National Qualifications 2016

X724/77/12

English
Textual Analysis

THURSDAY, 5 MAY
10:50 AM – 12:20 PM

Total marks — 20

Attempt **ONLY** Part A **OR** Part B **OR** Part C **OR** Part D

PART A — POETRY — 20 marks

Attempt the question.

PART B — PROSE FICTION — 20 marks

Attempt the question.

PART C — PROSE NON-FICTION — 20 marks

Attempt the question.

PART D — DRAMA — 20 marks

Attempt the question.

Write your answers clearly in the answer booklet provided. In the answer booklet, you must clearly identify the question number you are attempting.

Use **blue** or **black** ink.

Before leaving the examination room you must give your answer booklet to the Invigilator; if you do not, you may lose all the marks for this paper.

TEXTUAL ANALYSIS — 20 marks

Your answer should take the form of a CRITICAL ANALYSIS appropriately structured to meet the demands of your selected question.

Attempt ONLY Part A OR Part B OR Part C OR Part D.

PART A — POETRY

Read carefully *The Phantom Horsewoman* (1913) by Thomas Hardy and then answer the question that follows it.

The Phantom Horsewoman

I

Queer are the ways of a man I know:
He comes and stands
In a careworn craze,
And looks at the sands
And the seaward haze
With moveless hands
And face and gaze,
Then turns to go . . .
And what does he see when he gazes so?

II

They say he sees as an instant thing
More clear than to-day,
A sweet soft scene
That was once in play
By that briny green;
Yes, notes alway
Warm, real, and keen,
What his back years bring —
A phantom of his own figuring.

III

Of this vision of his they might say more:
Not only there
Does he see this sight,
But everywhere
In his brain — day, night,
As if on the air
It were drawn rose bright —
Yea, far from that shore
Does he carry this vision of heretofore:

IV

A ghost-girl-rider. And though, toil-tried,
He withers daily,
Time touches her not,
But she still rides gaily
In his rapt thought
On that shagged and shaly
Atlantic spot,
And as when first eyed
Draws rein and sings to the swing of the tide.

Question

Write a detailed critical response to this poem.

[Turn over

OR

PART B — PROSE FICTION

Read carefully the short story, *Explaining Death to the Dog* (1999), by Susan Perabo, and then answer the question that follows it.

Explaining Death to the Dog

After the baby died, I found it imperative that my German Shepherd Stu understand and accept the concept of death. The first week wasn't so bad, what with all our friends and relatives around, smothering Stu with affection. And Todd was home from work that week, dumping well-meaning casseroles accidentally-on-purpose onto the kitchen floor for Stu to indulge in. So Stu didn't notice the absence so much, didn't seem to. He trotted around the house happily, oblivious to the fact that the baby, who he had had a big hand in raising, was missing.

Then the party ended. Guests cried the last of their tears at my front door, said "What a waste" for the thousandth and final time, and made their separate ways back to their separate lives, lives that sailed along quite smoothly despite the absence of the infant whom they had been mourning for a good seven or eight days.

Todd went back to work; packed up his briefcase and kissed me good-bye. He nearly tripped over Stu in his rush to get out of the house. He wanted away, wanted to get busy again. Stu and I stood at the window and watched him drive away. Stu looked up at me and then back at the empty driveway. He lay down on the floor in the front of the window. I sat next to him and rubbed his stomach. He sighed.

What to do with the baby dead? No diapers, no screaming, no feeding. What had I done before the baby? I had been pregnant. Pregnant for longer than she had been alive. And what had I done before I got pregnant? I tried to remember. I supposed I had cleaned the house. Cooked. Taken Stu to the park. It didn't seem like it could have been nearly enough to take up a whole day.

