

# DEPARTMENT OF EDUCATION

UPPER SECONDARY SCHOOL CERTIFICATE EXAMINATIONS

# APPLIED ENGLISH

Friday
23<sup>rd</sup> October 2015

Time allowed: 2 hours and 30 minutes (8:00am – 10:30 am)

NO EXTRA TIME (NO OTHER TIME)

Candidates are advised to fully utilise the allocated time

### INSTRUCTIONS TO CANDIDATES

To be read by the external invigilator to all candidates.

- 1. The subject code for Applied English is 2.
- 2. There are **16** printed pages in the question booklet. An electronic answer sheet for part A and **2** pages answer booklet for Part B are inserted in the question booklet.
- 3. There are two parts in this paper. Answer all questions.

### Part A: Multiple Choice (Questions 1-30) 30 Marks

This section will be electronically marked.

All answers to the Multiple Choice Part MUST be answered on the ELECTRONIC ANSWER SHEET provided.

Carefully following the instructions, fill in your Candidate Information and Subject Information.

If you make a mistake, rub the shading out completely using an eraser and shade in your alternative clearly.

# Part B: Short Answer (Questions 31-70) 40 Marks

Write down your name, your school name and complete your10 digit candidate number on the Part B Answer Sheet Provided.

- 4. You are required to write only the correct answer in the space provided.
- 5. Answers written on the question paper will not be marked. Write answers neatly in spaces as allocated on the answer sheet. Answer **ALL** questions.
- 6. Correction fluid is <u>not allowed</u> on the answer sheet. Where you have made an error, cross out all the working and start on a new line.
- 7. Dictionaries are NOT permitted.

**Penalty For Cheating Or Assisting To Cheat In National Examinations Is Non-Certification.** 



DO NOT TURN OVER THE PAGE AND DO NOT WRITE UNTIL YOU ARE TOLD TO START.

USSCE APP ENG 2015 Page 2 of 16

### For questions 1 and 2 read the two poems below and answer the questions.

To make their images come alive, poets use all kinds of patterns that are called figures of speech.

### POEM 1

### I Know Where Yesterday Has Gone

Yesterday stopped at the traffic light

As it sat, Today tore by in front of it, At a life - threatening speed.

And Tomorrow turned the corner, following Slowly behind Today, It would reach its Destination all too soon for anyone's liking.

Yesterday sat, its engine idling slower and slower,

The light, never to be green again, Stared at Yesterday with a baleful Red eye.

The traffic light of the mind realised,
It had the power to hold Yesterday
On the corner of Memory Avenue ...forever...
It grinned, strangely please with itself

Cindy A. Booth

Source: Poets and Poetry

Sadler R K, Hayllar, TAS and Powel.C.J (1992)

Macmillan: Hong Kong pages 17 & 18

### POEM 2

### Love's Return

SINCE when in days agone we met
My life is dark and drear,
The sullen clouds are sable shrouds,
No ray of light comes near

But, like twin suns, thing eyes dispel
The murky fog of woe,
And on my heart, pierced by the dart
Of Love, they softly glow.

Thy lips -Ah sweet, what tongue can tell Their wondrous healing power? Like bubbling streams where moonlight gleams,

Or some rose – scented bower

Thy magic voice enthralls me still,
As in the days of yore,
Then by the side I'll e'er abide
I thank thee, Love, once more!

Robert Elliot Gonzales Blackcat poems.com

Source: Post Courier, Weekender Friday

March 20, 2015 page 4.

### **QUESTION 1**

What figure of speech is Poem 1 using?

A. irony B. metaphor

C. simile

D. personification

### **QUESTION 2**

What figure of speech is Poem 2 using?

A. irony B. metaphor C. simile D. personification

### For questions 3 - 6 read the poem and answer the questions.

### An Inner Battle

For far too along

It seems

I have been invective of myself

My approach to this crux

Has been somewhat biased

I now face the uncertainty.

That lies within what is an enigma In itself.

I feel I have analyzed

And criticized

Every fraction of my soul

And my intellectual

As well as emotional being

To discover at least a hint of assistance

Something different

But at the end of the day

I come to the same wind-up

I still believe.

