

CLAT UG 2023 Solutions

English language

PASSAGE - I

I grew up in a small town not far from Kalimpong. In pre-liberalization India, everything arrived late: not just material things but also ideas. Magazines — old copies of Reader's Digest and National Geographic — arrived late too, after the news had become stale by months or, often, years. This temporal gap turned journalism into literature, news into legend, and historical events into something akin to plotless stories. But like those who knew no other life, we accepted this as the norm. The dearth of reading material in towns and villages in socialist India is hard to imagine, and it produced two categories of people: those who stopped reading after school or college, and those including children — who read anything they could find. I read road signs with the enthusiasm that attaches to reading thrillers. When the itinerant kabadiwala, collector of papers, magazines, and rejected things, visited our neighbourhood, I rushed to the house where he was doing business. He bought things at unimaginably low prices from those who'd stopped having any use for them, and I rummaged through his sacks of old magazines. Sometimes, on days when business was good, he allowed me a couple of copies of Sportsworld magazine for free. I'd run home and, ignoring my mother's scolding, plunge right in — consuming news about India's victory in the Benson and Hedges Cup.... Two takeaways from these experiences have marked my understanding of the provincial reader's life: the sense of belatedness, of everything coming late, and the desire for pleasure in language. Speaking of belatedness, the awareness of having been born at the wrong time in history, of inventing things that

had already been discovered elsewhere, far away, without our knowledge or cooperation, is a moment of epiphany and deep sadness. I remember a professor's choked voice, narrating to me how all the arguments he'd made in his doctoral dissertation, written over many, many years of hard work (for there indeed was a time when Phds were written over decades), had suddenly come to naught after he'd discovered the work of C.W.e. bigsby. This, I realised as i grew older, was one of the characteristics of provincial life: that they (usually males) were saying trite things with the confidence of someone declaring them for the first time. i, therefore, grew up surrounded by would-be Newtons who claimed to have discovered gravity (again). there's a deep sense of tragedy attending this sort of thing — the sad embarrassment of always arriving after the party is over. And there's a harsh word for that sense of belatedness: "dated." What rescues it is the unpredictability of these anachronistic "discoveries" — the randomness and haphazardness involved in mapping connections among thoughts and ideas, in a way that hasn't yet been professionalised. [extracted, with edits and revisions, from "the Provincial reader", by Sumana roy, Los Angeles Review of Books]

- Question 1.** What use was the kabadiwala (wastepicker) to the author?
- (A) The kabadiwala bought up all her magazines.
 - (B) The kabadiwala's stock of books and magazines were of interest to the author.
 - (C) The kabadiwala was about to steal the author's magazines.
 - (D) The author ordered books online which the kabadiwala delivered.

Answer. The kabadiwala's stock of books and magazines were of interest to the author.

Solution. The correct answer is (B) The kabadiwala's stock of books and magazines were of interest to the author.

Question 2. What according to the author is essential about the experience of being a 'provincial reader'?

- (A) belatedness in the sense of coming late for everything.**
- (B) Over-eagerness.**
- (C) Accepting a temporal gap between what was current in the wider world and the time at which these arrived in the provincial location.**
- (D) None of the above**

Answer. Accepting a temporal gap between what was current in the wider world and the time at which these arrived in the provincial location.

Solution. The correct answer is (C) Accepting a temporal gap between what was current in the wider world and the time at which these arrived in the provincial location.

Question 3. Why did the author feel a sense of epiphany and deep sadness?

- (A) because the things that felt special and unique to the author, were already established and accepted thought in the wider world.**
- (B) because the author was less well-read than others.**
- (C) because the author missed being in a big city.**
- (D) All the above**

Answer. Because the things that felt special and unique to the author, were already established and accepted thought in the wider world.

Solution. The correct answer is (A) Because the things that felt special and unique to the author, were already established and accepted thought in the wider world.

Question 4. What does the word 'anachronistic' as used in the passage, mean?

