. You have 5 minutes perusal time.
2. You may take notes on the question paper during that time.
3. You may NOT make any mark on the answer grid during perusal.
4. At the end of 5 minutes, begin the exam.
5. Post-perusal, you have exactly 85 minutes to complete the exam.



UNIT 1

Questions 1 – 7



The experimental results from a study of how the action of parathyroid hormone (PTH) on plasma calcium and plasma phosphate concentrations is affected by the drug actinomycin D are shown in the graphs above. $200\mu\text{g}$ of purified PTH was administered to each of several 150g albino rats after their parathyroid glands were removed. Measurements of plasma calcium and phosphate concentrations were taken when the PTH was initially injected and at regular intervals for a period of 28 hours afterwards. The data obtained when no actinomycin D was injected is displayed in the **Control** graph on the left. The **Experimental** graph, on the right, shows the data obtained when actinomycin D was administered **2 hours prior** to the injection of PTH. Every point on each graph corresponds to the average results for a group of 12 rats. Plasma calcium (open circles) and plasma phosphate (closed circles) were measured in mg per 100 ml plasma.

1 Estimate the average plasma calcium concentration 9 hours after PTH was introduced into the control rats.

- A 6.5 mg/100 ml plasma
- B 8.5 mg/100 ml plasma
- C 11.5 mg/100 ml plasma
- D 12.5 mg/100 ml plasma

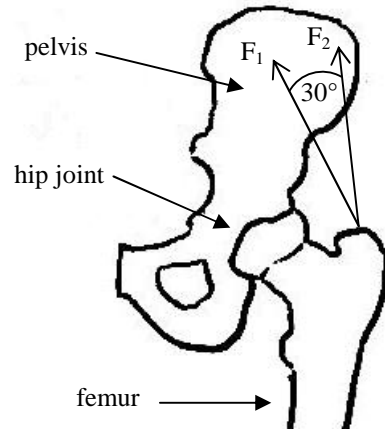
2 Of the following, which equation best expresses the change in plasma calcium (c) over time (t) after the control group is injected with PTH?

- A $c = 0.7t + 7.2$
- B $c = 0.33t^2 + 7.2$
- C $c = 1.65(\sqrt{t}) + 7.2$
- D $c = 7.2 - 5.3\log_{10}t$

- 3 According to the graphs, how would actinomycin D affect a normal rat whose parathyroid glands had not been removed?
- A No effect.
 - B Plasma calcium concentration increase.
 - C Plasma phosphate concentration decrease.
 - D Not possible to determine from the given data.
- 4 Of the following, which is a good estimate for the highest measured ratio of plasma calcium concentration to plasma phosphate concentration in the control rats?
- A 7:3
 - B 9:7
 - C 10:8
 - D 1:1
- 5 If PTH produced effects in proportion to the amount injected per gram of rat body weight, how much PTH would need to be administered to a 165 g rat to duplicate the degree of effect measured in the experiment?
- A 165 μg
 - B 180 μg
 - C 200 μg
 - D 220 μg
- 6 According to the data in the graphs, when can the effects of actinomycin D on PTH be noticed?
- A Only during the first 4 hours after PTH injection.
 - B Only after 4 or more hours has elapsed after PTH injection.
 - C As soon as PTH is injected, and until at least 28 hours afterwards.
 - D Only after 28 or more hours has elapsed since PTH injection.
- 7 The results of this experiment would seem to suggest that actinomycin D hinders the effect of PTH on which of the following?
- A Plasma calcium and plasma phosphate.
 - B Plasma calcium but not plasma phosphate.
 - C Plasma phosphate but not plasma calcium.
 - D Neither plasma calcium nor plasma phosphate.

UNIT 2

Questions 8 – 10



The femur is fixed to the pelvis by the hip abductor muscle. Fundamentally, this muscle can be considered to apply two independent forces ($F_1 = 50\text{lb}$, $F_2 = 75\text{lb}$) on the femur as shown above.

- 8 The magnitude (M) of the net force (in pounds) exerted on the femur by the abductor muscle is given by which of the following?
- A $M < 50$
 - B $50 < M < 75$
 - C $75 < M < 125$
 - D $M = 125$
- 9 When the femur is at constant velocity, which of the following is true?
- A There is no net force acting on the femur.
 - B The abductor muscle exerts no force on the femur.
 - C The femur's centre of gravity is immediately below the hip joint.
 - D The abductor muscle exerts no torque around the hip joint.
- 10 Estimate the magnitude of the component of force F_1 parallel to force F_2 .
[$\sin 30^\circ = 0.5$; $\cos 30^\circ = 0.9$; $\tan 30^\circ = 0.6$]
- A 25 lb
 - B 30 lb
 - C 45 lb
 - D 60 lb