In the afternoon I made myself a sandwich from one of the two whole hams that were still in the refrigerator and sat in front of the television. I waited for Stu, waited for him to emerge from wherever he was sleeping, jingling and jangling his way to a possible meal. The house was quiet. Still, very still. The morning the baby died Todd shook me awake to the stillness and said, "Listen, she's sleeping . . . "

I set my sandwich on the coffee table and got up to look for Stu. I called him a few times. Nothing. I walked through the house, from room to room. I found him upstairs, in the baby's room. The room was empty, except for one chair. Todd and the relatives had cleaned it out the day of the funeral because they said it was just too sad to look at. They stashed the crib in the back of a stranger's car and carted it away, hid the dolls and mobiles with the cobwebs in the basement. Then Todd's mother said the room looked so bare, so she had taken a chair from our bedroom and set it by the window. It looked unnatural by itself in the baby's room. Worse than bare. Just awkward.

Stu was lying in the middle of the empty room. His ears were back and his eyes open. He didn't raise his head when I came in. He just followed me with his eyes.

"Stu," I said. "Stu, what the hell are you doing?"

He looked like he had eaten too much casserole, was what it was, looked like he might toss his canine cookies at any moment. He stood up lazily. He walked in circles around the room. You could tell he was looking for the baby.

"No," I said. I called him to me and patted his head. "No more baby," I said. "Baby's gone."

He looked at me with the universal blank dog look. He had no idea what I was talking about. "No baby," I said again. It was then that I realized the impossibility of the situation. It wasn't even like trying to explain death to a child. The dog simply couldn't understand the language. He had a brain the size of a walnut and all he knew was that the baby wasn't where she was supposed to be. I imagined it must be even worse than knowing the baby was dead. At least Todd had been able to logically spell it out for me that morning to get me to stop shaking her and trying to wake her up, hold the little girl up in my face, point to the chest. NO BREATHING.

It was then I decided that I needed to teach Stu about death, whatever the cost. I figured he had a right to know, being a member of the family.

"Come on, boy," I said. He slunk out of the baby's room behind me. I closed the door.

On the coffee table we had a book. A big *Life* magazine book. *Best of Life*, something like that. I gave Stu part of my ham sandwich to lure him up on the couch with me. I opened the book out on the coffee table, paged through it, looking for the sixties, the best lesson of death on film.

"Lookee," I said. I turned the dog's head towards the contorted face of Lee Harvey Oswald, and the man behind him, a man whose name they never mentioned, looking like he might jump right out of his skin from the shock of it. Oswald was holding his stomach, hadn't even hit the floor. "Dead," I said. "Stu, it's dead."

Stu didn't seem to see the picture. He looked at the book, sure, but there was nothing in his eyes that said that he saw the proverbial farm being bought. The way he looked at it, it could have been a picture of a rolling wheat field. I turned the page, looking for something bigger, and found a two-page spread from Memphis, 1968, the man dead on the balcony, people pointing out into the sky. It was big; you couldn't miss it.

"Death," I said to Stu. "No more."

Again Stu glanced at the picture, then back at my ham sandwich. I jabbed my finger on Martin Luther King, Jr., held the picture up in Stu's face, and still his eyes didn't focus on it. What was I expecting? I don't know. If Todd had been there he would have clapped the book shut and told me the dog didn't know what the hell was going on and he'd be over it in a day and a half anyway. But Todd was gone. Strange things happen when you're alone in the house with pets all day.

In the middle of the night I woke up and heard the baby crying. I sat up and reached for my glasses before I remembered. It was not a staggering thing. It washed over me slowly, the way you remember what day it is when you wake up in the morning. I looked at Todd lying on his stomach next to me, the side of his face pressed to the pillow, his mouth open. The first week it was him who couldn't sleep. I'd open my eyes and he'd be sitting up in bed, his back against the wall, staring into space. The minister had come by and Todd told him about not being able to sleep. The minister said it was probably guilt, thinking that if he'd been awake when the baby started dying he could have done something about it. After that I guess Todd became comfortable with the guilt, because he didn't sit up nights anymore.

"Todd?" I said.

In the corner, Stu raised his head and looked at me.

[Turn over

"Todd?" I said again. I didn't have the courage to touch him, to wake him up and force him to share the grief, to try to explain to me why I might have heard the baby crying when the baby had been dead for over a week. I lay back down next to him and started thinking about the simplicity of a dog's mind. I tried to think of a way to explain to Stu just exactly what was going on.

