



Lahore University of Management Sciences (LUMS)

LUMS Written Test for the Selection of Trade & Investment Officers (TIOs) for Pakistan's Missions Abroad 2024

Ministry of Commerce, Government of Pakistan, Islamabad

Sample Test

Question Paper and Answer Sheet

Name: _____ **Date of Birth:** _____

Identity Card/Passport No. _____

Signature: _____

General Instructions to Candidates

- ❖ Do not open this exam until you are instructed to do so.
 - ❖ You will have a maximum of two hours to complete the exam.
 - ❖ All answers must be provided on this answer sheet.
 - ❖ Use a black or blue ballpoint to write your answers on the answer sheet.
 - ❖ This exam is divided into four sections. Each section of the exam has a fixed time limit, as specified in the instructions for each section. The section names and their corresponding marks scheme are listed below:
 - Section 1: Pakistan's Economy, International Trade & Emerging Trends (25%)
 - Section 2: Trade and Investment Promotion (45%)
 - Section 3: IT Skills and Data Analytics (15%)
 - Section 4: Analytical Writing Skills (15%)
 - ❖ Wait for the announcement before moving to the next section.
 - ❖ Mobile phones must be switched off in the examination hall. Failure to comply may result in the cancellation of your exam.
 - ❖ Calculators are permitted; however, the use of mobile phones as calculators is not allowed.
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Section 1

Pakistan's Economy, International Trade & Emerging Trends (25 marks)

Instructions for Candidates:

- Answer ALL questions in this section. Each question carries equal marks.
 - Carefully think through your answers before writing.
 - Short clear answers will receive more credit than lengthy, convoluted ones.
 - **You have 30 minutes to complete this section.**
-

Question 1:

What is the purpose of an export tax? Explain how an export tax can impact the price, quantity, and export levels of a commodity in the imposing country. Use hypothetical prices, quantities, and freight costs as needed to illustrate your explanation.

Question 2:

During FY2023, Pakistan's export earnings significantly declined in US dollar terms. Answer the following questions:

- A. How does the decline in Pakistani exports relate to global developments?
- B. What domestic factors have contributed to the stagnation of Pakistan's exports? Discuss.
- C. Has the gap between exports and imports widened the trade balance? Why or why not?

Section 2

Trade and Investment Promotion (45 marks)

Instructions for Candidates:

- Answer ALL questions in this section. Each question carries equal marks.
 - Carefully think through your answers before writing.
 - Short clear answers will receive more credit than lengthy, convoluted ones.
 - **You have 50 minutes to complete this section.**
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Trade Promotion (20 marks):

Question 1:

Write short notes on the following:

- A. Trade diplomacy plays a crucial role in addressing tariff and non-tariff barriers between trading partners. What strategies would you employ in trade diplomacy to eliminate these barriers?

- B. Trade promotion tools are designed to boost a country's exports, attract foreign investment, and foster economic growth. Explain how e-commerce and digital platforms, combined with business matching and networking events, can be implemented to create a comprehensive and integrated approach to facilitating international trade.

Question 2:

You have recently been appointed as a trade officer in a European country. One morning, you receive a policy paper from a leading Pakistani think tank on improving export performance. The report highlights several issues that hinder the export performance of Pakistani firms, including the following:

Product and Market Diversification:

Pakistan has a high degree of product concentration, though its market concentration is comparable to other countries.

Agro-Based Exports:

The potential for agro-based exports remains unrealized due to non-compliance with sanitary and phytosanitary standards, weak marketing infrastructure, and excessive and inconsistent government intervention in agricultural marketing.

Higher Technology Exports:

Medium and high-technology exports account for less than 10% of total exports. The stagnation in medium-technology exports is attributed to a specialized skills deficit, inadequate infrastructure, limited R&D, and weak intellectual property protection.

Skills Development:

The demand for advanced skills is increasing globally. Pakistan lags other countries in skills development and needs to address this deficit within the next five years.

Cost of Doing Business:

An unfavorable business environment persists due to economic uncertainty, inconsistent government policies, a complicated tax structure, numerous labor levies, weak contract enforcement, and inadequate physical infrastructure.

Trade Facilitation:

Pakistan faces cumbersome export procedures, ranking poorly globally. Additionally, inadequate transport networks result in some of the highest domestic costs worldwide.

Business Support Initiatives:

Small and medium exporters suffer from a lack of business support services.

Market Development Initiatives:

Exporters face inadequate market access, a poor international image, and weak linkages with global market networks.