UNIT 3

Questions 11 – 13

Two carboxylic acids which share a high degree of structural similarity are acetic acid (CH_3COOH) and chloroacetic acid (ClCH_2COOH). Their respective pK_a 's are



- 11 Of the following statements about the water solubilities of the two acids, which is true?
- A Both compounds have high water solubility.
 - B CH_3COOH is extremely soluble, ClCH_2COOH is only slightly soluble.
 - C ClCH_2COOH is extremely soluble, CH_3COOH is only slightly soluble.
 - D Both acids are only slightly soluble.
- 12 Which of the following is a good estimation of the magnitude of the acid dissociation constant (K_a) for CH_3COOH ?
- A 1.6×10^{-5}
 - B 1.6×10^{-4}
 - C 1.6×10^4
 - D 1.6×10^5
- 13 Of the following solutions, which has a higher proportion of dissociated acid molecules?
- A 0.1M CH_3COOH
 - B 0.1M ClCH_2COOH
 - C Both are equally dissociated.
 - D Cannot be determined from the data provided.

UNIT 4

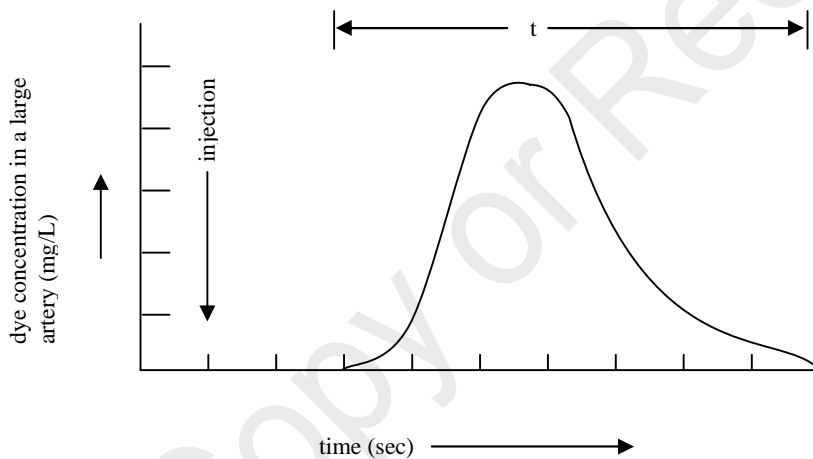
Questions 14 – 18

Cardiac catheterisation is one means by which pulmonary blood flow is often analysed. The following equation is used to calculate pulmonary blood flow:

$$Q = \frac{V_{O_2}}{Ca_{O_2} - Cv_{O_2}}$$

where Q = pulmonary blood flow (L/min); V_{O_2} = oxygen consumption (ml/min); Ca_{O_2} = systemic arterial oxygen content (ml/L of blood); Cv_{O_2} = pulmonary arterial oxygen (ml/L).

The following graph shows the results of using another newer method of pulmonary blood flow analysis – dye dilution. Using this technique the right side of the heart, or sometimes a tributary or vein, is injected with a dye (indocyanine green, for example), after which blood samples are taken from a large artery to determine the concentration of dye.



The equation

$$Q = \frac{60m}{c - t}$$

can then be used to calculate the pulmonary blood flow from the curve, where Q = pulmonary blood flow (L/min); m = the amount of dye injected (mg); c = average concentration of dye (mg/L over time t); t = time needed for dye to pass the monitoring point (sec).

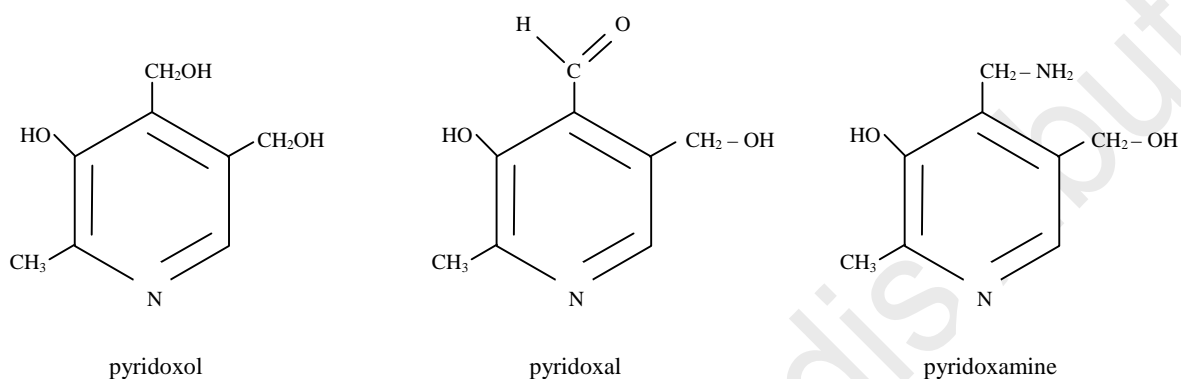
- 14** How would pulmonary blood flow change if a person's oxygen consumption were to double without changing the difference between pulmonary and systemic oxygen concentration?
- A** It would double.
 - B** It would quadruple.
 - C** It would increase eightfold.
 - D** It would decrease by half.