The morning was cool and dark. It was May and the natural order of things said it should have been warm and bright. But the natural order of things was wrong, so it was ugly out. Todd sat at breakfast and looked at the newspaper in much the same way Stu had looked at the coffee table book. His spoon went from the cereal bowl to his mouth without being led by anything but habit. I stared at him and he didn't even notice.

"I think Stu misses the baby," I said.

He looked up from the paper, his mouth open and his eyes empty like he was a vegetable.

"What?"

"Yesterday he was lying in her room."

"Close the door," Todd said.

"I was thinking," I said. "I was trying to figure out how to get it across to him that she's not coming back."

Todd put his spoon down. "Why would you think something like that?" he asked.

"I just thought it was interesting. I wondered how dogs understand those kinds of things."

"What are you doing today?" Todd asked. "Why don't you call somebody for lunch?"

"No one wants to have lunch with me," I said.

Todd sighed, looked at me like I was the baby squirming around while he was trying to get the diaper on. "We'll go out tonight, then," he said, but he wasn't even looking at me. He was looking over my shoulder out the back door, out into the grayness that was passing itself off as morning.

The house was clean. Relatives had occupied their time and their minds by picking up the place before the funeral gathering, and Todd and I hadn't done enough to mess anything up since then. And there was no cooking to do. I decided I would go ahead and take Stu to the park, force him down the slide for a good laugh, spin us both around on the merry-go-round just for a change of pace. There would be no baby carriage to drag through the sand, no need to worry about it slipping from my grip and careening down a hill into the creek. The park was different with no baby. It seemed much safer.

Then we found the squirrel. Stu walked right past it, didn't even notice, but I saw it. It was lying on its side on the grass. Its mouth was open, its eyes empty holes. Other than that it was fine. Perfectly whole, not the work of a cat or a child with a BB gun.

"Stu," I said. "Stu, come here baby." He stopped, turned back, then trotted to where I was kneeling on the ground. He saw the squirrel and stopped for a second. He looked at me. I reached out to touch the squirrel and Stu took a step back. Its fur was damp and brittle. Stu walked up to the squirrel, then turned his head away and looked at me like I had gotten him into something he wasn't near ready for. A fly landed on the squirrel's head and crawled into the empty eye socket.

"Stu," I said. "This is important." I took hold of his head and turned it toward the rodent. I pushed his nose a little closer to the body. "The squirrel's dead," I said. "You understand?"

Squirrels, I could hear Stu thinking. I chase these things. This squirrel is not running.

Stu backed away from the animal. I tried to hold onto him but he pulled me backward and I fell from my knees onto the wet grass. Stu ran in circles around me, afraid he was in trouble.

So we were going to go out for dinner. Todd came home and sat on the couch in a heap. His tie was askew and his hair mussed. I asked him if he had a bad day and he said he was just a little tired.

"Does that mean we're not going to dinner?" I asked.

"Dinner?" Todd leaned forward and banged the side of his head with his hand, like he was trying to get water out of his ear. "I feel like I'm all clogged up," he said.

"So we're not going out?"

He stopped banging, looked up at me. "I didn't say that," he said. "I didn't say we weren't going out." He paused. "Where do you want to go?"

"We could go someplace fancy," I said. "We haven't been someplace fancy in a long time."

For the first time he noticed the dog, lying on his side on the couch, his eyes staring absently at the ceiling.

"What's up with him?" Todd asked.

"I told you," I said. "He's confused."

"He's confused," Todd said. "The dog is confused."

"Yeah," I said. I was trying to think of a way to make a case for how confused Stu really was, but Todd didn't seem receptive to the idea.

Todd stood up and loosened his tie. "Let me change," he said. "We'll go out. I just have to get out of these clothes."

I sat on the couch with Stu and waited. Stu put his head on my thigh and looked up at me. I wanted to do something for him, take him out to dinner with us to get his mind off the mystery of the missing baby. We sat there for a few minutes. I couldn't hear any noises coming from the bedroom, so I got up and went down the hallway. I looked in the door and saw Todd sitting on the edge of the bed. He was banging the side of his head again, but this time he was crying while he was doing it. Actually he wasn't really crying. He was more making little howling noises with his throat. And he just kept whacking himself on the head.