I fear when I probe faint signs

Of shadows

Of things I can have

Slipping through my fingers

At their own accord to the wretched

I guess they have waited enough.

And when a larger depict is etched

It does not hurt as bad

And I cheat myself

By propelling them aside

Pretending that they don't live

That they never happened.

But it's there

Everyone can see it

I have not seen it

That is because I refuse to

It is becoming more apparent

And after this

I will be stronger.

I have prepared.

'The story is our escort without it we are blind.' Chinua Achebe

Source: Falling Foliage by

Melisa Aigilo 2011

### **OUESTION 3**

The poet who wrote the above poem is

- A. Chinua Achebe
- B. Foliage Haus
- C. Melanesian Publishing
- D. Melissa Aigilo

### **QUESTION 4**

What does the word "enigma" in stanza 2, line 1 mean?

- A. engine
- B. enigmatic
- C. mystery
- D. poetic item

### **QUESTION 5**

"Slipping through my finger" in stanza 4 is an example of

- A. alliteration.
- B. metaphor.
- C. personification.
- D. simile.

### **QUESTION 6**

What can you imply from what the poet has written?

- A. Humans are faced with many issues.
- B. Humans will continue to face and deal with conflicts.
- C. The author has some serious issues herself and needs help.
- D. The mind conflicts can be solved with proper understanding.

USSCE APP ENG 2015 Page 4 of 16

### For questions 7 and 8 read the text below and answer the questions.

### **Plays and Concerts**

The living culture of a rapidly changing society moves, grows and changes with the society it nourishes. In Papua New Guinea, two national theatre companies and a national arts schools have fostered and nurtured an amazing contemporary flowering of drama, art and music, all firmly rooted in national cultural traditions. Their work is a highlight of the Festival.

### **Eberia**

The National Theatre Company's contribution to the Festival is a musical drama written by William Takaku and based on traditional legends of the Nasioi people of the North Solomons. They share the widespread Pacific belief that each dead man's spirit roams the endless mysteries of the lower world (Eberia) according to the type of life he led while on the upper world.

With the popular Sanguma providing the music, Eberia is the first full-scale, all Papua New Guinea musical play. Rock operas like Jesus Christ Superstar, Ipi Tombi and the Wizard of Oz have been widely performed here, but Eberia is unlike them, in style as well as substance....

### Sail the Midnight Sun

The Raun Raun Theatre Company of Goroka will be presenting a folk opera based on an epic poem by John Kasaipwalova... Sail the Midnight Sun is by far the most difficult and ambitions folk opera that Raun Raun has tackled to date....

Source: William Takaku. In Souvenir Programme, South Pacific of Arts: Hong Kong, page 5.

### **QUESTION 7**

Eberia is an example of a

A. documentary film. B. folk opera.

C. rock opera. D. musical drama.

### **QUESTION 8**

Sail the Midnight Sun is an example of a

A. documentary film. B. folk opera.

C. rock opera. D. musical drama.

Page 5 of 16 USSCE APP ENG 2015

### Read the letter below and answer questions 9, 10 and 11.

January 10, 1995

Personnel Officer

**Road Transport Corporation** 

Udaynagar

Dear Sir.

I would like to commend the kindness of the crew of your bus number UL 1011 on route number 921, to my child who was travelling in their bus on January 8.

My child who is five years old was returning from school. Usually she is escorted to and fro by an attendant. But on January 8 the school ended early and the child got into the bus 921 alone. She knows the route number but does not know where to get off.

The driver and conductor found my daughter crying when they reached the bus terminus. She told them that she could not go home because she had forgotten where to get off. The two men found our address in her school bag. As it was their last trip they signed off and brought the child home.

We are deeply grateful to Mr Baig and Mr Ajay for their help, in a time when people constantly complain about the callousness of the RTC Staff. I want this incident to be given maximum publicity so that the negative attitude of people can change.

I thank these two wonderful persons and congratulate you on having such people on your staff.