- 15 Suppose a person at rest consumes 150ml of oxygen per minute and has a pulmonary blood flow level of 5.0 litres per minute. Upon embarking on vigorous exercise, pulmonary blood flow rises to a rate of 7.5 litres per minute and oxygen consumption to 225 ml per minute. What happens to the difference in arterial oxygen levels ($C_{aO_2} - C_{vO_2}$) as a result of exercise?
- A It decreases to half of the at-rest value.
 - B It decreases to 30ml/L
 - C It increases to 150ml/L
 - D It remains unchanged.
- 16 What is the rate of pulmonary blood flow (in L/min) if, during dye dilution, the average dye concentration is 2mg/L over 6 seconds for 1mg of injected dye?
- A 2
 - B 5
 - C 6
 - D 10
- 17 In certain situations injected saline can be quickly absorbed or otherwise partially lost from the blood stream before it reaches a large artery. If saline were to be substituted for dye in a dilution experiment, how would its absorption affect the calculated value of Q?
- A The calculated value of Q would be lower than the actual value.
 - B The calculated value of Q would be higher than the actual value.
 - C No effect, as long as an ample number of samples were acquired.
 - D No effect, as long as the sample was of sufficient volume.
- 18 How has the rate of pulmonary blood flow changed if a dye dilution test, where all parameters are constant, reveals a decrease in the average time taken for the dye to pass the monitoring point, from 18 seconds to 6 seconds?
- A Q has decreased by one third.
 - B Q has decreased by one sixth.
 - C Q has increased 3-fold.
 - D Q has increased 6-fold.

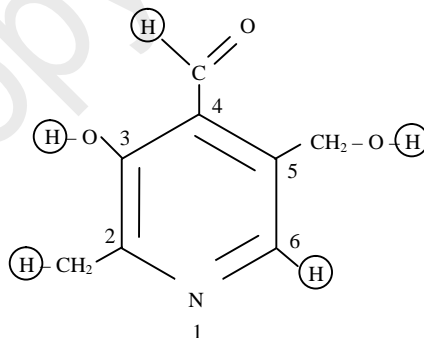
UNIT 5

Questions 19 – 21

Pyridoxine, otherwise known as Vitamin B₆, is really comprised of three compounds converted from one to each of the others by the body's biological processes.



- 19 Intramolecular hydrogen bonding would be observed in which of the three forms of Vitamin B₆ above?
- A Pyridoxol only
 B Pyridoxal only.
 C Pyridoxamine only.
 D Pyridoxol, pyridoxal, and pyridoxamine.
- 20 Of the hydrogens circled on pyridoxal below, which should be the most reactive with a base?

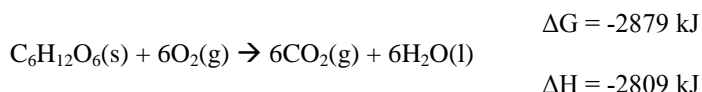


- A The hydrogen attached to the methyl group at position 2.
 B The hydroxyl hydrogen at position 3.
 C The aldehydic hydrogen at position 4.
 D The hydroxyl hydrogen on the group at position 5.
- 21 Of the three compounds, which (if any) is optically active?
- A Pyridoxol only
 B Pyridoxal only.
 C Pyridoxamine only.
 D None of the above.

UNIT 6

Questions 22 - 24

Physiological processes in the body derive their energy from the combustion of glucose:

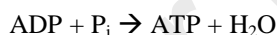


Due to its extremely exergonic nature, the reaction can also produce energy for particular endergonic systems.

- 22** The heat of formation of $\text{H}_2\text{O}(\text{l})$ is -285.8 kJ/mol , and the heat of formation of $\text{CO}_2(\text{g})$ is -393.5 kJ/mol . What is the heat of formation of glucose $\text{C}_6\text{H}_{12}\text{O}_6(\text{s})$?

- A -3489 kJ
- B -2809 kJ
- C -2130 kJ
- D -1267 kJ

- 23** The reaction



has a free energy of $+31.4 \text{ kJ}$ per mole of ATP produced. If one mole of glucose was combusted, how many moles of ATP would, in principle, be produced?