- (A) rooted in a non-urban setting**
- (B) related to a mofussil area**
- (C) Connected with another time**

(D) Opposed to prevailing sensibilities

Answer. Connected with another time

Solution. The correct answer is (C) Connected with another time

Question 5. Which of the following options captures the meaning of the last sentence best?

- (A) though the author feels provincial, she pretends to be from the metropolis.**
- (B) though the author feels dated in her access to intellectual ideas, her lack of metropolitan sophistication lets her engage with the ideas with some originality.**
- (C) though the author is aware of the limitedness of her knowledge, she is confident and can hold her own in a crowd. She also proud of her roots in the small town.**
- (D) All the above**

Answer. Though the author feels dated in her access to intellectual ideas, her lack of metropolitan sophistication lets her engage with the ideas with some originality.

Solution. The correct answer is (B) though the author feels dated in her access to intellectual ideas, her lack of metropolitan sophistication lets her engage with the ideas with some originality.

Current Affairs Including General Knowledge

VII. Former Governor of a State and National democratic Alliance (NdA) candidate Droupadi Murmu was elected the 15 th President of india, the first tribal woman to be elected to the position and the youngest as well. She was declared elected on thursday after four rounds of counting, although she had crossed the half-way mark after the third round of counting itself, posting an unassailable lead over her rival and the Opposition's candidate who conceded the election thereafter. Prime minister Narendra modi was the first to greet ms. murmu at her residence in New delhi after the third round of counting showed that she had crossed the half-way mark. Ms. Murmu hails from the Santhal tribe and was born in the district of mayurbhanj, coming up the hard way in life, graduating and teaching in Odisha before entering electoral politics at the local body level and later being elected MLA and serving as a minister in the biju Janata dal-bJP coalition government from 2000 to 2004. She remained an mLA till 2009, representing rairangpur in Odisha, a town that burst into celebrations since her name was announced as a candidate for the post of President of india. She was known to intervene in stopping amendments to the Chota Nagpur tenancy Act that was being brought in by the bJP government of raghubar das, which involved changing land use in tribal areas. [excerpt taken and edited from "Droupadi Murmu elected 15 th President of india", the Hindu]

Question 31. Before Droupadi Murmu, India had only one other female president, Pratibha Patil. When did Patil serve as the President of india?

- (A) 2007-2012**
- (B) 2005-2010**
- (C) 2012-2017**
- (D) 2006-2011**

Answer. 2007-2012

Solution. The correct answer is (A) 2007-2012.

Question 32. President Murmu has earlier served as a Governor of which State?

- (A) Odisha
- (B) bihar
- (C) Jharkhand
- (D) West bengal

Answer. Jharkhand

Solution. President Murmu has earlier served as a Governor of Jharkhand, so the correct answer is (C) Jharkhand.

Question 33. The first presidential election was held by the election Commission in which year?

- (A) 1952
- (B) 1950
- (C) 1948
- (D) 1949

Answer. 1952

Solution. The first presidential election was held by the Election Commission in the year 1952, so the correct answer is (A) 1952.

Question 34. The Rashtrapati bhavan was formerly known as the Viceroy's palace (during colonial times). Where did the Governor General reside before the transfer of the British capital to Delhi in 1911?

- (A) belvedere House**
- (B) raisina Palace**
- (C) Secretariat building**
- (D) Writers' building**

Answer. Belvedere House

Solution. Before the transfer of the British capital to Delhi in 1911, the Governor General resided at the Belvedere House. So the correct answer is (A) Belvedere House.

Question 35. Who among the following was a candidate in the elections for the Vice President of India in 2022?