Yours sincerely,

Prem Thakoo

5/4D AG's Office Road

Udaynag Sar

Source: Roy, S. (1999). Business English, Sterling Publishers Private Limited: New Delhi, pages 13-15

### **QUESTION 9**

This type of letter is called a letter of

A. application. B. commendation. C. complaint. D. recommendation.

### **QUESTION 10**

The style this letter is using is called a

A. full- block. B. half-block. C. quarter-block. D. semi-block.

### **QUESTION 11**

Another meaning for 'callousness' in paragraph 4 is

A. aimless. B. foolishness. C. selfishness. D. worthless.

USSCE APP ENG 2015 Page 6 of 16

For questions 12 and 13, refer to the newspaper article, 'Board to approve health care trainers.'

# Board to approve health care trainers

- Health Department Secretary Pascoe Kase says trainers for health care providers will be credited to maintain high standards of health care through the expansion of training schools.
- 5 "When Papua New Guineans arrive at a health service for treatment, whether a child or elderly parent, they expect to be given services from a health professional that is caring, competent, motivated and well trained," he said.
- 10 The Health Department, with the support of the Australian Government, is rehabilitating training schools for nurses and community health workers in the country.
- "This is a key strategy being implemented 15 under the Government's health workforce enhancement plan," Kase said.

The rehabilitation of training schools is expected to increase the number of health workers providing services to the people.

- 20 "We need to maintain the high standard healthcare in PNG," he said.
  - "For this reason, health worker training providers are required to be credited through the PNG Nursing Council and medical board at the Health Department.
  - "This is a legal requirement for the graduates to practice in the PNG health sector."
  - He said all health-related training programs were to be approved by the Health Department before commencement.
  - "If any health training provider is unsure about the accreditation status or require further information, they should contact the Health Department," he said.

Source: The National, Wednesday, March 4, 2015, page 10

### **QUESTION 12**

PNG can improve the quality of its health care by

- A. ensuring trainers for health care providers are credited.
- B. maintaining high standards of health care.
- C. getting services from a health professional.
- D. rehabilitating training schools.

### **QUESTION 13**

The word 'this' in the sentence: "This is a legal requirement for the graduates to practice in the PNG Health Sector," refers to

- A. trainers to be credited.
- B. maintaining the high standards and the healthcare.
- C. the rehabilitation of training schools.
- D. the Government's health workforce enhancement plan.

Page 7 of 16 USSCE APP ENG 2015

### For questions 14 and 15, refer to the text below.

I have yet to meet a poetry-lover under thirty who was not an introvert, or an introvert who was not unhappy in adolescence. At school, particularly, maybe, if, as in my own case, it is a boarding school, he sees the extrovert successful, happy, and good and himself unpopular or neglected; and what is hardest to bear is not unpopularity, but the consciousness that it is deserved, that he is grubby and inferior and frightened and dull. Knowing no other kind of society than the contingent, he imagines that this arrangement is part of the eternal scheme of things, that he is doomed to a life of failure and envy. It is not till he grows up, till years later he runs across the heroes of his school days and finds them grown commonplace and sterile, that he realizes that the introvert is the lucky one, the best adapted to an industrial civilization the 10 collective values of which are so infantile that he alone can grow, who has educated his fantasies and learned how to draw upon the resources of his inner life. At the time, however, his adolescence is unpleasant enough. Unable to imagine a society in which he would feel at home, he turns away from the human to the nonhuman: homesick he will seek, not his mother, but mountains or autumn woods, and the growing life within him will express itself in a devotion to music and thoughts upon mutability and death. Art for him will be something infinitely precious, pessimistic, and hostile to life. If it speaks of love, it must be love frustrated, for all success seems to him noisy and vulgar; if it moralizes, it must counsel a stoic resignation, for the world he knows is well content with itself and will not change.

Extract taken from an article written by a well-known poet and biographer in the 1930s.

### **QUESTION 14**

According to the author, poetry lovers under thirty generally

A. are always products of boarding schools.

B. are outgoing as adolescents.

C. have a strong sense of their own inferiority. D. have an unhappy home life.

### **QUESTION 15**

The word 'contingent' in line 6 also means:

A. competitive. B. immediate. C. juvenile. D. scholarly.

USSCE APP ENG 2015 Page 8 of 16

### Read the extract of a short-story, A Talent by Albert Wendt and answer questions 16 and 17.

Salepa had a very lively sense of his own worth and assumed that his special talent would get him everything he wanted.