- A 34
- B 36
- C 73
- D 91

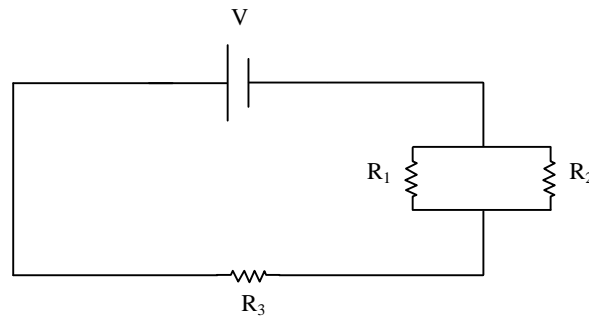
- 24** Some of the energy gained from metabolism is used to keep the body at a constant temperature of 37°C . If the energy produced from the combustion of glucose were entirely devoted to increasing body temperature, how many moles of glucose would have to be combusted to increase the temperature of a 60kg person from room temperature of 22°C to standard body temperature of 37°C ?

[Specific heat of the body is $4.2 \text{ kJ/kg } ^\circ\text{C}$]

- A 0.1
- B 0.3
- C 1.3
- D 2.0

UNIT 7

Questions 25 – 27



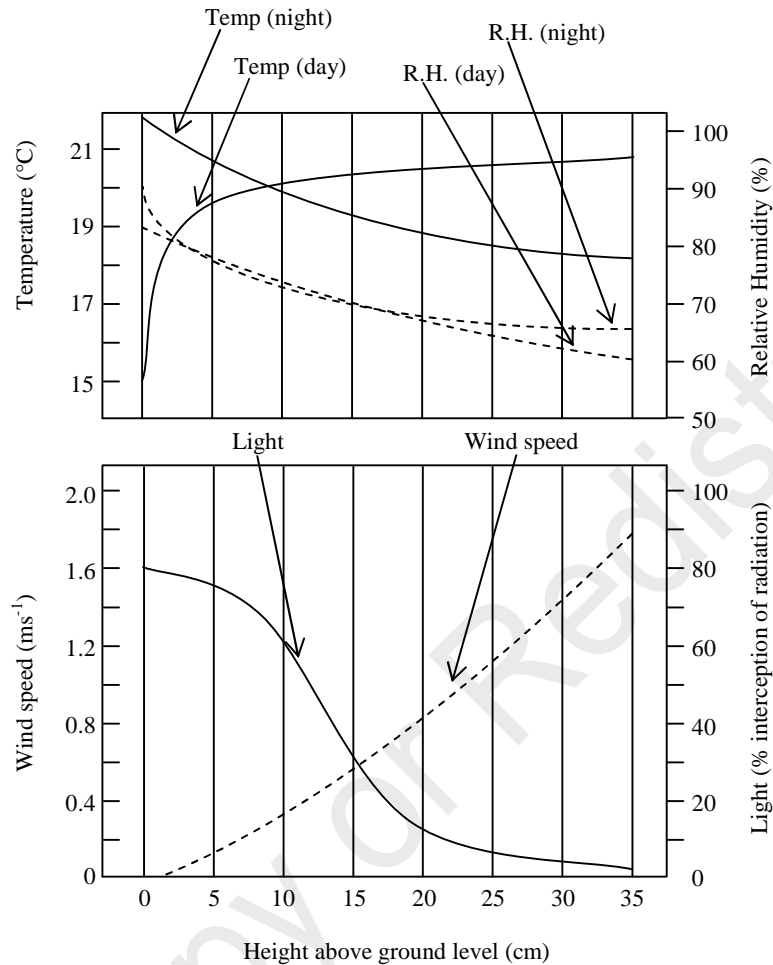
$R_1 = 3 \text{ ohms}$
 $R_2 = 1.5 \text{ ohms}$
 $R_3 = 1 \text{ ohm}$

The resistances of the resistors in the given circuit are shown above.

- 25 Of the following, which is the correct way of expressing the currents (I_1 , I_2 and I_3) passing through the three resistors?
- A** $I_1 + I_2 = I_3$
B $I_1 - I_2 = I_3$
C $I_2 + I_3 + I_4 = V$
D $V/I_3 = I_1 + I_2$
- 26 If R_1 bears a current of 1 amp, what current is borne by R_2 ?
- A** 0.5 amp
B 1 amp
C 1.5 amps
D 2 amps
- 27 If the resistance of R_3 were doubled, but the magnitude of V , R_1 and R_2 remained unchanged, in which resistor(s) would there be a change in magnitude of the current?
- A** None of the resistors.
B R_1 and R_2 only.
C R_3 only.
D All of the resistors.

UNIT 8

Questions 28 – 33



Local changes in climate over small distances (metres or only centimetres) are called microclimates. At varying heights above ground level several quantities in a particular microclimate were measured: light, wind speed, relative humidity and temperature. The plants in this microclimate had an average height of about 35cm. Measurements were taken of temperature and relative humidity during a sunny day and at night. The data is displayed in smooth curves on the above graphs.

- 28** For every unit increase in height above ground level, which quantity in this microclimate exhibits positive growth?
- A Light
 B Wind speed.
 C Daytime temperature.
 D Night-time temperature.
- 29** For the measurements taken in this microclimate, the temperature was higher during
- A day than night, for all heights.
 B day than night, only for heights greater than 9cm.
 C day than night, only for heights less than 9cm.
 D night than day, for all heights.