- (A) R. Venkataraman**
- (B) Yashwant Sinha**
- (C) M. Venkaiah Naidu**
- (D) Margaret Alva**

Answer. Margaret Alva

Solution. The correct answer is (D) Margaret Alva

Question 36. Voting in an indian Presidential election is through:

- (A) A first-past-the-post system through a single transferable vote cast in a secret ballot**
- (B) A proportional representation system through a single transferable vote cast in a secret ballot**
- (C) A proportional representation system through a single transferable vote cast in an open ballot**
- (D) A first-past-the-post system through a single transferable vote cast in an open ballot**

Answer. A proportional representation system through a single transferable vote cast in a secret ballot

Solution. Voting in an Indian Presidential election is done through a system of proportional representation and through a single transferable vote cast in a secret ballot. So the correct option is:

(B) A proportional representation system through a single transferable vote cast in a secret ballot.

Question 37. Who was the first dalit to hold the office of the President of india?

- (A) ram Nath Kovind
- (B) V.V. Giri
- (C) Neelam Sanjiva reddy
- (D) Kocheril raman Narayanan

Answer. Kocheril raman Narayanan

Solution. The first Dalit to hold the office of the President of India was Kocheril Raman Narayanan. So the correct option is:

(D) Kocheril Raman Narayanan.

Legal Reasoning

Assume that the statements in the passages are the applicable law.

XII. Quashing a case of cruelty that was filed against a man by his wife, the bombay High Court said that if a married lady is asked to do household work for the family, it cannot be said that she is treated “like a maid servant”. the Court was hearing an application by the husband and his parents seeking that proceedings against them are quashed. A First information report (“FIR”) was filed against the trio in September 2020, around nine months after the marriage, alleging that they hounded the woman for money to purchase a car, harassed her mentally and physically and treated her like a maid servant.

examining the evidence, the Court found that there was no merit to the woman’s allegations. the Court said that though the Fir says that she was treated properly for about a month and then “like a maid servant”, there are no details of what this meant. the Court added: “if a married lady is asked to do household work for the purpose of the family, it cannot be said that it is like a maid servant.” the Court held that the mere use of the word harassment “mentally and physically” in the Fir is not sufficient to constitute an offence Section 498A of the indian Penal Code (“IPc”), which punishes the husband, or a relative of the husband of a woman who subjects her to cruelty in any way. it is interesting to note that Section 498A of the iPC also provides that if a married woman is actually treated like a ‘maid servant’, it would be an offence under that Section.

[extracted, with edits and revisions, from “if Wife is Asked to do Household Work, does Not mean She is treated Like maid: bombay HC”, The Wire]

Question 66. Ashwin and Ashima were married in February 2020. In March 2020, Ashwin asked Ashima to take care of all their household work, such as cooking, cleaning, and other domestic chores, as he was very busy with his professional responsibilities. Ashima claims that this amounts to treating her like a maid servant and constitutes an offence under Section 498A of the iPC. Applying the Bombay High Court decision, is she likely to succeed?

(A) Yes, since Ashwin had only asked Ashima to do their household work, and not for others.

(B) No, since Ashwin had only asked Ashima to do their household work, and not for others.

(C) Yes, since Ashwin had asked Ashima to do household work for themselves as well as others.

(D) No, since treating a married woman like a maid servant would not amount to an offence under that Section.

Answer. No, since Ashwin had only asked Ashima to do their household work, and not for others.

Solution. According to the Bombay High Court's decision as described in the passage, merely asking a married lady to do household work for the family would not be considered as treating her "like a maid servant." The Court held that this would not constitute an offense under Section 498A of the IPC.

So, based on the Bombay High Court's decision, Ashima is unlikely to succeed in her claim because asking her to do household work, even for themselves, is not treated as an offense under Section 498A of the IPC. Therefore, the correct answer is: (B) No, since Ashwin had only asked Ashima to do their household work, and not for others.

Question 67. In April 2020, Ashwin's friend Rakesh visits Ashwin and Ashima's home, and stays with them for a few days. During his visit, he is very mean to Ashima, and uses abusive language with her. He also threw a plate at her one evening when he was unhappy with the

meal that she had prepared. Ashima now claims that Rakesh has committed an offence under Section 498A of the IPC. Is she likely to succeed?

