1. Read the following passage carefully and answer Question No. 10:

Samar measured his alienation in units of silence. At home, his grandfather narrated the mechanics of canal gates in idioms that spilled from decades of mud and metal; at school, fluid dynamics arrived in curves that refused to bend toward those idioms. Between these two waters, Samar floated, learning to be fluent in neither. He began to suspect that language was not merely a vessel for knowledge but a pump that could pressurize or depressurize understanding. When the pump mismatched the fluid, cavitation occurred: pockets of emptiness in the stream of learning, audible as stuttered explanations and visible as wrong answers. Yet on evenings when he translated a concept successfully for his sister—drawing a diagram labeled in their mother tongue—he felt the pressure equalize, the flow smooth. He started keeping a notebook of metaphors that seemed to travel well between home and school: a sluice gate as a valve, a monsoon surge as transient response. The more he mapped these, the more he recognized that correctness in class was not the same as comprehension at the kitchen table; one was a grade, the other a grip. The day a teacher praised his “intuitive leap,” he realized it was not a leap at all but the steady work of matching pumps to fluids.

The comparison of language to a “pump” indicates that the author views language as  
(A) a neutral container with no effect on learning  
(B) a mechanism that actively modulates comprehension  
(C) a barrier that cannot be overcome  
(D) a mere aesthetic layer over content

2. Read the following passage carefully and answer Question No. 11:

Samar measured his alienation in units of silence. At home, his grandfather narrated the mechanics of canal gates in idioms that spilled from decades of mud and metal; at school, fluid dynamics arrived in curves that refused to bend toward those idioms. Between these two waters, Samar floated, learning to be fluent in neither. He began to suspect that language was not merely a vessel for knowledge but a pump that could pressurize or depressurize understanding. When the pump mismatched the fluid, cavitation occurred: pockets of emptiness in the stream of learning, audible as stuttered explanations and visible as wrong answers. Yet on evenings when he translated a concept successfully for his sister—drawing a diagram labeled in their mother tongue—he felt the pressure equalize, the flow smooth. He started keeping a notebook of metaphors that seemed to travel well between home and school: a sluice gate as a valve, a monsoon surge as transient response. The more he mapped these, the more he recognized that correctness in class was not the same as comprehension at the kitchen table; one was a grade, the other a grip. The day a teacher praised his “intuitive leap,” he realized it was not a leap at all but the steady work of matching pumps to fluids.

“Cavitation” in the context of learning most nearly refers to  
(A) productive pauses in study  
(B) gaps in comprehension caused by linguistic mismatch  
(C) efficient acceleration of understanding  
(D) the enrichment of technical vocabulary

3. Read the following passage carefully and answer Question No. 12:

Samar measured his alienation in units of silence. At home, his grandfather narrated the mechanics of canal gates in idioms that spilled from decades of mud and metal; at school, fluid dynamics arrived in curves that refused to bend toward those idioms. Between these two waters, Samar floated, learning to be fluent in neither. He began to suspect that language was not merely a vessel for knowledge but a pump that could pressurize or depressurize understanding. When the pump mismatched the fluid, cavitation occurred: pockets of emptiness in the stream of learning, audible as stuttered explanations and visible as wrong answers. Yet on evenings when he translated a concept successfully for his sister—drawing a diagram labeled in their mother tongue—he felt the pressure equalize, the flow smooth. He started keeping a notebook of metaphors that seemed to travel well between home and school: a sluice gate as a valve, a monsoon surge as transient response. The more he mapped these, the more he recognized that correctness in class was not the same as comprehension at the kitchen table; one was a grade, the other a grip. The day a teacher praised his “intuitive leap,” he realized it was not a leap at all but the steady work of matching pumps to fluids.