- 30 Approximately how many times the daytime relative humidity at 35cm was the night-time relative humidity at the same height?
- A 0.6
 - B 0.1
 - C 0.9
 - D 1.1

- 31 At 35cm above ground level the wind speed for this microclimate is the same as the wind speed over the entire macroclimate that contains it. On the day these measurements were made, the wind speed in kilometres per hour over the whole macroclimate was approximately

- A 0.10 km/hr
- B 2 km/hr
- C 6 km/hr
- D 9 km/hr

- 32 The formula for the conversion of °C to °F is as follows:

$$^{\circ}\text{F} = \frac{9}{5} ^{\circ}\text{C} + 32$$

What is the approximate change in daytime temperature, in °F, between 0cm and 35cm?

- A 6
 - B 11
 - C 27
 - D 45
- 33 The slope of the line that approximates the change in night-time temperature between 0cm and 30cm is which of the following?

- A $-13^{\circ}\text{C}/\text{cm}$
- B $-0.13^{\circ}\text{C}/\text{cm}$
- C $0^{\circ}\text{C}/\text{cm}$
- D $0.13^{\circ}\text{C}/\text{cm}$

UNIT 9

Questions 34 – 36

The cross-sectional area of the aorta, the largest artery in the human body, is roughly $2 \times 10^{-4} \text{ m}^2$. The left ventricle of the heart supplies blood to the aorta which, in turn, supplies blood to the circulatory system of the body.

34 Approximately 2.6 newtons of force is exerted on blood entering the aorta. What is the pressure associated with this force?

- A** $1.3 \times 10^4 \text{ N/m}^2$
- B** $2.6 \times 10^4 \text{ N/m}^2$
- C** $5.2 \times 10^4 \text{ N/m}^2$
- D** $10.4 \times 10^4 \text{ N/m}^2$

35 How does the gravitational potential energy E_H of 0.01L of blood in the head relate to the gravitational potential energy E_S of 0.01L of blood in the stomach? (Assume the person is standing).

- A** $E_H > E_S$
- B** $E_H = E_S$
- C** $E_H < E_S$
- D** Unable to determine from the data provided.

36 For the person described above, how does the gravitational potential energy E_H of 0.01L of blood at head level change if two steps are taken across a horizontal surface?

- A** E_H increases.
- B** E_H does not change.
- C** E_H decreases.
- D** Change dependent on the direction in which the person moves.

UNIT 10

Questions 37 – 39

The permeability of a mammal's red blood cells, when they are separated from whole blood and introduced into a hypertonic solution, changes to admit larger molecules. The material inside the cell escapes, and only the plasma membrane and its related proteins remain. If these permeable membrane "ghosts" are introduced into an isotonic solution, the "leaks" are sealed again; these resealed "ghosts" are then impermeable to entry or exit of large molecules, like enzymes. Several ghost-related proteins have been researched, for example: E1, E2, and E3.

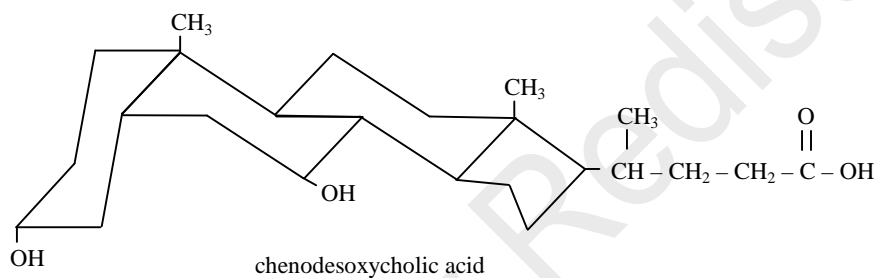
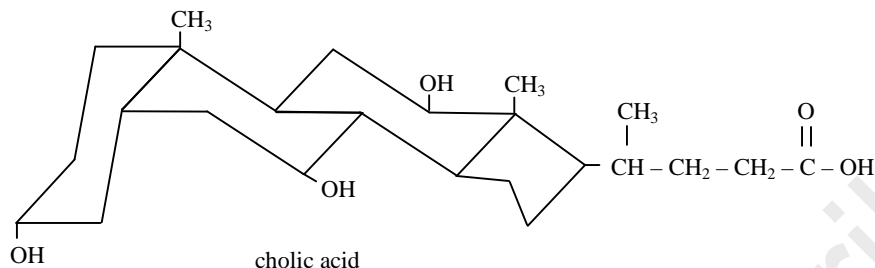
To label the resealed ghost proteins in a particular experiment, they are incubated with radioactive iodine and an enzyme that attaches iodine only to the tyrosine residues in protein. The three ghost-related proteins, all containing tyrosine, are analysed. E3 is the only one not found to contain radioactivity. E1 and E2 are both radioactive.