- (A) No, since Rakesh's actions were perfectly justifiable for a man who does not get a well-cooked meal.
- (B) Yes, since Rakesh's use of abusive language and throwing the plate at Ashima clearly amounts to cruelty.
- (C) No, since Rakesh is not her husband, nor is he related to Ashwin.
- (D) Yes, since Rakesh was staying at Ashwin and Ashima's home at the time of the incident.

Answer. No, since Rakesh is not her husband, nor is he related to Ashwin.

Solution. Based on the information provided in the passage and the context of Section 498A of the IPC, Ashima is unlikely to succeed in her claim against Rakesh for an offense under Section 498A. Section 498A specifically punishes the husband or a relative of the husband of a woman who subjects her to cruelty. Rakesh is neither Ashwin's husband nor a relative of Ashwin, so he does not fall under the scope of Section 498A.

Therefore, the correct answer is:

- (C) No, since Rakesh is not her husband, nor is he related to Ashwin.

Question 68. Frustrated and upset with her marriage, Ashima applies for and is granted a divorce from Ashwin in November 2020. Since she and Ashwin had been friends for many years before they got married, she stays in touch with him. She moves into her own apartment and starts going to office regularly at a new job. Ashwin is very upset at this and starts treating Ashima very cruelly. Ashima again claims that Ashwin has committed an offence under Section 498A of the IPC. Is she right?

- (A) Yes, since Ashwin has, as we are told, treated her cruelly.
- (B) Yes, since Ashwin has been her husband.
- (C) No, since Ashwin was understandably upset at Ashima's behaviour.

(D) No, since she is no longer married to Ashwin.

Answer. No, since she is no longer married to Ashwin.

Solution. In this scenario, Ashima is no longer married to Ashwin as they have obtained a divorce. Section 498A of the Indian Penal Code specifically pertains to cruelty by a husband or a relative of the husband towards a woman. Since Ashima and Ashwin are no longer married, and Ashwin is no longer her husband, Section 498A would not apply to this situation.

Therefore, the correct answer is:

(D) No, since she is no longer married to Ashwin.

Question 69. Assume that the government passes a new law in January 2021, called the Protection of Rights of Married Women Act, 2021 (the “PoMWA”), according to which, asking a married woman to take care of household chores would be an offence. the PomWA also provides that if a man commits such an offence, he would have to pay compensation to the woman. the PomWA even applies to actions that were committed any time in the three years prior to the new law coming into force, and even if the man and woman involved in the matter were no longer married. upon hearing about this new law, Ashima once again alleges that Ashwin has committed an offence under Section 498A of the iPC, and claims compensation under the PomWA for his actions. is she right, and will she succeed?

(A) Ashima is right about Ashwin committing an offence under Section 498A of the iPC, but she will not get compensation under the PomWA.

(B) Ashima will get compensation under the PomWA, but she is not right about Ashwin committing an offence under Section 498A of the iPC.

(C) Ashima will get compensation under the PomWA, and she is also right about Ashwin committing an offence under Section 498A of the iPC.

(D) Ashima will neither get compensation under the PomWA, nor is she right about Ashwin committing an offence under Section 498A of the iPC.

Answer. Ashima will get compensation under the PomWA, but she is not right about Ashwin committing an offence under Section 498A of the iPC.

Solution. In this hypothetical scenario with the newly passed Protection of Rights of Married Women Act, 2021 (PoMWa), asking a married woman to take care of household chores is considered an offense, and the law allows for compensation.

The correct answer is:

(C) Ashima will get compensation under the PoMWa, and she is also right about Ashwin committing an offense under Section 498A of the IPC.

Under the PoMWa, Ashima can claim compensation for Ashwin's actions, and Section 498A of the IPC applies, as it deals with cruelty by a husband or a relative of the husband towards a woman. Since Ashwin's actions would fall under the PoMWa, she can both seek compensation under this new law and claim an offense under Section 498A of the IPC.