Supportive Policy Framework:

The trade regime suffers from significant anti-export bias. Persistent overvaluation of the exchange rate and repeated episodes of macroeconomic instability have undermined export competitiveness.

As a newly appointed trade officer, you have the capacity to address or facilitate solutions to some of these issues for Pakistani exporters.

- A. Identify the issues where you can play an active role as a trade officer.
- B. Outline the specific actions you would take to mitigate these challenges and facilitate Pakistani exporters in overcoming them.
- C. Ensure that your proposed measures directly address the identified issues to enhance export performance and competitiveness.

Investment Promotion (25 marks):

Question 1:

To promote tourism in the Northern Areas during the winter months, the Government of Pakistan has facilitated the establishment of ski resorts and supporting infrastructure in scenic locations. As part of this initiative, ski resorts have been developed at the following locations: Malam Jabba; Naltar; Nathia Gali, and Shimshal. The tourism facilities available at these resorts include:

Malam Jabba ski resort:

Malam Jabba ski resort is located in the Hindu Kush range of the Swat Valley, in Khyber Pakhtunkhwa province, Pakistan. Situated at a top elevation of 2,804 meters (9,199 feet), it is the largest ski resort in Pakistan. The resort is in the village of Malam Jabba, 40 kilometers east of Saidu Sharif and 314 kilometers northwest of Islamabad. The facilities at Malam Jabba ski resort include two 800-meter ski runs, chairlifts, a five-star hotel, a three-star hotel, an ice-skating rink, the Ghorband Valley trekking trail, and the Sabonev Valley trekking trail.

Naltar ski resort:

Naltar is the oldest ski resort in Pakistan; however, it is relatively less known and less developed compared to Malam Jabba ski resort. The major obstacle to Naltar's development has been the poor condition of the road connecting Gilgit to Naltar. Currently, the one-hour journey to Naltar is nearly impossible unless travelers use a four-wheel-drive jeep. In 2015, a chairlift was constructed to enhance accessibility.

Nathia Gali:

Nathia Gali is famous for its lush green meadows and dense forests of oak, cedar, and pine, where the fog in July and August creates a breathtaking sight. In winter, snowfall enhances the scenic beauty of the area. Nathia Gali is also known for a picturesque trekking route that leads to Thandiani, passing through Dagri Naka.

Shimshal valley:

Shimshal Valley is the largest adventure area in Hunza and a major attraction for tourists. Its renowned mountains, including Distaghil Sar (7,885 m), Shimshal White Horn (6,303 m), Minglik Sar (6,150 m), Lupghar Sar (7,200 m), Yazghail Sar (6,000 m), and Kunjut Sar, are well known among mountaineers. The valley also boasts gigantic glaciers such as Malangudhi, Yazghail, Khurdopin (5,800 m), Braldu, Odver, and Ver Zharav. Its main passes include Chafchingoal, Khurdopin, Mai Dur, Braldu, and Boi Sam.

Shimshal is often referred to as the "Valley of Mountaineers" due to its significant contribution to Pakistan's tourism. More than twenty renowned mountaineers from this valley have earned national and international acclaim, making Pakistan proud. Shimshalis are to Pakistan what Sherpas are to Nepal.

You are posted as a trade officer in a Middle Eastern country and are tasked with promoting tourism to these areas.

- A. What would be your tourism promotion strategy considering the competition you could face?
- B. Which promotional activities would you undertake to promote tourism to these areas?
- C. Which advertising, promotion, and communication channels would you use?

Question 2:

The Boeing Company faced a dilemma in 2004. For a long time, it held the industry leader position in global airframe manufacturing industry, but it has been slowly losing market share since the 1990s to the European-based Airbus Industries—now known as the European Aeronautic & Space Company (EADS). In December 2001, the EADS board of directors committed to building the largest commercial jet plane in the world, the Airbus 380. The A380 would carry 481 passengers compared to the 416 passengers carried by Boeing's 747—400. The A380 would not only fly 621 miles farther than the 747, but it would cost airlines 15%–20% less per passenger to operate. With orders for 50 A380 aircraft in hand, the EADS board announced that the new plane would be ready for delivery during 2006. The proposed A380 program decimated the future sales of Boeing's jumbo jet.

Boeing was clearly a company in difficulty in 2004. Boeing, once the manufacturing marvel of the world, was now spending 10%–20% more than EADS (Airbus) to build a plane. The prices it asked for its planes were thus also higher. As a result, Boeing's estimated market share of the commercial market slid from nearly 70% in 1996 to less than half that by the end of 2003.