It hadn't rained for over a month, and, sitting in his *fale*, which was the smallest one in Sapepe village, Salepa (everyone called him Sale) cursed the endless heat and the flies and the stench of the mangroves and the shrieking of his neighbour's children and the audibly complaining hunger in his belly and his wife Lagilelei (everyone called her Lagi) who had left him, taking their three children with her the week before. After cursing his wife - calling her a mean, sullen, ungrateful, ugly bitch who has sucked the marrow out of his gullible bones for eighteen years - he recursed all the other things he had cursed before cursing his wife.

Source: A Talent by Albert Wendt. In Roskies, D.M, James, A, and Mind, B. Language and Literature; An Introduction, A Course Reader, n.p.

### **QUESTION 16**

The phrase: "It hadn't rained for over a month" implies

A. disaster. B. drought. C. flood. D. problem.

### **QUESTION 17**

A gullible person is someone who is easily

A. fooled. B. loved. C. teased. D. tricked.

### For question 18, refer to the news headline below.

### **CRIME HINDERS PROGRESS, PM SAYS**

Prime Minister Peter O'Neill says law and order problems hinder business development and keep tourists away from the country.

He told the people in Mendi town of Southern Highlands that business development in the province was being dragged down by law and order problems.

He was in his home province to open the Mendi Travellers Inn last Friday.

He said local business owners went to other provinces or overseas to invest. And companies from outside the province have no interest in setting up business there, he added.

O'Neil said Peter Nupiri, the owner of the new Mendi Travellers Inn, was a dedicated man who had sacrificed and was dedicated to changing Mendi town and creating jobs. O'Neill said many businesses failed because of the lack of discipline and good management.

"The Government is strongly supporting small and medium enterprise activities and is strengthening law and order," he said.

Governor William Powi said due to the police modernization program and the hard work by the police, law and order problems in the province had decreased.

He said provincial police commander Supt Sibron Papoto and his officers were working hard to reduce the crime rate.

"There is no reason why people from Southern Highlands would not be involved in business activities as the Government had eased their burdens by paying their children's school fees and providing free medical treatment," he said.

Source: The National Newspaper, Monday, 13th of April, 2015

Page 9 of 16 USSCE APP ENG 2015

### **QUESTION 18**

The news headline would imply that

- A. crime is responsible for progress.
- B. the good intentions of the government are hampered by crime.
- C. people's advancement is frustrated by crime.
- D. the PM and crime are slowing down progress.

### Read the extract below and answer questions 19 and 20

The pioneers of the teaching of science imagined that its introduction into education would remove the conventionality, artificiality, and backward-lookingness which were characteristic; of classical studies, but they were gravely disappointed. So, too, in 5 their time had the humanists thought that the study of the classical authors in the original would banish at once the dull pedantry and superstition of mediaeval scholasticism. The professional schoolmaster was a match for both of them, and has almost managed to make the understanding of chemical reactions as dull 10 and as dogmatic an affair as the reading of Virgil's Aeneid. The chief claim for the use of science in education in education is that it Teaches a child something about the actual universe in which he is living, in making him acquainted with the results of scientific discovery, and at the same time teaches him how to think logically 15 and inductively by studying scientific method. A certain limited success has been reached in the first of these aims, but practically none at all in the second. Those privileged members of the community who have been through a secondary or public school education may be expected to know something about the 20 elementary physics and chemistry of a hundred years ago, but they probably know hardly more than any bright boy can pick up from an interest in wireless or scientific hobbies out of school hours. As to the learning of scientific method, the whole thing is palpably a farce. Actually, for the convenience of teachers and the 25 requirements of the examination system, it is necessary that the pupils not only do not learn scientific method but learn precisely the reverse, that is, to believe exactly what they are told and to reproduce it when asked, whether it seems nonsense to them or not. The way in which educated people respond to such quackeries 30 as spiritualism or astrology, not to say more dangerous ones such

USSCE APP ENG 2015 Page 10 of 16

as racial theories or currency myths, shows that fifty years of education in the method of science in Britain or Germany has produced no visible effect whatever. The only way of learning the method of science is the long and biter way of personal

35 experience, and, until the educational or social systems are altered to make this possible, the best we can expect is the production of a minority of people who are able to acquire some of the techniques of science and a still smaller minority who are able to use and develop them.