Question 70. Assume that in march 2021, the government changes Section 498A of the iPC. The effect of this change is that asking a married woman to do household chores — even for their own family — by herself would be considered cruelty, and therefore, an offence under the Section. Some days after this change comes into effect, Shamita, Ashima’s friend at work, tells her that her husband has been forcing her to do all the household work by herself. Ashima tells Shamita that her husband’s actions would amount to an offence under Section 498A of the iPC, even though Ashima herself has been unsuccessful in having Ashwin convicted under that Section in the past. is Ashima’s advice to Shamita correct?

(A) Yes, since Section 498A has now been changed, and Shamita's husband's actions would now be an offence under the changed Section 498A.

(B) No, since Ashima has been unsuccessful in having Ashwin convicted under that Section in the past.

(C) Yes, since the passing of the Protection of married Women Act has resulted in Shamita's husband's actions being made illegal.

(D) No, since Ashima is only Shamita's friend, and only the married woman herself can file a complaint under Section 498A of the iPC.

Answer. Yes, since Section 498A has now been changed, and Shamita's husband's actions would now be an offence under the changed Section 498A.

Solution. Assuming that Section 498A of the IPC has been changed in March 2021 to include asking a married woman to do household chores as cruelty, which is now considered an offense, the answer is:

(A) Yes, since Section 498A has now been changed, and Shamita's husband's actions would now be an offense under the changed Section 498A.

The change in the law now makes it an offense to force a married woman to do household chores, even for their own family, as per the hypothetical scenario. The previous outcome of Ashima's case against Ashwin doesn't affect the applicability of the changed law in Shamita's case.

Logical Reasoning

XX. The depreciation of an economy's currency is not a matter of concern in itself. The decline in value against major currencies has to be viewed within a set of macroeconomic factors. the recent depreciation of the Indian rupee is a case in point. the rupee has been depreciating for a long time. What are of concern now are the rate at which the depreciation is occurring and the underlying factors causing the change. The russia-ukraine war has disrupted supply chains causing commodity prices to rise, leading to a worldwide hardening of inflationary trends. This, in turn, has caused major central banks to raise interest rates, forcing investors back to the safe haven of the uS dollar. For India, these headwinds from the global economy have caused several problems. the rise international prices, especially of crude oil, has led to a higher import bill and, hence, a greater demand for dollars. Higher interest rates in developed country markets have caused a significant outflow of portfolio investments from India, aggravating the already climbing demand for dollars from a rising import bill. By May 2022, foreign institutional investors had pulled out rs. 1.50 lakh crore from Indian markets. In the face of these pressures, the rupee, left to itself, would decline in value as the rupee-price of a dollar would increase substantially. One way the reserve bank of india could stem the tide would be to sell off dollars in the market to ease the supply situation. However, this would mean that while the value of the rupee could be contained, the nation's foreign exchange kitty would start to erode further. The RBI has been doing exactly that. The challenge before the RBI is this: how much to let the rupee depreciate and how much to intervene to prop it up? too much depreciation would raise domestic inflation rates as the rupee-price of imports, especially oil, would raise costs of production. it could trigger a rise in policy-controlled interest rates while closely monitoring inflationary expectations. the biggest challenge is to navigate unpredictable

international economic shocks in the near future. The Indian economy's health is not exactly at its best. exports may not be able to take advantage of a falling rupee since international demand is expected to stagnate. india's growth and employment situations are yet to stabilize to what they were about a decade ago. The RBI has difficult choices: controlling inflation versus stimulating growth and stabilising the rupee without severely diminishing the economy's foreign exchange kitty. [extracted, with edits and revisions, from "Stiff test: editorial on depreciation of rupee & challenges before rbi", The Telegraph]

Question 106. Which of the following is the author most likely to agree with?

- (A) it is a major cause for concern if an economy's currency is depreciating.
- (B) Currency depreciation is not a reason for worry in itself, but if macroeconomic factors are not good, there may be a cause for concern.
- (C) the fact that the indian rupee is witnessing a decline in value against major currencies is very worrisome.
- (D) A central bank must always do everything in its power to stem the slightest depreciation of an economy's currency.

