Aptitude Advanced

Reading Comprehension Basics

Assignment 04

RC Practice Assignment 04

Directions: *Read the passage and, in your own words, put down the idea of the paragraph.*

Passage 1

The so-called 'creative' industries, like gaming and Hollywood, often churn out safe, relatively uninspiring sequels that consume huge budgets. In contrast, frugal artists are now making games and films that are truly creative and cost much less to develop.

Consider the case of Jason Rohrer, a game developer. Rohrer lives with his wife and three kids on a modest ranch in Las Cruces in the middle of the New Mexico desert where he creates ingenious, meaningful games with high experiential value that he gives away for free (or charges a modest fee for downloading). Rohrer and his family do not own a car; they ride bicycles. They have no insurance or mortgage; they do have a fridge, but turn it off during winters. This family of five has voluntarily capped its yearly expenses at $14,500 – which represents the family's total annual budget.

Rohrer's fans love his games because they feel 'real' – not because of hyperrealistic graphics (which would typically

cost a fortune to develop) but because their stories ring true and feel genuine. Rohrer infuses his games with his own life experiences and this in turn gives his characters and storylines authenticity. His creations deal with complex sociocultural topics such as marriage, the desire to become an artist or balancing personal aspirations with family commitments. Whereas in commercial games superhuman heroes mindlessly shoot down monsters, aliens and criminals, Rohrer's thoughtful characters struggle to overcome their inner demons and cope with personal dilemmas.

The sophistication of the stories in Rohrer's games stands in striking contrast to the frugal simplicity of their user interface: the interface is typically minimalist, even slightly 'retro', with no whiz-bang special effects like 3D. His games are rendered in low-resolution graphics—the same ones found in arcade-style games—with characters that look like pixilated gnomes. The frugal look and feel of Rohrer's games hasn't stopped them from rapidly achieving cult status among users worldwide. Says Clint Hocking, creative director at Ubisoft, the world's fourth-largest game developer: these games have used what is innate to games—their interactivity—to make a statement about the human condition. And we in the industry seem not to be able to do that.

Excerpted from 'Jugaad Innovation' by Radjou, Prabhu and Ahuja Pages-255-257

1. What is the central idea that the passage conveys?

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2. What makes Rohrer's games achieve cult status?

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3. What set of words would characterise Rohrer?

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Passage 2

The good thing about the transistor was that by the late 1950s it was becoming smaller and smaller as well as more and more reliable. The bad thing was that an electrical circuit containing thousands of tiny transistors,

along with other elements such as resistors and capacitors, had to be interconnected with thousands of tiny wires. As Ian Ross describes it, “As you build more and more complicated devices, like switching systems, like computers, you get into millions of devices and millions of interconnections”. So what should you do?” At Bell Labs, Jack Morton, the vice president of device development, had coined a name for the dilemma: “the tyranny of numbers.” Morton believed that one way to tackle the tyranny of numbers was simply to reduce the number of components (transistors, resistors, capacitors, and so forth) in a circuit. Fewer components meant fewer interconnections. One way to do this, Morton thought was to harness the physical properties of special semiconductors so that they might be made to perform multiple electronic tasks—turning them into a kind of electronic Swiss Army knife. Therefore “a simple thing” within a circuit could replace multiple components. Morton called these “functional devices,” but they were proving exceedingly difficult to engineer.

Jack Kilby at Texas Instruments and Robert Noyce at Fairchild had different, better ideas. Both men, nearly simultaneously, came up with the idea of constructing all of the components in a circuit out of silicon, so that a complete circuit could exist within one piece—one *chip*—of semiconductor material. By eliminating the tyranny of

interconnections, the method seemed to suggest substantial advantages in manufacturing and operational speed. Their innovation could, in short, be better and cheaper. In the early days, the product that Kilby and Noyce designed was known as a “solid circuit.”

But it was the received wisdom under Jack Morton that such devices could *never* be reliable. Even though the quality of manufactured transistors was improving, there was still a significant failure rate and on a chip with hundreds or thousands of components? Some of those components would inevitably fail, thus rendering the entire device useless. Kilby and Noyce opted to believe, correctly, that the manufacturing challenges could be worked out later.

Excerpted from ‘The Idea Factory’ – by Jon Gertner, pages 252-254

4. What was the difference in approach to build complex circuits between Morton and Noyce?

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5. What was the biggest technical hurdle that the initial ICs faced?

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6. What was meant by the 'tyranny of numbers'?

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Passage 3

Not until the tenth century CE did cotton become an important Chinese cash crop. However, from the beginning, silk, used by the royal elite, remained China's principal export. Indians, in contrast, developed technologies like vegetable dyes with fast color and print designs with wood blocks to produce exportable cotton fabrics. They also mastered the art of ginning the cotton, spinning the fibres into thread, and weaving cloth on handlooms made of bamboo and wood.