In a different experiment, the leaky "ghosts" are incubated again, this time only with the enzyme, and are then resealed and washed. This means that the ghosts are exposed to the enzyme internally only. Radioactive iodine, which crosses the membrane easily, is added. Analysis of the three ghost proteins shows that E1 and E3 are radioactive; only E2 is not.

- 37 How is the relationship of E1 to the ghost best described?
- A It is located completely within the ghost.
 - B It is located completely outside the ghost.
 - C It is located completely within the membrane bilayer.
 - D It lies across the membrane, having amino acid residues inside as well as outside the ghost.
- 38 Peptides are removed from ghost proteins by a protease enzyme called trypsin. Which ghost proteins will be affected if sealed ghosts are treated with trypsin?
- A E2 only.
 - B E1 and E2 only.
 - C E1 and E3 only.
 - D E1, E2, and E3.
- 39 What would be the most probable purpose of a plasma membrane-related protein located completely within the ghost vesicle?
- A A hormone receptor.
 - B A protein that carries mRNA across the membrane.
 - C A protein that carries sodium across the membrane.
 - D An enzyme that catalyses a reaction in the glycolytic pathway.

UNIT 11

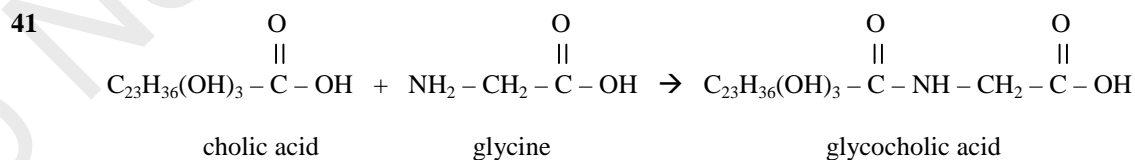
Questions 40 – 42



The two bile acids whose structures are shown above, cholic acid and chenodesoxycholic acid, are vital contributors to the digestion process.

40 How do the acidity of cholic acid and chenodesoxycholic acid compare?

- A Both acids are roughly equally strong.
- B Cholic acid is stronger due to a higher number of hydroxyl groups.
- C Cholic acid is weaker due to a higher number of hydroxyl groups.
- D Cholic acid is stronger because a hydroxyl group is near the carboxylic acid group.



The reaction above shows how cholic acid and the amino group in glycine react to produce glycocholic acid. What kind of bond is formed during this reaction?

- A Amide.
- B Amine.
- C Imide.
- D Ketoamine.

- 42 Of the following, which purpose might be served by the body's secretion of the sodium salt of glycocholic acid, $C_{23}H_{36}(OH)_3CONHCH_2COO^-Na^+$, into the intestine?
- A To emulsify fats.
 - B To decrease the pH of the intestine.
 - C To act as an acid catalyst for digestion.
 - D To act as an enzyme for the digestion of proteins.

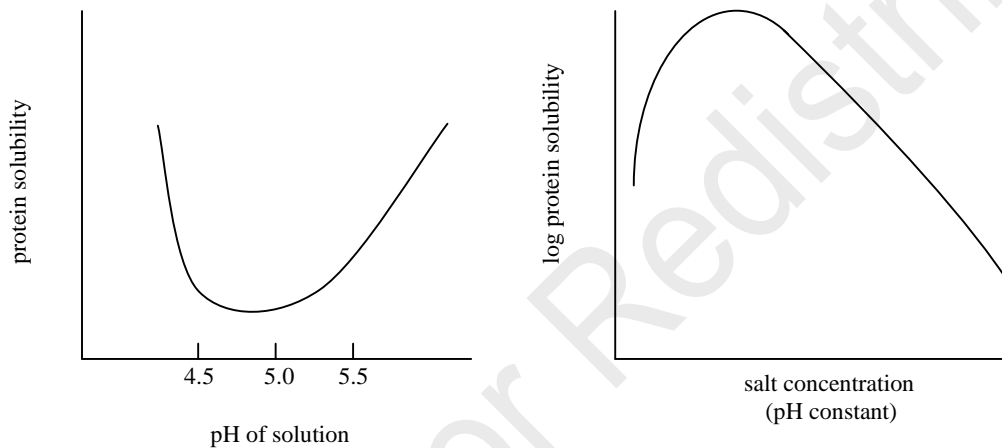
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UNIT 12

Questions 43 – 45

The net charge on a protein can be altered by titration of the positively and negatively charged groups contained within it. Counterions in solution contain equal and opposite charges which balance the net charge on the protein. This quality of proteins is fundamental to certain modes of protein purification such as “isoelectric precipitation”, “salting in”, and “salting out.”

The two curves below expose the relationship between the solubility of a hypothetical protein and the pH and salt concentration of the solution, respectively.