Answer. Currency depreciation is not a reason for worry in itself, but if macroeconomic factors are not good, there may be a cause for concern.

Solution. The author is most likely to agree with:

(B) Currency depreciation is not a reason for worry in itself, but if macroeconomic factors are not good, there may be a cause for concern.

The passage emphasizes that the depreciation of a currency is not concerning in itself but should be viewed in the context of macroeconomic factors.

Question 107. Based on the author's arguments, which of the following, if true, would reduce the decline in value of the rupee?

- (A) Appointing a new Governor for the rbi who has a better sense of how to control inflationary trends.**
- (B) A steep increase in commodity prices and the continued disruption of supply chains.**
- (C) A reduction in worldwide inflationary trends and the reduction of interest rates in developed country markets.**
- (D) The RBI buys as many dollars as possible from the market.**

Answer. A reduction in worldwide inflationary trends and the reduction of interest rates in developed country markets.

Solution. Based on the author's arguments, the following option, if true, would reduce the decline in value of the rupee:

- (C) A reduction in worldwide inflationary trends and the reduction of interest rates in developed country markets.**

A reduction in worldwide inflationary trends and lower interest rates in developed countries would reduce the outflow of foreign investments and lower the demand for dollars, which could help stabilize or appreciate the value of the rupee.

Question 108. Which of the following, if true, would most weaken the author's arguments?

- (A) The Indian economy has been affected by global inflationary trends and the increase of interest rates in developed country markets.**
- (B) Since developed country markets have increased their interest rates, global investors have pulled their investments out of other economies, and routed them to such developed country markets.**
- (C) As the demand for uS dollars increases, it is likely the rupee-price of a dollar would increase substantially.**

(D) The Indian economy and currency are highly protected and have been insulated from the effects of global inflationary trends and the increase of interest rates in developed country markets.

Answer. The Indian economy and currency are highly protected and have been insulated from the effects of global inflationary trends and the increase of interest rates in developed country markets.

Solution. The statement that would most weaken the author's arguments is:

(D) the Indian economy and currency are highly protected and have been insulated from the effects of global inflationary trends and the increase of interest rates in developed country markets.

If the Indian economy and currency were indeed highly insulated from global economic trends, it would suggest that the concerns raised by the author regarding the depreciation of the Indian rupee may not be as significant as portrayed, and there may be less reason to worry about the factors influencing the rupee's decline.

Question 109. Which of the following, if true, would most strengthen the author's arguments for why Indian exports may not be able to take advantage of a falling rupee?

(A) economies across the world are witnessing a slowdown, and in such economies, demand for imports decreases substantially.

(B) economies across the world are booming, and there is an increasing demand for Indian exports.

(C) A reduction in the volume of exports would be more than offset by the increased value of dollars that Indian exporters would earn.

(D) Countries across the world have managed to find ways to insulate themselves from the effects of the russia-ukraine war and will need a lot of indian imports to sustain their new growth models.

Answer. Economies across the world are witnessing a slowdown, and in such economies, demand for imports decreases substantially.

Solution. The statement that would most strengthen the author's arguments for why Indian exports may not be able to take advantage of a falling rupee is:

(A) economies across the world are witnessing a slowdown, and in such economies, demand for imports decreases substantially.

If economies around the world are experiencing a slowdown, it would reduce the demand for imports, which could affect the demand for Indian exports. This would align with the author's argument that the depreciation of the Indian rupee might not necessarily lead to increased exports if global demand is stagnating.

Question 110. Based on the author's arguments, which of the following must necessarily be true?

(A) the continuing depreciation of the Indian rupee at its current rate, coupled with worldwide inflationary trends, would result in immense political instability in India, and consequently, in all of South Asia.

(B) if nothing else is done, the rise of interest rates in developed country markets, coupled with hardening of inflationary trends across the world, will result in a fall in the value of the rupee against the dollar.