Extract adapted from, 'The Social Function of Science,' John D. Bernard (1939)

### **OUESTION 19**

The author implies that the "professional Schoolmaster' in line 7 has

- A. aided true learning.
- B. been a pioneer in both science and humanities.
- C. no interest in teaching science.
- D. thwarted attempts to enliven education.

### **QUESTION 20**

The author's attitude to secondary and public school education in the sciences is

A. ambivalent. B. contemptuous. C. neutral.

Read the extract from the Foreword by the Honourable Stephen Ogaji Tago, MP, Minister for Culture, Science and Tourism to answer question 21.

D. supportive.

We must assert our independence.

I am proud that the opening paragraph of our Papua New Guinea Constitution states:

"We...pay homage to the memory of our ancestor - the source of our strength and origin of our combined heritage.

We acknowledge the worthy customs and traditional wisdoms of our people - which have come down to us from generation to generation".

Source: Souvenir Programme, South Pacific Festival of Arts: Hongkong.

**Forward** 

# **QUESTION 21**

Which word in the above extract imply a national identity?

A. culture B. homage C. generation D. we

Page 11 of 16 USSCE APP ENG 2015

### For question 22, refer to the extract below.

"...we value having a workforce as diverse as the city we serve..."

### **QUESTION 22**

This statement would most probably be found in a

A. Appraisal Report. B. Curriculum Vitae. C. Job Application. D. Job Advertisement.

### For question 23 read the extract below and answer the question

A wheel on a stick is probably the most popular and versatile toy. The variations are almost infinite; from cotton reels to truck tyres and from discs cut from pandanus stems to the most elaborate pram wheels....

### **QUESTION 23**

Another meaning for the word versatile is

A. adaptable. B. creative. C. diversified. D. traditional.

### Questions 24 and 25 are based on the text below,

Nobody ever wrote a dull autobiography. If one may make such a bull, the very dullness would be interesting. The autobiography has two qualifications of supreme importance in all literary work. He is writing about a topic upon which he is the highest living authority. It may be more valuable in proportion to the amount of misrepresentation, which it contains. We do not wonder when a man gives a false character to his neighbor, but it is always curious to see how a man contrives to present a false testimonial to himself. It is pleasant to be admitted behind the scenes and trace the growth, of that singular phantom which is the man's own shadow cast upon the coloured and distorting mists of memory. Autobiography for these reasons is so generally interesting, that I have frequently thought with the admirable Benvenuto Cellini that it should be considered as a duty by all

eminent men; and, indeed, by men not eminent. As every sensible man is exhorted to make his will, he should also be bound to leave to his descendants some account of his experience of life. The dullest of us would inspite of themselves say something profoundly interesting, it only by explaining how they came to be so dull - a circumstance which is sometimes in great need of explanation. On reflection, however, we must admit that autobiography done under compulsion would be in danger of losing the essential charm of spontaneity. The true autobiography is written by one who feels an irresistible longing for confidential expansion; who is forced by his innate constitution to unbosom himself to the public of the kind of matter generally reserved for our closest intimacy.

Source: Adapted from writing by Steven L. (1907) on the subject of autobiography.

# **QUESTION 24**

The word 'bull' in line 1 would most likely mean

A. confession. B. generalisation. C. paradoxical statement. D. ridiculous assertion.

USSCE APP ENG 2015 Page 12 of 16

### **QUESTION 25**

The author of the passage mentions 'Cellini' in line 18 as

- A. a biographer of distinction.
- B. a confidant of the author.
- C. an authority who has advocated the writing of autobiography
- D. an eminent yet dull man.

Refer to the advertisement below to answer questions 26 to 30.



Source: Paradise Magazine, July -August issue 1990.

Page 13 of 16 USSCE APP ENG 2015

### **QUESTION 26**

The phrase: the faces of Papua New Guinea tell a story rich in tradition and culture is an example of

A. alliteration B. metaphor.

C. personification D. simile.

# **QUESTION 27**

Who is the author of this advertisement?

