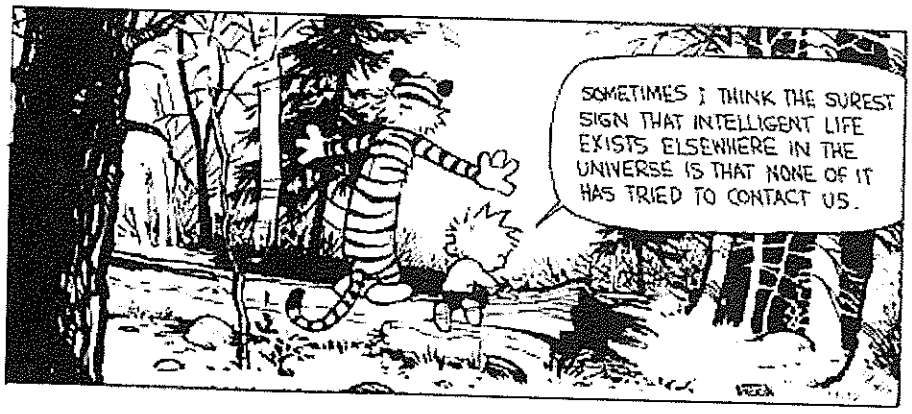
ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE
I B.COM MID-SEMESTER TESTAUGUST2018 20.8.2018
GENERAL ENGLISH - GE 114

Time: 1 hour **Max marks: 30**

INSTRUCTIONS

1. **Please indicate your stream clearly on the front page of your answer booklet.**
2. **This question paper has four printed sides.**
2. **You will lose marks for exceeding word limits.**
3. **You are allowed to use a dictionary during the examination**

I.Look carefully at this panel from the comic *Calvin and Hobbes*.



The text reads as follows

"Sometimes I think the surest sign that intelligent life exists elsewhere in the universe is that none of it has tried to contact us"

I A. Answer the following in about five sentences each. **(3x5=15)**

1. Look up the word **sarcasm** in your dictionary. Is the definition useful in explaining how this cartoon works?
2. Why does Calvin think it is intelligent that nobody from outer space has contacted us on earth?
3. Do you see any connection between the visual and the words in the comic? Explain.

II. Read the following passageby the astronaut Marsha Ivins.

There's no way to anticipate the emotional impact of leaving your home planet. You look down at Earth and realize: You're not on it. It's breathtaking. It's surreal. It's a "we're not in Kansas anymore, Toto"

kind of feeling. But I've spent a total of 55 days in space, over the course of five missions for NASA, and I've learned that being out there isn't just a series of breathtaking moments. It's a mix of the transcendently magical and the deeply prosaic. It can be crowded, noisy, and occasionally uncomfortable. Space travel—at least the way we do it today—isn't glamorous. But you can't beat the view!

Everyone imagines that when you're sitting on the launchpad atop 7 million pounds of explosive rocket fuel, you're nervous and worried; but the truth is, there isn't much to do for those two hours after you climb into the shuttle. Many astronauts just take a nap. You're strapped in like a sack of potatoes while the system goes through thousands of prelaunch checks. Occasionally you have to wake up and say "Roger" or "Loud and clear." But the launch itself is a whole other thing—from the pad to orbit in 8.5 minutes, accelerating the entire time until you reach the orbital velocity of 17,500 mph. That is a ride.

It turns out that once you're actually in orbit, zero-g (zero gravity) has some upsides. Without gravity, bodily fluids move toward your head. It's a great face-lift. Your stomach gets flat. You feel long, because you grow an inch or two. (I thought, "Oh cool, I'll be tall," but of course everybody else was taller too.)