- 43 Which section of these graphs is NOT explained by the electrostatic attraction between the protein and the charged particles in solution?
- Minimum solubility at the isoelectric pH.
 - Rise in solubility after adding salt at low salt concentrations.
 - Fall in solubility after adding salt at high salt concentrations.
 - All sections of these graphs can be explained.
- 44 The surface of a protein can absorb ions. Of the following ions, which would most likely be bound to the protein at a pH of 10?
- Positive ions.
 - Negative ions.
 - Either positive or negative ions with equal likelihood.
 - Depends on the salt concentration of the solution.
- 45 Of the following buffer solutions, which will dissolve the hypothetical protein LEAST readily? [$pK_a \text{ H}_3\text{PO}_4 = 2.14$; $pK_a \text{ H}_2\text{PO}_4^- = 7.20$; $pK_a \text{ CH}_3\text{COOH} = 4.76$; $pK_a \text{ NH}_4^+ = 9.25$]
- $\text{H}_3\text{PO}_4/\text{NaH}_2\text{PO}_4$
 - $\text{CH}_3\text{COOH}/\text{CH}_3\text{COONa}$
 - $\text{NaH}_2\text{PO}_4/\text{Na}_2\text{HPO}_4$
 - $\text{NH}_4\text{Cl}/\text{NH}_3$

UNIT 13

Questions 46 – 52

Energy Metabolism of Anephric Patients						
	Newborn		Child		Adult	
	Unstressed	Stressed	Unstressed	Stressed	Unstressed	Stressed
Body weight (kg)	3	3	10	10	70	70
Expected nitrogen loss (g/day)	0.1	0.2	0.7	1.4	7.0	14.0
Total metabolic rate (Cal/day)	225	250	1000	1200	2400	2700
Carbohydrate (Cal/day)	45	50	200	240	480	540
Protein (Cal/day)	2	5	18	35	175	350
Fat (Cal/day)	178	195	782	925	1745	1810
Carbohydrate metabolised (g/day)	11.3	12.5	50	60	120	135
Protein metabolised (g/day)	0.6	1.3	4.4	8.8	44	88
Fat metabolised (g/day)	19.7	21.6	87	103	194	201

Various alterations in physiology attend the onset of acute kidney failure (anephria), including changes in the speed at which the body metabolises different foods. Fasting patients with kidney failure were divided into two different groups to measure their metabolism: “unstressed” relates to a previously healthy person who developed kidney failure, and “stressed” relates to a person whose kidney failure was accompanied by other diseases or physical trauma. The table above describes the data collected.

- 46** How many more grams of nitrogen per kg of body weight should an unstressed anephric adult lose in one day compared to an unstressed anephric newborn?
- A .07 g
 B .33 g
 C 1.0 g
 D 3.0 g
- 47** For the stressed anephric child, estimate the proportion of the total metabolic rate (in cal/day) made up of carbohydrate.
- A 1 part in 2
 B 1 part in 4
 C 1 part in 5
 D 1 part in 6
- 48** Compared to the unstressed anephric adult, the unstressed anephric newborn, per unit of body weight, metabolises
- A more fat and more protein.
 B less fat and more carbohydrate.
 C more protein and more carbohydrate.
 D more fat and less protein.
- 49** With respect to the data in the table, roughly how many calories will the metabolism of one gram of carbohydrate produce?
- A 4
 B 12
 C 20
 D 45

- 50 64.8 grams of protein was metabolised by one normal (nonanephric) adult in one day. Compared to this normal adult, estimate how many more calories of protein the stressed anephric adult will metabolise in one day.
- A 23 calories.
 - B 54 calories.
 - C 90 calories.
 - D 280 calories.
- 51 Estimate the percentage, by weight, of metabolised protein excreted as nitrogen in adult anephric patients if all of the nitrogen lost originates from metabolised protein?
- A 6%
 - B 16%
 - C 23%
 - D 44%
- 52 The following equation can be used to determine the approximate amount of energy that an average healthy woman metabolises in one day:

$$E = 580 + 31.1W$$

where E = energy metabolised (in calories), and W = weight in kg. According to the table, how does the daily metabolic rate for an unstressed anephric adult compare to the amount of energy metabolised in a single day by a healthy 70 kg woman?

- A The normal woman metabolises 357 more calories per day than the anephric adult.
- B The normal woman metabolises 223 more calories per day than the anephric adult.
- C The normal woman and the anephric adult metabolise approximately the same number of calories per day.
- D The normal woman metabolises 223 fewer calories per day than the anephric adult.

UNIT 14

Questions 53 – 55

When it is digested, sucrose is hydrolysed to produce glucose and fructose.