I went back into the living room. I had a desire to get Stu off the couch and give him a push toward the bedroom, so he could stumble upon Todd and see what the death thing was all about, but I didn't have the heart.

I woke again in the middle of the night, but I didn't hear any crying. I got out of bed anyway and went into the baby's room. Stu hopped up and followed me, hopefully, but the room was still empty except for the chair by the window. Still, the dog wandered around, sniffing out the emptiness, the way he had the day before, and the day before that, and the way I realized he probably would for quite awhile. I sat down in the chair by the window. Everything was quiet, and I thought of saying to Stu that that was it, that was death, the quiet. But Stu was still sniffing around the room, trying to pick up the scent of the baby, and I realized he would never understand death. All he would come to understand was that the baby was not coming back.

Question

Discuss the effectiveness of the ways in which Susan Perabo presents the mother's grief in this story.

[Turn over

OR

PART C — PROSE NON-FICTION

Read carefully the extract below from *H Is for Hawk* (2014) by Helen Macdonald and then answer the question that follows it.

H Is for Hawk

We stand uncertainly under the thatched roof of the pavilion. Behind us is a straggling copse of chestnut and limes and a ditch full of leaves and rainwater. The air about us is mild, still, pointed with tiny flies, the sky dull and flat as unpolished brass. There's an ill savour to the air. I am not sure I want to be here. On the other side of the pitch is a familiar building, a red-brick Victorian Camelot with crenelated battlements, mullioned windows, and a tiny Gothic tower. My office is up there on the top floor. Books, papers, a desk, a chair, a carpet of dove-coloured wool; air that always smells of sunbaked dust, even in winter when frost burns the glass and makes drop-shadows on the panes. I look at the blank façade and think of the letter I'd sent that morning to a German university telling them I couldn't accept the job they'd offered me that winter. I told them I was sorry, told them that my father had died and I needed to be here. But I was not sorry, and they were not the reasons for my refusal. *I can't go to Berlin in December*, I'd thought, appalled. *I have a hawk to fly*. Ambitions, life-plans: these were for other people. I could no more imagine the future than a hawk could. I didn't need a career. I didn't want one.

White doves fly up from the roof. I watch their wings flicker against the sky. Sudden vertigo. Something shifts in my head. Something huge. Then everything I see collapses into something else. I blink. It looks the same. But it isn't. This is not my college. Nothing about it feels familiar. It doesn't even feel like a college at all. Just a few acres of buildings, giant collector's boxes of brick and stone crammed with the detritus of centuries. In the chapel are painted angels whose faces are all the same, uncanny angels with swords and bright pre-Raphaelite plumage. There's a bronze Benin cockerel in the dining-hall, and a skeleton in a cupboard in the Fellows' cloakroom, a real, yellowed skeleton held together with pins and twisted wire. Beyond my office building are a host of yew trees clipped into absurd wind-blown boulders. A bronze horse on one lawn, and a hare on another, and a metal book held to the ground by a sculpted ball and chain. Everything here is built from things pulled from dreams. A few weeks earlier scores of bay trees in pots were set out all over the college for an *Alice in Wonderland*-themed Ball; I'd watched students wiring flowers into their branches: soft fabric roses of white and pillarbox red.

In two months, I think, my college job will end. In two months I will have no office, no college, no salary, no home. Everything will be different. *But*, I think, *everything already is*. When Alice dropped down the rabbit-hole into Wonderland she fell so slowly she could take things from the cupboards and bookshelves on the walls, look curiously at the maps and pictures that passed her by. In my three years as a Cambridge Fellow there'd been lectures and libraries and college meetings, supervisions, admissions interviews, late nights of paper-writing and essay-marking, and other things soaked in Cantabrian[1] glamour: eating pheasant by candlelight at High Table while snow dashed itself in flurries against the leaded glass and carols were sung and the port was passed and the silver glittered upon dark-polished refectory tables. Now, standing on a cricket pitch with hawk on my hand, I knew I had always been falling as I moved past these things. I could reach out and touch them, pick them off their shelves and replace them, but they were not mine. Not really ever mine. Alice, falling, looked down to see where she was headed, but everything below her was darkness.