Even though defense sales now accounted for more than half of the company's revenues, Boeing's CEO realized that he needed to quickly act to regain Boeing's leadership of the commercial part of the industry. In December 2003, the board approved the strategic decision to promote a new commercial airplane, the Boeing 787, for sale to airlines. The 787 was a midrange aircraft, not a jumbo jet such as the A380. The 787 would carry between 220 and 250 passengers but consume 20% less fuel and be 10% cheaper to operate than its competitor, EADS' current midrange plane, the smaller wide-body A330-200. It was to be made from a graphite/epoxy resin instead of aluminum. It was designed to fly faster, higher, farther, cleaner, more quietly, and more efficiently than any other medium-sized jet. This was the first time since approving the 777 jet in 1990 that the company had launched an all-new plane program. Development costs were estimated at \$8 billion over five years. Depending on the results of these sales efforts, the board would decide sometime during 2004 to either begin or cancel the 787-construction program. If approved, the planes could be delivered in 2008—two years after the delivery of the A380.

The Boeing 787 decision was based on a completely different set of assumptions from those used by the EADS board to approve the A380. EADS' top management believed that the commercial market wanted even larger jumbo jets to travel long international routes. Airports in Asia, the Middle East, and Europe were becoming heavily congested. In these locations, the "hub-and-spoke" method of creating major airline hubs was flourishing. Using larger planes was a way of dealing with that congestion by flying more passengers per plane out of these hubs. EADS management believed that over the next 20 years, airlines and freight carriers would need a minimum of 1,500 more aircraft, at least as big as the B747.

EADS management had concluded that the key to controlling the future commercial market was by using larger, more expensive planes. The A380 was a very large bet on that future scenario. The A380 program would cost EADS almost \$13 million before the first plane is delivered.

In contrast, Boeing's management believed in a very different future scenario. It concluded that no more than 320 extra-large planes would be sold in the future as the airline industry moved away from hub-and-spoke networks toward more direct flights between smaller airports. The fragmentation of the airline industry, with its emphasis on competing through lower costs, was the primary rationale for Boeing's fuel-efficient 787. A secondary reason was to deal with increasing passenger complaints about shrinking legroom and seat room on current planes flown by cost-conscious airlines. The 787 was designed in both short- and long-range versions. Boeing's management predicted a market for 2,000 to 3,000 such planes.

Boeing's strategy to regain industry leadership with its proposed 787 airplane meant that the company would have to increase its manufacturing efficiency to keep the price low. To significantly cut costs, management would be forced to implement a series of new programs:

- Outsource approximately 70% of manufacturing. Could it find suppliers who could consistently make the high-quality parts needed by Boeing?
- Reduce final assembly time to three days (compared to 20 for its 737 plane) by having suppliers build completed plane sections. Could these many suppliers meet Boeing's exact deadlines?
- Use new, lightweight composite materials in place of aluminum to reduce inspection time. Would the plane be as dependable and as easy to maintain as Boeing's aluminum airplanes?
- Resolve poor relations with labor unions caused by downsizing and outsourcing. The machinists' union would have to be given a greater voice in specifying manufacturing procedures. Would Boeing's middle managers be willing to share power with an antagonistic union?

Answer the following questions:

Which vision of the future was correct? The long-term fortunes of both Boeing and EADS depended on two contrasting strategic decisions, based on two very different assessments of the market. If EADS was correct, the market would continue to demand ever-larger airplanes. If Boeing was correct, the current wave of jumbo jets would have crested, and a new wave of fuel-saving midrange jets would soon replace them. Which company's strategy had the best chance of succeeding?

Section 3

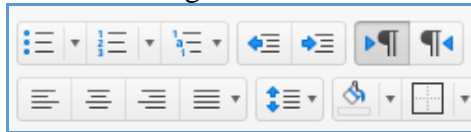
IT Skills & Data Analytics (15 Marks)

Instructions for Candidates:

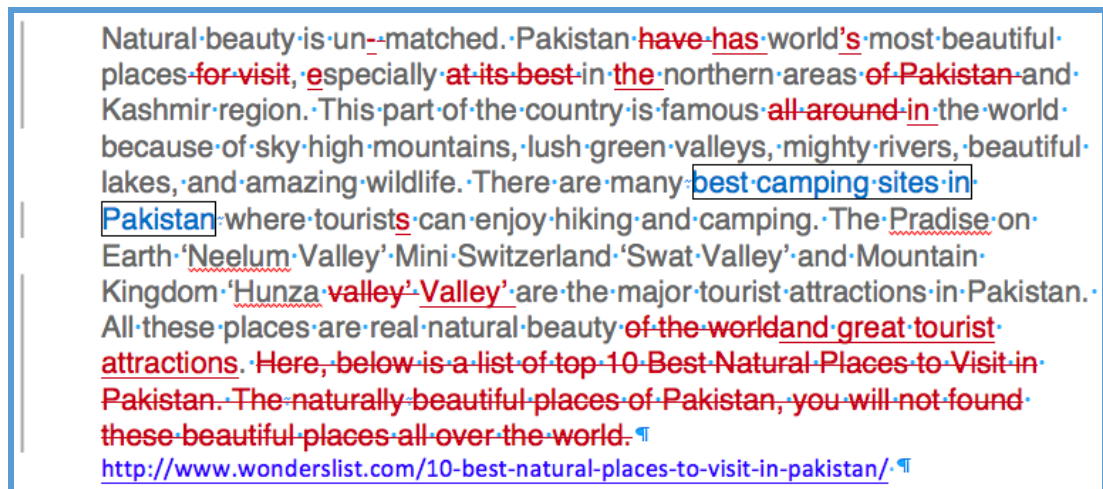
- You have 20 minutes to complete the questions in this section.
-

IT Skills

1. The left and right arrows shown in the figure are used to:



- a. Increase/decrease indents
b. Move columns left or right
c. Move cursor left or right
d. All of the above
2. Given the following screenshot from a Microsoft Word document showing a document under review, you want to remove all the text that has been crossed. Which of the following actions will you take?



- a. Accept all changes.
b. Reject all changes.
c. Turn off “Track Changes”.
d. Turn on “Track Changes”.
3. While inserting a table in a MS Word file, the table has become too large to fit within the page limits defined using ‘page margins’. Which of the following actions can reduce the width of the table and bring it within the bounds of the page width?

- a. Auto fit to contents
b. Auto fit to window
c. Distribute columns evenly
d. All the above

4. Mail Merge is an application of Microsoft Word used to:

- a. Generate same letter for many different recipients
- b. Generate same email for many different recipients
- c. Generate different labels and envelopes for different recipients
- d. All the above

5. The “Protect Document” option in MS Word provides the following options:

- a. Set password
- b. Make the document read-only
- c. Remove personal data on “Save”
- d. All the above

6. In the Excel sheet shown below, percentage change has been calculated in the last column titled “Percent Change”. Write down the formula that was used in the cell that shows 48%?

	C	D	E	F	G	H
13	Sales Person	Year	Quantity Sold	Rate (PKR/unit)	Sales (PKR)	Percent Change
14	Ahmad	1997	50	112	5600	
15	Amjad	1998	74	115	8510	48%
16	Akbar	1999	67	128	8576	-9%
17	Aslam	2000	35	124	4340	-48%
18	Azhar	2001	98	132	12936	180%
19	Asim	2002	110	150	16500	12%
20	Ameen	2003	89	167	14863	-19%

7. In Microsoft Excel, in order to record a macro to do repetitive tasks you need to:

- a. Add the “Designer” menu in the ribbon
- b. Add the “Developer” menu in the ribbon
- c. Add the “Macro” menu in the ribbon
- d. Add the “Record” menu in the ribbon

8. In the Excel sheet shown below Control-C and Control-V was used to copy the contents of the cell F2 into the cells ranging from F3 to F8. However, the result is zero instead of showing the respective sales amount. Correct the formula in F2 so that Control-C/Control-V commands could work properly and generate the required sales amounts in the cells F3:F8, given that the sales rate remains constant over the years.

F2 fx =E2*B1							
	A	B	C	D	E	F	G
1	Rate	120	Sales Person	Year	Quantity Sold	Sales (PKR)	Percent Change
2			Ahmad	1997	50	6000	
3			Amjad	1998	74	0	48%
4			Akbar	1999	67	0	-9%
5			Aslam	2000	35	0	-48%
6			Azhar	2001	98	0	180%
7			Asim	2002	110	0	12%
8			Ameen	2003	89	0	-19%

Corrected Formula:

9. The values for the ‘Quantity Sold’ and “Sales (PKR)” in cells I3 and I4 respectively for the year given in the cell I2 have been found using the VLOOKUP formula. Which of these are the right formulas that will show the correct results?