Which scene contradicts Samar’s general alienation?  
(A) His grandfather’s canal narratives  
(B) His difficulty with fluid dynamics curves  
(C) His successful translation for his sister  
(D) His stuttered explanations in class

4. Read the following passage carefully and answer Question Nos. 10, 11 and 12:

In cities with volatile weather and intermittent connectivity, the rhetoric of “on-demand” collides with the physics of rain and bandwidth. A platform can confirm a booking in two taps, but the path between technician and doorstep may traverse a bridge that floods twice a month. When the inevitable delay occurs, customers discover the difference between notification and communication: an automated “running late” ping lowers anxiety less than a human call that explains revised ETA, probable cause, and options. Over time, platforms that invest in last-mile intelligence—micro-maps of regular bottlenecks, neighborhood-specific buffer times, backup providers within 2 kilometers—outperform those that treat every pin as equal. It turns out that fairness is not sameness; allocating more slack to high-variance routes helps everyone by reducing cascading cancellations.

The supply side faces its own constraints. Tool calibration and spares inventory cannot be optimized to zero without risking multiple revisits; training cannot be limited to technical skills without addressing interpersonal dynamics and regional language basics. Consider a mixed-language household where a senior understands one tongue and a domestic worker another: the technician who can summarize steps twice, in both languages, reduces the risk of misinterpretation that later becomes a complaint. Elasticity in scheduling, elasticity in speech—the platforms that scale will be those that design for variance, not against it.

The central claim about “on-demand” promises is that they  
(A) operate identically across all neighborhoods  
(B) must be adjusted for local variance in routes and conditions  
(C) eliminate the need for human communication  
(D) require zero buffer time to be efficient

5. Read the following passage carefully and answer Question Nos. 10, 11 and 12:

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The text implies that fairness in scheduling should  
(A) allocate identical buffers to all routes  
(B) ignore known bottlenecks  
(C) account for route-specific variance to reduce knock-on delays  
(D) always prioritize first-come-first-served without exceptions

6. Read the following passage carefully and answer Question Nos. 10, 11 and 12:

In cities with volatile weather and intermittent connectivity, the rhetoric of “on-demand” collides with the physics of rain and bandwidth. A platform can confirm a booking in two taps, but the path between technician and doorstep may traverse a bridge that floods twice a month. When the inevitable delay occurs, customers discover the difference between notification and communication: an automated “running late” ping lowers anxiety less than a human call that explains revised ETA, probable cause, and options. Over time, platforms that invest in last-mile intelligence—micro-maps of regular bottlenecks, neighborhood-specific buffer times, backup providers within 2 kilometers—outperform those that treat every pin as equal. It turns out that fairness is not sameness; allocating more slack to high-variance routes helps everyone by reducing cascading cancellations.

The supply side faces its own constraints. Tool calibration and spares inventory cannot be optimized to zero without risking multiple revisits; training cannot be limited to technical skills without addressing interpersonal dynamics and regional language basics. Consider a mixed-language household where a senior understands one tongue and a domestic worker another: the technician who can summarize steps twice, in both languages, reduces the risk of misinterpretation that later becomes a complaint. Elasticity in scheduling, elasticity in speech—the platforms that scale will be those that design for variance, not against it.

The bilingual communication example is used to argue that training should include  
(A) only advanced technical modules  
(B) minimal interaction to save time  
(C) interpersonal and language skills alongside technical competence  
(D) outsourcing all communication to call centers

7. Read the following passage carefully and answer Question No. 10:

During an Arctic summer campaign, a field team documented how melt ponds formed earlier and persisted longer on multi-year ice, reorganizing surface topography into a network of lenses that funneled sunlight into the upper ocean. Instruments recorded a measurable decrease in local albedo just when solar input peaked, a timing that compounded melt. At the same time, the team measured a shift in the phenology of ice-associated algae, whose growth spurts coincided with the extended pond season. While the bloom’s green sheen was photogenic, microscopy and pigment analysis revealed it as a symptom of ecological re-timing, not recovery. The team’s reports warned that late-season refreezing over residual ponds produced thinner, saltier ice with different mechanical properties, predisposing it to earlier breakup the following year. What looked like a benign oscillation through the casual lens was, through the scientific one, a ratchet.