[1]Cantabrian: pertaining to Cambridge University

Concentrate on why you're here, I tell myself. Y*ou have a hawk to fly*. Ever since my father died I'd had these bouts of derealisation, strange episodes where the world became unrecognisable. *It will pass*. But I am spooked by what's just happened. My fingers shake as I thread the end of the creance[2] through the swivel at the end of her jesses[3] and tie it there with two miniature falconer's knots. I pull on them and they hold. Knots and lines. Material reassurances. I play out fifteen feet more creance and stow the rest of it deep in a zipped-up pocket of my hawking waistcoat to keep it secure. Then I pull her leash free from the swivel and tuck it into another pocket. Hawking waistcoats, like those of fishermen or photographers, are hardly clothes at all, just pockets hung in rows. The one at my right hip is lined in vinyl, and inside it are three dead day-old chicks, each skinned and torn roughly in half.

"Sit there — on you go." The hawk hops onto the rail of the wooden veranda and turns to face me in a low boxer's crouch. I step back six feet, put half a chick in my glove, extend my arm and whistle. There is no hesitation. There is a scratch of talons on wood, a flowering of feathers, one deep downstroke, the brief, heavy swing of talons brought up and into play and the dull *thud* as she hits my glove. When she has finished eating we do it again, and this time I stand a little further away. Eight feet: three wingbeats, another reward. For a creature with the tactical intelligence of a goshawk this game is child's play. The third time I put her on the railing she is already airborne as I turn my back: a skip of my heart, a hastily extended glove and she is at my side, wolfing down the rest of her food, crest raised, wings dropped, eyes blazing, a thing of perfect triumph. I thread her leash back through the swivel and untie the creance. That will do for today. She flew perfectly. And I'm so pleased with how the lesson has gone I start singing on the way home. I serenade my hawk with "My Favourite Things", with whiskers and kittens and brown paper packages tied up with string. It strikes me that this must be happiness. That I have remembered what it is, and how it can be done. But watching television from the sofa later that evening I notice tears running from my eyes and dropping into my mug of tea. *Odd*, I think. I put it down to tiredness. *Perhaps I am getting a cold*. *Perhaps I am allergic to something*. I wipe the tears away and go to make more tea in the kitchen, where a dead white rabbit is defrosting like a soft toy in an evidence bag, and the striplight flickers ominously, undecided whether to illuminate the room or cease working entirely.

[2]creance: a long, fine cord attached to a hawk's leash to prevent escape during training

[3]jesses: short leather straps fastened around each leg of a hawk, usually also having a ring or swivel to which a leash can be attached

Question

Discuss the effectiveness of the ways in which Macdonald conveys the significance of this personal experience.

You may wish to consider:

- structure
- contrast
- the exploration of what the writer terms "derealisation" (line 41)

[Turn over

OR

PART D — DRAMA

Read carefully the extract from *The Hard Problem* (2015) by Tom Stoppard below and then answer the question that follows it.

In the following extract, Hilary is attending the Krohl Institute for Brain Science to be interviewed for a job.

Characters in this extract:

Hilary Matthews: a psychology student.
Amal Admati: a mathematician.
Leo Reinhart: a Krohl Institute executive.
Julia Chamberlain: an old school friend of Hilary's.
Ursula Tarrant: an employee at the Krohl Institute and Julia's partner.
Jerry Krohl: the head of the Krohl Institute.

Other characters mentioned in this extract:

Catherine: Hilary's daughter, given up for adoption six years previously.

The Hard Problem

SCENE THREE

The Krohl Institute for Brain Science is a purpose-built complex of labs and offices on which no expense has been spared, set in its own grounds. It employs perhaps 150 people. Something of the expense and scale is suggested by what we see, which is a mere fragment of the whole, a walk-through/waiting area. Everyone we get to see has a security pass (with photo) worn around the neck, specific to the bearer. This is true of all scenes set in the Institute.