(C) if inflationary trends continue to harden across the world, and if interest rates in developed country markets continue to rise, portfolio investors will increase their investments in India, and this will have a positive impact on India's foreign exchange reserves.

(D) if nothing else is done, the rise of interest rates in developed country markets, coupled with hardening of inflationary trends across the world, will result in a rise in the value of the rupee against the dollar.

Answer. If nothing else is done, the rise of interest rates in developed country markets, coupled with hardening of inflationary trends across the world, will result in a fall in the value of the rupee against the dollar.

Solution. Based on the author's arguments, the following statement must necessarily be true:

(B) if nothing else is done, the rise of interest rates in developed country markets, coupled with the hardening of inflationary trends across the world, will result in a fall in the value of the rupee against the dollar.

The author argues that the rise in interest rates in developed countries, along with the hardening of inflationary trends worldwide, has caused the rupee to depreciate. Therefore, if nothing else is done to address these factors, it would lead to a fall in the value of the rupee against the dollar.

Question 111. Which of the following is the author most likely to agree with?

(A) the rbi must not focus solely on preventing the depreciation of the rupee, as that may result in negative impacts on other aspects of the economy.

(B) the rbi must focus solely on preventing the depreciation of the rupee at all costs, since it is by far the most important indicator of the health of the indian economy.

(C) Periodic inflationary trends are normal in any economy, and the RBI need not worry about the inflationary effects in the Indian economy caused by the depreciation of the rupee.

(D) the rbi need not do anything to reduce the rate of depreciation of the rupee, since the depreciation of an economy's currency is not a matter of concern in itself.

Answer. The RBI must not focus solely on preventing the depreciation of the rupee, as that may result in negative impacts on other aspects of the economy.

Solution. The author is most likely to agree with:

(A) The RBI must not focus solely on preventing the depreciation of the rupee, as that may result in negative impacts on other aspects of the economy.

The author's argument is that while the depreciation of the rupee is a concern, focusing solely on preventing its depreciation can have negative impacts on other aspects of the Indian economy. The author emphasizes the need to consider a set of macroeconomic factors and strike a balance between controlling the depreciation and addressing other economic challenges.

Quantitative Techniques

XXV. The findings of Oxfam India's latest 'india discrimination report 2022' indicate that there is a significant gap in the earnings between men and women in the case of regular and self-employment in urban areas. The lower wages for salaried women are due to 67 percent of discrimination and 33 percent due to lack of education and work experience. The average earning is Rs. 16,000 for men and merely Rs. 6,600 for women in urban areas in self-employment. The average earning of men is Rs. 19,800 as against Rs. 15,600 for women in regular/salaried employment in urban areas. Also, in urban areas The average earnings of men (Rs. 9,000) are significantly higher than women (Rs. 5,700) even in casual employment. Apart from women, historically oppressed communities along with religious minorities also continue to face discrimination in accessing jobs, livelihoods, and agricultural credit. the mean income for Scheduled Castes or Scheduled tribes ("sc/st") persons in urban areas who are in regular employment is Rs. 15,300 as against Rs. 20,300 for persons belonging to the non-SC/St category. The average earning of self-employed workers is Rs. 15,900 for non-SC/Sts and Rs. 10,500 for SC/Sts. The average monthly earning for the SC/St workers in casual work is Rs. 8,000 below the corresponding figure of Rs. 8,600 for the non-SC/St. [data source: Oxfam india] [note: Values have been approximated to the nearest hundred]

Question 136. Choose the correct option:

- (A) Women's average earnings in urban areas in casual work is 30% lower than that of men**
- (B) men's average earning in urban areas in self-employment is nearly 2.5 times that of earnings of women**
- (C) in casual work, women earn more in rural areas than in urban areas**
- (D) the difference in earnings of men and women in regular/salaried employment in urban areas is Rs. 3,500**

Answer. Men's average earning in urban areas in self-employment is nearly 2.5 times that of earnings of women

Solution. The correct option is:

(B) men's average earning in urban areas in self-employment is nearly 2.5 times that of earnings of women.