53 Sucrose was hydrolysed in 0.100 M HCl at 35 ° C, producing the following table of data:

concentration of sucrose (M)	initial rate (M/min)
0.500	1.80×10^{-3}
0.400	1.46×10^{-3}
0.200	7.32×10^{-4}

In this experiment, which of the following could be the rate law for the hydrolysis of sucrose?

- A rate = $(1.46 \times 10^{-4} \text{ min}^{-1})[\text{sucrose}]$
- B rate = $(1.46 \times 10^{-3} \text{ min}^{-1} \text{ M}^{-1})[\text{sucrose}]^2$
- C rate = $(3.66 \times 10^{-3} \text{ min}^{-1})[\text{sucrose}]$
- D rate = $(3.66 \times 10^{-4} \text{ min}^{-1} \text{ M}^{-1})[\text{sucrose}]^2$

54 $\text{sucrose(aq)} + \text{H}_2\text{O} \rightarrow \text{glucose(aq)} + \text{fructose(aq)}$ [$K = 4.59 \times 10^7$ and $\Delta H^\circ = -15.8 \text{ kJ}$].

If the reaction above were carried out at 25°C, how would an increase in temperature affect the value of K?

- A K will increase as temperature rises.
- B K will remain constant as temperature rises.
- C K will decrease as temperature rises.
- D K will increase or decrease independent of temperature change.

55 If a 2.0 M sucrose solution freezes at -3.72 °C, at what temperature will the solution freeze after total hydrolysis?

- A -1.86°C
- B -3.72°C
- C -7.44°C
- D K_f for water is also needed to solve the problem.



Diagnostic Simulated GAMSAT

**** (Half-length) ****

Answer Grid

Section I

	A	B	C	D
1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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	A	B	C	D
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	A	B	C	D
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38.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section I

Raw Score	=	No. Correct x 2
	=	

Section III

	A	B	C	D
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6.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	A	B	C	D
20.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	A	B	C	D
39.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
51.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
54.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
55.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section III

Raw Score	=	No. Correct x 2
	=	



Diagnostic Simulated GAMSAT

**** (Half-length) ****

Answers

Section I

QUESTION TYPE	A	B	C	D	QUESTION TYPE	A	B	C	D	QUESTION TYPE	A	B	C	D
X 1.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	XVI 14.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	XV 27.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
XVI 2.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	X 15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	XV 28.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
X 3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	X 16.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	XV 29.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
X 4.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	X 17.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	XV 30.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
XVII 5.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	XII 18.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	X 31.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
X 6.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	XVIII 19.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	XIV 32.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
VII 7.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	XI 20.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	XV 33.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
X 8.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	XI 21.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	XVII 34.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
XVIII 9.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	X 22.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	XI 35.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
XI 10.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	XVII 23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	XI 36.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
XVI 11.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	XVI 24.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	III 37.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
X 12.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	XV 25.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	X 38.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
XII 13.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	XV 26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>					

Section III

QUESTION TYPE	A	B	C	D	QUESTION TYPE	A	B	C	D	QUESTION TYPE	A	B	C	D
Bio VI 1.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	OC I 20.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bio IV 39.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Bio VII 2.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	OC I 21.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	OC III 40.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bio VII 3.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	PC VIII 22.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	OC I 41.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bio IX 4.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	PC VIII 23.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	OC IV 42.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bio IX 5.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	PC VIII 24.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	PC VI 43.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Bio VI 6.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Phy I 25.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	PC IV 44.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bio IV 7.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Phy VIII 26.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	PC I 45.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phy VIII 8.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Phy VIII 27.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Bio VI 46.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phy II 9.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bio VI 28.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bio IX 47.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Phy VIII 10.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Bio VI 29.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bio VI 48.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
PC I 11.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bio VIII 30.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Bio VI 49.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PC VIII 12.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bio VI 31.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Bio IX 50.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
PC I 13.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bio VIII 32.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bio IX 51.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bio VIII 14.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bio VI 33.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Bio VIII 52.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bio VIII 15.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Phy VIII 34.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	PC I 53.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Bio VIII 16.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Phy II 35.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	PC I 54.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Bio II 17.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Phy II 36.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	PC I 55.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Bio VIII 18.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Bio II 37.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>					
OC I 19.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Bio II 38.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>					

QUESTION TYPE KEY

I	Recollection of knowledge	VIII	Calculation or Formulation	XVI	Rhetoric
II	Deduction or Inference	IX	Approximation, Interpolation, or Extrapolation	XVII	Tone
III	Comparison or Contrast	X	Situation & Content	XVIII	Application
IV	Judgement or Hypothesis	XI	Meaning of Word/Phrase	Bio	Biology
V	Pattern Recognition or Shape Visualisation	XII	Diction	OC	Organic Chemistry
VI	Interpretation of Tables, Graphs, or Diagrams	XIV	Figurative Language	Phy	Physics
VII	Interpretation of Pictures or Illustrations	XV	Logical Structure	PC	Physical Chemistry