Hilary, dressed for the interview, with a laptop bag and an old satchel, sits waiting in a designer chair. Specialist periodicals and print-outs encased in Krohl-branded file-holders are available, and perhaps a wall-mounted computer screen silently offers more material. Hilary turns over pages, looking up briefly when a woman, of Hilary's age, crosses the space. The woman (Julia) hesitates slightly as she takes a second look at Hilary, and continues on her way, and is followed in, more tentatively, by a young man, Amal, wearing a cheap suit and carrying a haversack. He is Indian. He sits down near Hilary.

AMAL: Hi.

HILARY: Hi.

Amal chooses a print-out to look at. Hilary sizes him up. He catches her eye.

AMAL: Are you here for an interview?

HILARY: (*nods*) Dr Reinhart.

AMAL: Same here. What time . . . ?

HILARY: Eleven-fifteen.

AMAL: It's nearly twelve.

HILARY: I know.

AMAL: Maybe he forgot about you.

HILARY: Is your doctorate in psychology?

AMAL: If necessary. My degree is in maths, and I'm doing a Master's in biophysics, which is actually a neurobiology research project I managed to latch on to, to make myself beautiful for the Krohl! We already published a paper which I've got my name on. I'm Amal, by the way.

HILARY: Hilary. Wow.

AMAL: How about you?

HILARY: Yes. Psychology. I haven't graduated yet. So you liked the Krohl Institute?

AMAL: What's not? It's small, it's not industry, it's not academia, it's state of the art for imaging and all the toys, it's elitist but in a good way, it's got a gym, and after five years of Cambridge it's not in Cambridge.

HILARY: Oh.

AMAL: Where are you?

HILARY: Loughborough.

AMAL: Where's that?

HILARY: Loughborough.
We must be up for the same job.

AMAL: Well, good luck.

HILARY: I'll say.

AMAL: (?)

HILARY: Thank you. Good luck to you, too.

AMAL: Thanks. Psychology is a sideshow at the Krohl. You need a hard-science crossover to improve your chances — a lot of what they publish is on mice and macaques.

HILARY: (*surprised*) Parrots?

AMAL: Monkeys.

HILARY: Oh, right.

AMAL: Monkeys are great. Scan the hell out of them, open up their little heads, try this, try that, see what happens, and they don't sue.

HILARY: Yeah, that wouldn't work with behavioural psychology.

AMAL: I've submitted to do an experiment tracking unconscious readiness potential move by move in two subjects playing a repeated prisoner's dilemma.

HILARY: They're going to love you.

AMAL: It's just to get me through the door. The Dilemma is cleaned out, it was oversold in the first place with the one-shot game —

HILARY: (*pleased*) That's just what I . . .

AMAL: I wonder what's happened to our interview?

HILARY: Perhaps this is it. *Candid Camera*.

AMAL: Do you think so?

Made uneasy, he corrects his sprawl. They fall silent. Leo enters. He's running late but unfussed.

LEO: Apologies. I'm Leo Reinhart.

Hilary and Amal stand up.

Which of you is my eleven-fifteen?

HILARY: I am, sir. Hilary Matthews.

LEO: Then you must be my twelve o'clock?

AMAL: Amal Admati.

LEO: I have to ask you a favour, Hilary. I can save a few minutes if I take Amal first.

HILARY: Of course.

LEO: So, Amal, come with me and tell me why you believe a machine can think, or why you believe it can't, whichever you prefer.

Amal grabs his haversack and follows Leo out.

AMAL: (*leaving*) Can a machine think . . . ?

Hilary takes out her laptop, opens it, gets something up, looks at it, despairs of it, closes the laptop.

Julia enters and goes straight to Hilary.

JULIA: Hilary . . . I knew it was you. Do you remember me? It's Julia. Redcliffs High. The Purple Gang!

HILARY: Julia . . . Julia Chamberlain. Gosh. Hello! Do you work here?