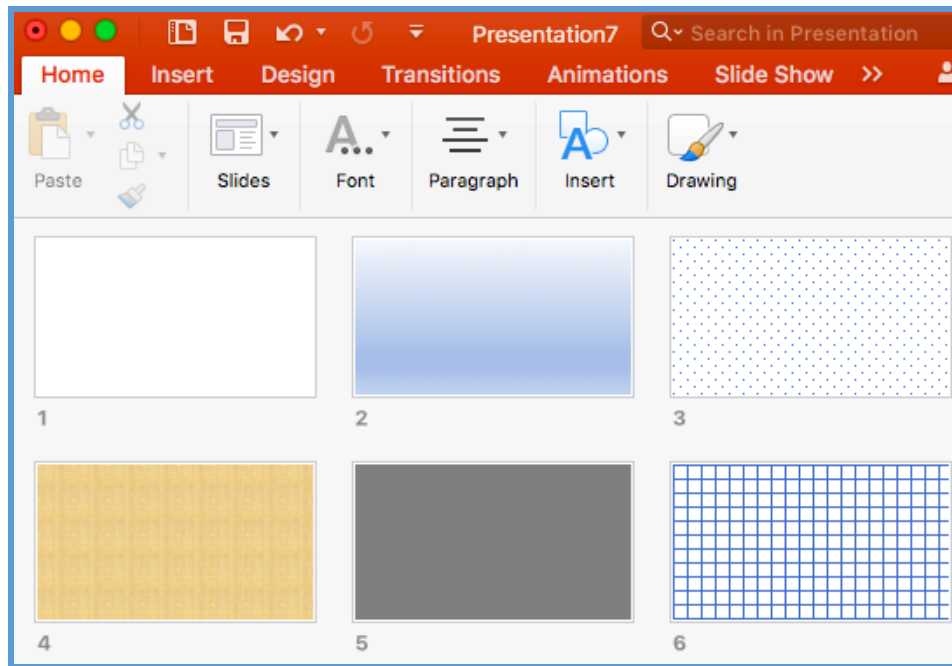
	A	B	C	D	E	F	G	H	I
1	Rate	120	Sales Person	Year	Quantity Sold	Sales (PKR)	Percent Change		
2			Ahmad	1997	50	6000		Year	1998
3			Amjad	1998	74	0	48%	Quantity Sold	74
4			Akbar	1999	67	0	-9%	Sales (PKR)	0
5			Aslam	2000	35	0	-48%		
6			Azhar	2001	98	0	180%		
7			Asim	2002	110	0	12%		
8			Ameen	2003	89	0	-19%		

- a. =VLOOKUP(2, D1:G8,2,FALSE) and =VLOOKUP(2,D2:G8,3,FALSE) respectively
 b. =VLOOKUP(I2,D1:G8,2,FALSE) and =VLOOKUP(I2,D2:G8,3,FALSE) respectively
 c. =VLOOKUP(I2,C1:G8,2,FALSE) and =VLOOKUP(I2,C2:G8,3,FALSE) respectively
 d. =VLOOKUP(I2,C1:G8,3,FALSE) and =VLOOKUP(I2,C2:G8,4,FALSE) respectively

10. The “Freeze Panes” menu option in Excel:

- a. Keeps a specific worksheet visible when the rows or columns are scrolled
- b. Keeps a workbook frozen and does allow any changes to it
- c. Keeps specific rows or columns frozen and does not allow any changes to it
- d. Keeps specific rows or columns visible when the worksheet is scrolled

11. Six slides of a power point presentation are shown side-by-side in the following figure. Which PowerPoint menu option was selected?



- a. View and Presenter View
- b. View and then Outline View
- c. View and then Slide Sorter
- d. None of the above

12. You plan to invite your colleagues to an official meeting. However, you want that this invite is recorded in the calendar of the invitees too. What option will you use?

- a. Use ‘calendar invite’ from your own calendar
- b. Use ‘calendar invite’ from your own email client
- c. Use ‘email message’ from your own calendar
- d. Use ‘email message’ from your own email client

13. Hypertext is the text having:

- a. Excited links
- b. Hectic links
- c. Hyper links
- d. Small links

14. Encryption:

- a. Can help protect data in transit
- b. Is a process of encoding data for authorized access only?
- c. May not help in maintaining the integrity of data
- d. All of the above

15. Linux, MacOS, iOS, Windows, Unix are examples of:

- a. Communication system
- b. Network system
- c. Operating system
- d. All of the above

Data Analytics

Instructions: Open defecation (OD) is when people go to the bathroom in open spaces instead of using toilets. Table 3.1 presents data on hours spent and time cost of accessing OD sites in selected districts of rural Punjab. Collectively, rural households in selected districts in Punjab spent a staggering 3.93 million hours per year accessing OD sites. The average annual economic cost due to lost access time is PKR 21.95 billion, or PKR 4074 per household, which is PKR 340 per month based on 2019-20 prices. This amounts to PKR 610 per month in 2022-23 prices. Answer the following multiple-choice questions (MCQs).