But zero-g also has some disadvantages. As that fluid shifts north, you get an enormous headache. Your body compensates and loses about a liter of fluid in the first couple of days—you essentially pee the headache away. And a lot of people get nauseated. The way to feel better is to "lose up," to convince your visual system that "up" is wherever you point your head and "down" is where your feet are. When you can do that, and go headfirst or earlobe-first wherever you want, then you're getting adapted to zero-g. On each flight this adaptation happens more quickly—your body remembers having been in space. But it can take a few days before your stomach finally settles down and says, "OK, what's for lunch?"

I didn't eat much on any of my flights. I don't have a big appetite even on Earth, but between the lack of gravity and the shifting fluids, things can taste different in space. I'd bring great chocolate with me and it would taste like wax—it was very disappointing. But you don't go to space for the gourmet dining. There's no way to cook, on the shuttle or on the ISS. Space food is already cooked and then either freeze-dried and vacuum-packed—so you add water and put it in the oven to warm up—or it's thermo-stabilized, like a military MRE. With no refrigerator on board, fresh food won't keep. Soon the shuttle we'd have to eat anything fresh—usually fruit like apples, oranges, and grapefruit—early in the mission.

One of the strangest experiences in space is one of the simplest on Earth: sleeping. On the shuttle, you strap your sleeping bag to the wall or the ceiling or the floor, wherever you want, and you get in. It's like camping. The bag has armholes, so you stick your arms through, reaching outside the bag to zip it up. You tighten the Velcro straps around you to make you feel like you're tucked in. Then you strap your head to the pillow—a block of foam—with another Velcro strap, to allow your neck to relax. If you don't tuck your arms into the bag, they drift out in front of you. Sometimes you wake up in the morning to see an arm floating in front of your face and think, "Whoa! What is that?" until you realize it's yours.

On most of my flights, I slept in the airlock, in the middeck of the shuttle. Nobody worked in there when we weren't doing an EVA (extra-vehicular activity), so it was like my own private bedroom. The downside? It was also the coldest part of the shuttle by about 20 degrees. I would tuck my arms into the bag and wear four layers of clothes; sometimes I'd warm up a package of food in the oven and throw it in my sleeping bag like a hot-water bottle. On the last two nights of my final flight, I slept on the flight deck, my sleeping bag strapped beneath the overhead windows. The position of the shuttle put Earth in

those windows, so when I woke up the whole world was out there in front of me—in that moment, just for me alone.

The most amazing thing about my spaceflights was how relaxing they were. New astronauts get so worried about fulfilling their duties that they sometimes get hours or days into a mission before stopping to watch the sun rise, even though it happens 16 times a day on orbit. Shuttle flights were always busy—experiments, daily maintenance, EVAs, robotic operations. It was incredibly hard work, stressful in its own way, and scary—if you screwed up, you screwed up with people all over the world watching. But at the same time I found it all very relaxing. When you travel on Earth, you're almost never out of touch. Anyone can reach you if they need to. But going to space, you are really out of reach. You have communication with the ground and email, sure, but there's not much you can do about those everyday worries: Did I pay the bills? Did I feed the dog? I felt like everyday things just stopped at the edge of the atmosphere. I was totally liberated from Earth. But all those earthly concerns reattached as soon as we reentered. By the time I landed, my brain was mapping out a to-do list.

I never got sick going to space, but I never felt great coming home. When you return, your inner ear—which keeps you balanced on Earth and which has been essentially turned off for the duration of your trip—feels a little gravity and becomes unbelievably sensitive. Your balance is off and you have to relearn how to move in a gravity field. If I turned my head, I would fall over. Muscles you haven't used in weeks have to reengage to help you do everyday stuff like walk, stand, and hold things. It can take days or weeks to get your Earth legs back.

It was hard, it was exciting, it was scary, it was indescribable. And yes, I'd go back in a heartbeat.

II A. Answer the following in about 150 words: **(15 marks)**

The author says this of space travel in the first paragraph: "It's a mix of the transcendently magical and the deeply prosaic." Explain this idea in your own words. What would you identify as the magical and the prosaic parts of the author's experience?