The earlier and longer presence of melt ponds primarily leads to  
(A) higher albedo and reduced melt  
(B) lower albedo and enhanced solar absorption  
(C) thicker multi-year ice formation  
(D) immediate stabilization of ice mechanics

8. Read the following passage carefully and answer Question No. 11:

During an Arctic summer campaign, a field team documented how melt ponds formed earlier and persisted longer on multi-year ice, reorganizing surface topography into a network of lenses that funneled sunlight into the upper ocean. Instruments recorded a measurable decrease in local albedo just when solar input peaked, a timing that compounded melt. At the same time, the team measured a shift in the phenology of ice-associated algae, whose growth spurts coincided with the extended pond season. While the bloom’s green sheen was photogenic, microscopy and pigment analysis revealed it as a symptom of ecological re-timing, not recovery. The team’s reports warned that late-season refreezing over residual ponds produced thinner, saltier ice with different mechanical properties, predisposing it to earlier breakup the following year. What looked like a benign oscillation through the casual lens was, through the scientific one, a ratchet.

The algal bloom described is best interpreted as  
(A) evidence of ecosystem recovery  
(B) neutral with no relation to melt timing  
(C) a symptom of altered seasonal dynamics  
(D) proof that ice is getting colder

9. Read the following passage carefully and answer Question No. 12:

During an Arctic summer campaign, a field team documented how melt ponds formed earlier and persisted longer on multi-year ice, reorganizing surface topography into a network of lenses that funneled sunlight into the upper ocean. Instruments recorded a measurable decrease in local albedo just when solar input peaked, a timing that compounded melt. At the same time, the team measured a shift in the phenology of ice-associated algae, whose growth spurts coincided with the extended pond season. While the bloom’s green sheen was photogenic, microscopy and pigment analysis revealed it as a symptom of ecological re-timing, not recovery. The team’s reports warned that late-season refreezing over residual ponds produced thinner, saltier ice with different mechanical properties, predisposing it to earlier breakup the following year. What looked like a benign oscillation through the casual lens was, through the scientific one, a ratchet.

The term “ratchet” in the final sentence conveys that the system  
(A) oscillates back and forth without trend  
(B) locks in incremental changes that promote further melt  
(C) reverses damage each winter  
(D) resists any external forcing

10. Read the following passage carefully and answer Question Nos. 10, 11 and 12:

On the road to Tawang, prayer flags speak in colors to wind that remembers avalanches. At every bend, a signboard lists altitudes like achievements, but the snowlines are learning new arithmetic. What used to be a seasonal hush has become a conversation of meltwater at hours when the sun used to be too shy to intrude. Villages downstream have learned a new calendar of outburst floods, annotated by WhatsApp warnings and temple loudspeakers. Glaciers, which once felt like old relatives—distant, formidable, and reliable—now feel like teenagers: changing fast, sometimes sullen, sometimes reckless. Hydropower tunnels grudgingly accept silt loads they were not designed to swallow; turbines rasp, and the accountants widen their margins. To live with mountains is to be a student of time; the syllabus has been revised mid-term.

This revision also writes itself into agriculture and ritual. Barley sowing shifts by a fortnight; pastures open sooner but tire earlier, and herders add unfamiliar salt licks to rations as mineral balances slide. Pilgrimage schedules stitch in meteorological caution, and insurance agents learn to pronounce names of lakes whose moraine walls have become risk vocabulary. The army’s supply lines rebuild contingency for bridges that will stand until they don’t. Each institution learns a new humility: planning now includes an extra column titled “what if the mountains answer differently this year?”

The main contrast in the passage is between  
(A) fixed altitudes and unchanging snowlines  
(B) pastoral traditions and urban lifestyles  
(C) historical stability of cryosphere and its present volatility  
(D) religion and technology in mountain life

11. Read the following passage carefully and answer Question Nos. 10, 11 and 12:

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The sentence “the syllabus has been revised mid-term” implies that mountain communities must  
(A) delay adaptation until next season  
(B) rapidly relearn environmental cues and risks  
(C) abandon hydropower development entirely  
(D) rely solely on old calendars for safety

12. Read the following passage carefully and answer Question Nos. 10, 11 and 12:

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The mention of hydropower tunnels “accepting silt loads” suggests  
(A) improved turbine efficiency  
(B) unexpected maintenance and operational stress  
(C) complete protection from glacier outbursts  
(D) reduction in sediment transport