Table 3.1. Hours spent and time cost of accessing OD in selected rural districts of Punjab

Selected districts	Annual cost of accessing OD sites in 2019-20		Average cost per household (PKR)		
	OD time (million hours)	Time cost (PKR, million)	Annual cost in 2019-20 prices	Monthly cost in 2019-20 prices	Monthly cost in 2022-23 prices
Bahawalnagar	0.34	1717.72	4311	359	644
Bahawalpur	0.30	1847.37	4077	340	610
Bhakhar	0.14	684.80	3006	250	449
Chakwal	0.01	85.65	413	34	61
Chiniot	0.21	1236.41	7560	630	1131
D. G. Khan	0.39	2204.41	5902	492	883
Jhang	0.35	2218.76	6668	556	998
Khushab	0.09	409.33	2905	242	434
Lodhran	0.06	335.14	1477	123	221
Mianwali	0.12	585.07	2555	213	382
Multan	0.17	933.87	2227	186	334
Muzaffargarh	0.57	3018.91	4503	375	673
Pakpattan	0.08	597.14	2239	187	336
Rahim Yar Khan	0.52	3023.01	5014	418	750
Rajanpur	0.36	1878.59	7140	595	1068
Sargodha	0.22	1178.76	2851	238	427
16 districts	3.93	21954.93	4074	340	610

Source: These calculations are based on the Pakistan Social and Living Standards Measurement Survey (PSLM) 2019-20.

- (Logical Reasoning):** If Bahawalnagar's annual economic cost attributed to lost access time is PKR 1717.72 million and its annual average cost per household for accessing OD sites in 2019-20 prices is 4308 (PKR 359 x 12 = 4308), estimate the approximate number of households in Bahawalnagar.
 - 222,000
 - 289,000
 - 320,000
 - 398,728

2. **(Critical Thinking):** Why might the cost per household for accessing OD sites in 2022-23 prices be significantly higher than in 2019-20 prices?
- Increased time spent accessing OD sites
 - Higher number of households
 - Decreased availability of OD sites
 - Inflation and increased cost of living
3. **(Critical Thinking):** Which districts bore the highest average costs per household in 2022-23 prices?
- Rahim Yar Khan, Muzaffargarh, Jhang, and D.G. Khan
 - Chiniot, Rajanpur, Jhang, and D.G. Khan
 - Bahawalnagar, Bahawalpur, Multan, and Pakpattan
 - Bhakhar, Chakwal, Khushab, and Mianwali
4. **(Problem Solving):** Given that the average annual economic cost attributed to lost access time in rural households in selected districts in Punjab is PKR 21954.9 million, what is the average annual cost per household if there are 5.4 million households in these districts?
- PKR 4074
 - PKR 3889
 - PKR 4066
 - PKR 610
5. The average cost per household for accessing OD sites increased from PKR 340 per month in 2019-20 prices to PKR 610 per month in 2022-23 prices. What is the percentage increase?
- 60.4%
 - 89.1%
 - 55.2%
 - 79.4%
6. If the OD time in D.G. Khan is 0.39 million hours and the time cost is PKR 2204.41 million, what is the average time cost per hour in PKR?
- PKR 5052.12
 - PKR 5660.54
 - PKR 5649.77
 - PKR 5652.33
7. The monthly average cost per household for accessing OD sites is PKR 1131 in Chiniot and PKR 750 in Rahim Yar Khan. How much higher is the monthly cost in Chiniot than in Rahim Yar Khan in percentage terms?
- 50.8%
 - 33.7%
 - 42.13%
 - 56.1%

Section 4

Analytical Writing Skills (15 marks)

Instructions for Candidates:

You have 20 minutes to answer questions in this section.

Please choose ONE topic to write a 300-word response:

- I) What are some unique features of foreign investment in Pakistan that give it a distinctive edge over other South Asian countries?
- II) If tasked with providing a roadmap to increase trade volume between Pakistan and one of its neighboring countries, which country would you choose and why?