JULIA: Yes, nothing brainy, surprise, surprise! I do a pilates class for who wants it. My partner works here, she's the brainy one. You'll meet her in a minute. How are things with you, Hilary?

HILARY: Fine. Thanks. The Purple Gang! Do you hear from anyone?

JULIA: Christmas cards. Not really. What did you do after Redcliffs?

HILARY: I had the baby.

JULIA: Oh, I wasn't asking . . . !

HILARY: It's all right.

JULIA: The Head told us, just the seniors.

HILARY: Awful warning, was I?

JULIA: No, honestly, she was really sympathetic. She said you might come back to do your GCSEs.

HILARY: I suppose that's what girls do now, with a bucket under the desk.

JULIA: Mm, not at Redcliffs. What was your baby?

HILARY: A girl. Catherine. I don't know if she's still Catherine. You don't get to know. Anything. She was six in November. Guy Fawkes night! The sky was exploding.

JULIA: Oh, Hilly.

HILARY: Yes. Well. You know. The adoption was all arranged beforehand. No granny, and my poor dad wasn't about to take it in his stride. I was quite relieved, actually. I wasn't into babies. It was different when it came to it. But, I don't know, everything just went ahead, it seemed like the best thing.

JULIA: What about the, your, well, boyfriend, was he?

HILARY: I didn't have a boyfriend. It was stupider than that. I never saw him again, and didn't much want to. Really stupid.

JULIA: But here you are.

HILARY: (*nods*) Reading psychology at Loughborough.

JULIA: So everything turned out all right.
I'm sorry. I'm an idiot. Here's Ursula coming. Listen, good luck.

Ursula approaches.

Ursula, look! — Hilary Matthews.

URSULA: Hello. Ursula Tarrant.

JULIA: Hilary's here for her interview.

HILARY: I was amazed. I think it must be a mistake.

URSULA: Usually is, but picking a winner from the slush pile is Leo's little vanity. Sorry, that sounds rude. I bet your application was brilliant. How did you get on?

HILARY: I haven't had it yet . . . Dr Reinhart is in there with the other candidate.

URSULA: The men's room? That could be good. It could be bad. Hard to tell. What's the competition?

HILARY: Mathematician. He's Indian.

URSULA: Ooh, that's bad.

HILARY: I know.

URSULA: Where's your degree?

HILARY: Loughborough.

URSULA: That's definitely good. That's inclusive, Loughborough. The intake here is way too up itself.

JULIA: Don't mind Ursula.

HILARY: Oh, I don't! God, I wish I had an earthly now! I wish my model had a neurobiology crossover —

URSULA: Forget your model, he just wants to hear what you're thinking. Good luck.

JULIA: Come to the gym after if you can.

Hilary nods.

Ursula makes to leave with Julia but changes her mind and comes back, close to Hilary, more intimately.

Julia pauses to watch.

URSULA: He doesn't like neurobiology. Obviously he likes it, but it's not what he likes, do you see?

HILARY: No.

URSULA: The Krohl mostly does brains. Matter. But Leo likes minds as the way to go. What he *likes*, what he really, really likes, is the Hard Problem.

HILARY: Which hard problem?

URSULA: We do brain science. There is only one Hard Problem.

Leo and Amal are returning, already audible.

HILARY: (*pause*) Okay.

When Leo reappears with Amal he has changed into a tracksuit and tennis shoes. He carries a tennis racket.

Ursula goes back to Julia and they leave.

AMAL: Sure, but the brain *is* a machine, a biological machine, and it thinks. It happens to be made of living cells but it would make no difference if the machine was made of electronic gates and circuits, or paperclips and rubber bands for that matter. It just has to be able to compute.

LEO: Computers compute. Brains think. Is the machine thinking?

AMAL: If it's playing chess and you can't tell from the moves if the computer is playing white or black, it's thinking.

LEO: What it's doing is a lot of binary operations following the rules of its programming.

AMAL: So is a brain.

LEO: But can a computer do what a brain can do?

AMAL: Are you kidding? — A brain doesn't come close!