A. ICI Dulux B. Paradise Magazine

C. ICI Dulux PNG Pty Ltd. D. ICI DULUX and Paradise Magazine

### **QUESTION 28**

The underlined phrase: It takes more than paint to hold Papua New Guinea together can also mean

A. extra things. B. few things. C. other things. D. some things.

### **QUESTION 29**

This text is an example of

A. an Advertisement. B. a ICI Dulux. C. a Notice. D. a Story.

# **QUESTION 30**

The last paragraph contains an example of

A. an irony. B. a metaphor. C. a simile. D. a personification.

USSCE APP ENG 2015 Page 14 of 16

PART B SHORT ANSWERS (QUESTIONS 31 to 70) 40 MARKS

For questions 31 to 40, match the phrases from the left (31-40) to the definitions on the right (a - j) Write only the correct corresponding letters as your answer on the Answer Sheet.

Q 31. online Recruitment	a. to have the right to extra advantages on top of salary
Q 32. unsolicited application	<b>b.</b> to get extra money for working 'unsociable' hours
Q 33. to create report	c. to suggest the best way to do something
Q 34. to understand their needs	d. to visit a company to discuss a job
<b>Q</b> 35. to provide advice	e. to develop a good relationship
<b>Q 36.</b> to promote a range of services	f. to be told the results of a decision
<b>Q</b> 37. to attend an interview	g. to attract people's attention to what you offer
Q 38. to be notified of the outcomes	<b>h.</b> to know what they want
Q 39. to receive a shift allowance	i. internet recruitment sites for job seekers
Q 40. to be entitled to a benefits package	$\mathbf{j}$ . letters received from people looking for a job (but not

Source: Pledger, P. (2007)

Q 50. fly off the handle

English for Human Resources Oxford University Press: Oxford, pages 12 and 14.

For questions 41 to 50, match the idioms (41-50) to the definitions or explanations on the right (a-j)

responding to an advertisement).

Write only the correct corresponding letter as your answer on the Answer Sheet.

Q 41. someone's bread and butter	a. to become very angry
Q 42. every cloud has a silver lining	<b>b.</b> a very costly possession that is worthless to its owner and only a cause of trouble
Q 43. crocodile tears	<b>c.</b> Something good will always come from a difficult or unpleasant moment, situation.
<b>Q 44.</b> Rome was not built in a day	<b>d.</b> life is better, easier, etcetera in any place where one is not at present living or working.
Q 45. a dog's life	e. insincere tears; pretended to show of sorrow
Q 46. a white elephant	<b>f.</b> something that provides a person with the simple things he needs to continue to live or work
Q 47. (the) loose ends	g. things still to be dealt with or explained
<b>Q 48.</b> fools rush in where angels fear to tread	<b>h.</b> a job cannot be done properly if it was done too hastily
Q 49. the grass is greener on the other side of the hill	i. people with little experience or knowledge often attempts to do more difficult or dangerous things than wiser or more experienced people

**j.** a life existence full of worries, trouble or

Page 15 of 16 USSCE APP ENG 2015

### unhappiness

For questions 50-60, write the most suitable word in the spaces provided on the Answer Sheet. Usage and spelling must be correct.

### **Expectation Syndrome is Dangerous**

Students at the University of Natural Resources and Environment in East New Britain got a rude awakening from Vice Chancellor Prof Philip Siaguru on Monday to kick-start their orientation and registration week.

"The young generation has been brain-washed from the time they **Q.51** born to now when you have entered the university that to be successful and wealthy you have to get **Q.52** good education and a good job.

"What a whole lot of non-sense!

"Your parents have misled you because they **Q.53** greedy and they are using you as an interest-bearing deposit in the bank for their own selfishness when they hit old age."

Q. 54 no-nonsense remarks must have hit the students like a ton of bricks. Hopefully, his words will stick in the back of their Q.55 throughout their university years and for the rest of their lives.

We support the vice-chancellor's statement that the "expectation" syndrome is crippling Papua New Guinea.

**Q. 56** days, many parents expect their children to be successful by graduating from university or other tertiary institutions and getting good jobs that will sustain them and **Q. 57** extended families.

Most parents in this country view their children's education as a long-term investment just like the interest-bearing deposit (IBD) referred to by Siaguru.