Although Indian textiles had been a coveted item of trade in the Red sea, Arabian sea and Indian ocean trade since Roman times, Europeans discovered Indian cotton only after Vasco da Gama blazed the trail for shipping trade with Asia in 1498. Europeans, who for centuries had been clad entirely in linen and wool, at last, discovered cotton. Indian cotton manufacturing boomed, even though its

spinning and weaving technology had remained essentially the same for centuries. It boomed simply because more and more workers were pressed into growing cotton and producing cloth.
The proto-capitalist production system, developed in India, could be scaled up to meet growing demand. So high was the demand for Indian textiles that Britain had a constant trade deficit with India. Of the estimated 17,000 tonnes of silver mined in the new World in the 16th century, some 6,000 tonnes ended up in India to pay for European imports. Indian domination of textile alarmed Britain's silk and wool weavers. In Roman times moral reasons had been invoked to ban the import of silk. Centuries later, some Britons found religious piety to be a good reason for banning import of cotton. Protests and worker riots eventually lead Britain to impose the Calico Act of 1701, a partial ban on the import and wearing of Indian textiles. In 1721 Britain passed a second Calico Act banning cotton textiles of all kinds, but this only fired up smuggling.

The obvious answer to the popularity of Indian calico was to begin producing locally, but European wages were six times higher than Indian wages. The search for technology to reduce the need for labor led to the opening of a water-powered cotton spinning mill in Cromford in 1771. The Industrial Revolution was launched. Although

many workers were still needed to work with the machines, the speed and the volume of production eliminated the cheap labor advantage so far enjoyed by India. In just 14 years (1814-1828) India's cotton piece goods exports to Britain dropped by two-thirds, and mass-produced British textile imports to India, backed by tariff policy, rose more than five times. For the first time in its history, India was importing what the mass of its citizenry wore.

Excerpted from 'Bound Together: How traders, preachers, adventurers and warriors shaped globalisation' by NayanChanda.

7. The governor general of India, William Bentinck wrote in a confidential report in 1835, 'The bones of the cotton weavers are bleaching the plains of India.' What can you infer from this?

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8. Referring to the third paragraph first line, what can you infer about the proto-capitalist system?

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9. ‘Centuries later, some Britons found religious piety to be a good reason for banning import of cotton.’ If you were a preacher, what would be an argument you would make to support the ban?

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Passage 4

It has been a long journey for us. It began in 1976 with lending of $27 to 42 poor people in a village next to the university campus where I was teaching economics. I had no intention of making a wave. Nor was I planning to create a bank for the poor. I had a very modest goal. I was trying to free 42 people from the clutches of moneylenders by giving them money they owed to moneylenders, in order to repay them and become free from exploitation.

I was teaching in Chittagong University while a famine raged in Bangladesh in 1974. It was uncomfortable to teach elegant theories of economics when people were dying of hunger. I felt totally irrelevant. I tried to make myself in some way relevant by going out to the poor people living in the village next to the university campus. Initially I looked for any little thing that I could do to make

the life of a poor individual slightly tolerable. One thing led to another. I kept seeing how people suffered because they could not find tiny amounts of money to carry on with their livelihood activities. To solve this problem, they went to moneylenders. Moneylenders turned them into slave-labour with unbelievable loan conditions. I wanted to see how many people there were in the village in this situation. I made a list. The list contained 42 names, the total amount they needed was $27.

Imagine the shock to an economics professor who teaches his students about the national five-year plan and the rationale for investing billions of dollars to overcome poverty. The professor did not know that people go through misery because they do not have access to pennies, let alone a whole dollar. Even if you invest those billions of dollars in big projects, this need of the poor will still not be addressed. I tried to address this problem by way of an emotional response, I gave the money from my pocket. I did not know that it would create an emotional counter response from the people who got the money. They thought it was nothing less than a miracle. I thought if you could make so many people so happy with such a small amount of money, why not do more of the same. I decided to link the poor people in the village with the bank located in the campus, but the bank refused to get involved. They argued that the poor are not creditworthy. I

pleaded with them to give me a chance to try. They refused. Ultimately, when I offered to become the guarantor for these loans, they reluctantly agreed. I started giving loans to poor people in Jobra and was pleasantly surprised to see that it was working perfectly. I continued to expand the programme. Several stages later we converted the project into a formal bank, named, Grameen Bank, in 1983.

11. A suitable title for this passage is

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12. Banks considered the poor creditworthy, yet Grameen Bank makes money lending to the poor. What practice do you think, Grameen Bank adopts, which helps it recover its loans?

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RC Practice Assignment 04 - Answer Key

Passage		Explanation
Passage-1	Q. 1.	Simple living, high thinking.
	Q. 2.	They tell a story based on life experiences.
	Q. 3.	Frugal, Minimalist
Passage-2	Q. 4.	Morton wanted to have devices which had fewer more powerful components – Noyce wanted to build devices which used existing components – but many more of them.
	Q. 5.	The interconnections.
	Q. 6.	The more the components, the more the interconnections.
Passage-3	Q. 7.	The new policy created so much unemployment amongst weavers in India, that a lot of them started dying.
	Q. 8.	It had the capital but lacked the machinery, which was substituted by home looms spread across thousands of homes in villages.
	Q. 9.	If this ban leads to more employment of Christians, the Lord would be happy. Anyway the people who would lose jobs and livelihood do not follow our Lord's

		word.
Passage-4	Q.10.	Banker to the Poor
	Q.11.	Lending in groups – the group has to make up shortfalls that any individual defaulter in the group has.