LEO: (*to Hilary*) Do you want to jump in?

HILARY: Not much.

LEO: Really? Why?

HILARY: It's not deep. If that's thinking. An adding machine on speed. A two-way switch with memory. Why *wouldn't* it play chess? But when it's me to move, is the computer *thoughtful* or is it sitting there like a toaster? It's sitting there like a toaster.

LEO: So, what would be your idea of deep?

HILARY: A computer that minds losing.

Leo takes a moment to reconsider her.

AMAL: If I made a computer simulating a human brain neuron by neuron, it would mind losing.

LEO: (*to Hilary*) Do you agree?

HILARY: No.

LEO: Amal's machine wouldn't be conscious?

HILARY: No, but how would you tell? You can't tell by watching the wheels go round. Just like with a brain. I couldn't tell what you're thinking by watching what your brain is doing, or even that you're thinking.

AMAL: I'll tell you what I'm thinking. There is overwhelming evidence that the brain causes consciousness.

HILARY: There's overwhelming evidence that brain activity correlates with consciousness. Registers consciousness. Nobody's got anywhere trying to show how the brain is conscious.

AMAL: This is mysticism!

LEO: (*to Hilary*) So, how would consciousness come about?

HILARY: I have no idea, and nor does anyone else. I thought that's why we're here. To crack the Hard Problem.

LEO: (*pause*) It is. It is why we're here. (*Checking his watch, to Amal.*) Thank you. Apologies again.

Jerry, wearing a tracksuit and carrying his racket, enters.

Jerry!

(*to Hilary*) As you see, I have a pressing engagement. There is an excellent eatery, lavishly subsidised. After lunch, you can hang around in the department and see what's going on.

Leo and Jerry shake hands.

AMAL: Excuse me!

They stop for him.

Was that my interview? In the toilet?

LEO: Yes. Good luck with your career.

They are leaving again.

AMAL: Good luck with yours!

That stops them again.

I'm sorry, but if you separate what you can't understand from anatomy, you're going backwards to Plato. The brain is physical, and there's no other kind of stuff out there, there's no beans that haven't been counted. The maths to explain what's going on in the brain is like trying to write the equations for a waterfall as big as — I have no idea how big, as big as a million Niagaras maybe — and so far we can write a short-term prediction for two variables in the mixer tap; probably — but the only way to go is to map brain activity in greater and greater detail against conscious experience. There's no hard science in a psychology test if it's not plugged into a brain scan. Neurobiology.

LEO: (*pause*) Amal, you're bright, you're going to do fine.

He goes to leave.

JERRY: Go ahead, Leo, I'll be right there.

Leo leaves.

(*to Amal*) I don't think you can write a prediction for a non-linear complex system, even for a mixer tap.

AMAL: Short term you can, if you have some earlier values for the variables. That gives you a history of the system's behaviour, like a library of the patterns it made, because there *is* a pattern, a chaotic system isn't *really* random, it just *looks* random. So you look in the library for previous states of the system, and where you find some similarity to what you're looking at now, you can expect to see similar behaviour in the short-term future.

Jerry considers this for a couple of seconds; accepts it.

JERRY: Uh-huh.

AMAL: You're not the tennis coach, then. Do you work here?

JERRY: Not really. I visit. My office is in town. Come and see us.

AMAL: Oh. Okay.

[Turn over

JERRY: What's your name?

AMAL: Admati, Amal Admati. What's yours?

JERRY: It's on the building. But people call me Jerry.

He goes.

Amal and Hilary stare at each other.

Question

Discuss some of the ways in which Stoppard creates tension among the various characters presented in this scene.

[END OF QUESTION PAPER]

ACKNOWLEDGEMENTS

Part A – Poem, "The Phantom Horsewoman" (1913) by Thomas Hardy. Public Domain.

Part B – Short story, "Explaining Death to the Dog" (1999) by Susan Perabo, is taken from *Explaining Death to the Dog* ISBN 074754574X. Published by Bloomsbury Publishing. © Susan Perabo, 1999, *Explaining Death to the Dog*, Bloomsbury Publishing plc.

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