The vice-chancellor wants **Q.58** students to stand up for themselves by ditching their parents' expectations and discarding the IBD tag. "Your choice for coming here is noble and your profession

O.59 golden.

It is prime time and important that you use your training time more wisely and when you leave here, give yourself some experience time and after two or three years **Q.60** employment, take the risk and start your own business".

Part of the Editorial taken from the National 4th of March, 2015

USSCE APP ENG 2015 Page 16 of 16

### Read the extract below to answer questions 61 to 70.

### Write the correct verb tense of the verbs in brackets.

In recent years biology has undergone a revolution that has attracted attention. Controversy centered initially on whether genetic cloning techniques could create new, possibly dangerous forms of life. Attention next focused on the power of genetic engineering to produce valuable new medical and agricultural products. Largely overlooked, however are developments that will ultimately have far greater social impacts; the ability to analyze genetic information (**Q.61 allow**) the prediction of human traits.

While some fear that by analyzing the entire library of human sequences we will discover the essence of humanity, this is unlikely. Our bodies are complex networks of interacting components, influenced by a variable environment. Nevertheless, genes do help determine aspects of human form and function. Herein (Q. 62. lie) the seeds of future problems.

By about the year 2010, barring unforeseen technical obstacles, scientists will have fully mapped the complex human genetic terrain. Before this, however, new information will make possible techniques that will engender a host of ethical issues. Imagine that investors could predict with some accuracy such aspects of human behavior or functioning as intelligence, shyness, aggressiveness, or heat tolerance. Consider the power this would give to some - and the vulnerable position in which it (**Q. 63 put**) others.

Even if society can anticipate and control most misuse of genetic data, we face a more insidious problems: a rising ethic of genetic determinism. For the past century, ideological currents have closely affected the nature versus nurture debate. Widespread rejection of social Darwinism and institutionalized racism (Q. 64 buoy) the strong nurturist sentiments of the century, but a growing proportion of the public, impressed by the successes of genetics, is likely to come to view genes as determinants of the human condition. Such an uncritical embrace of genetics is likely to come to view genes as determinants of the human condition. Such as uncritical embrace of genetics will not be deterred by scientists' reminders that the powers of genetic predictions are limited. Environment variations can cause genetically similar individuals to (Q. 65 develop) in dramatically different ways, and genetics will at best suggest only a probability of development for complex traits, such as those (Q. 66 involve) in behavior and cognition. Those overlooking this will disastrously misjudge individual ability.

What a tragedy this would be. We Americans ( Q. 67 view ) our roots as interesting historical relics, hardly as rigid molds dictating all that we (Q. 68 be) and will be. Moreover, a belief that each of us is responsible for our own behavior has woven our social fabric. Yet in coming years we will hear increasingly from those attributing "bad" behavior to inexorable biological forces. As a biologist, I (Q. 69 find) this a bitter prospect. The biological revolution of the past decades will spawn enormous benefit, but we (Q. 70 pay) a price unless we craft an ethic that cherishes our spontaneity, unpredictability, and individual uniqueness.

Extract, adapted from, The Social Function of Science, John D. Bernard (1939)

END OF EXAMINATION

# ANSWER SHEET FOR PART B

Fill in the codes for the province, school and candidate.

Write your name and school in the spaces provided.

Ye	ear	Province		School		Candidate No			
1	5								

Candidate Name: _			
School Name:			

- 1. This answer sheet is for PART B only.
- 2. Part B requires SHORT answers.
- 3. Write the answer beside the correct question number in the space provided.

### FOR MARKERS' USE ONLY

QUESTION	SCORE	MARKERS' INITIAL		
		Marker	Marker	
		1	2	
Q 31 – 40				
Q 41 – 50				

Q51 – 60		
Q61-70		
TOTAL / 40		

# **PART B: SHORT ANSWERS**

Q31	Q51
Q32	Q52
Q33	Q53
Que la companya de la companya della companya della companya de la companya della	
Q34	Q54
Q35	Q55
Q36	Q56
Q37	Q57
Q38	Q58
Q39	Q59
Q40	Q60
Q41	Q61
Q42	Q62
Q43	Q63
Q44	Q64
Q45	Q65
Q46	Q66
Q47	Q67
Q48	Q68
Q49	Q69
Q50	Q70