This is evident from the data provided: Men's average earnings in self-employment in urban areas are Rs. 16,000, while women's average earnings in self-employment in urban areas are Rs. 6,600, which is approximately 2.42 times lower.

Question 137. Of the regular employed in urban areas, the earnings of a non-SC/St worker is what percent more than a SC/St worker?

- (A) between 20% and 25%
- (B) Less than 15%
- (C) between 30% and 35%
- (D) more than 35%

Answer. Between 30% and 35%

Solution. To find the percentage difference in earnings between a non-SC/ST worker and a SC/ST worker in regular employment in urban areas, we need to calculate the difference in their average earnings and then express that difference as a percentage of the average earnings of a SC/ST worker.

The average earning of a non-SC/ST worker in regular employment = ₹20,300

The average earning of a SC/ST worker in regular employment = ₹15,300

$$\text{Difference in earnings} = ₹20,300 - ₹15,300 = ₹5,000$$

$$\text{Percentage difference} = (\text{Difference} / \text{SC/ST average earnings}) * 100$$

$$\text{Percentage difference} = (₹5,000 / ₹15,300) * 100 \approx 32.68\%$$

So, the percentage difference in earnings between a non-SC/ST worker and a SC/ST worker in regular employment in urban areas is approximately 32.68%.

(C) Between 30% and 35%.

Question 138. Of those in casual employment, if a man's average earnings was deposited at a rate of 16% simple interest for 20 years, in how many years at the same rate of simple interest a SC/St worker must deposit their average earnings to earn the same amount as a man in 20 years?

- (A) 24 years
- (B) 22.5 years
- (C) 21 years
- (D) 23.2 years

Answer. 23.2 years

Solution. To solve this problem, we'll calculate the amount accumulated by the man over 20 years at a simple interest rate of 16%. Then, we'll determine the time required for a SC/ST worker to accumulate the same amount with their average earnings at the same interest rate.

For the man:

Principal amount (P) = Average monthly earnings of the man in casual employment = ₹9000

Rate of interest (R) = 16% per annum

Time (T) = 20 years

Using the formula for simple interest: $I = (P * R * T) / 100$

Interest earned by the man over 20 years:

$$I = (9000 * 16 * 20) / 100 = ₹28,800$$

Total amount accumulated by the man:

$$\text{Total amount} = \text{Principal amount} + \text{Interest earned} = 9000 + 28,800 = ₹37,800$$

Now, let's determine the time required for a SC/ST worker to accumulate ₹37,800 with their average earnings.

For the SC/ST worker:

Principal amount (P) = Average monthly earnings of the SC/ST worker in casual employment = ₹8000

Rate of interest (R) = 16% per annum

Total amount (A) = ₹37,800

Using the formula: $A = P + (P * R * T) / 100$

$$₹37,800 = 8000 + (8000 * 16 * T) / 100$$

$$₹29,800 = (128000 * T) / 100$$

$$(128000 * T) = ₹29,800 * 100$$

$$T = (29,800 * 100) / 128000$$

$$T \approx 23.2 \text{ years}$$

Therefore, a SC/ST worker must deposit their average earnings for approximately 23.2 years at the same rate of simple interest to earn the same amount as a man in 20 years. The correct answer is (D) 23.2 years.

Question 139. The findings also indicate discrimination as a driving factor behind low Women's Labour Force Participation rate (LFPr) in the country. As per the union ministry of Statistics & Programme implementation (moSPi), LFPr for women in India was only 25.1 percent in 2020-21 for urban and rural women. this is considerably lower than South Africa where the LFPr for women is 46 percent in 2021 as per the latest World bank estimates. The LFPr for women in India has rapidly declined from 42.7 percent in 2004-05 to mere 25.1 percent in 2020-2021 showing the withdrawal of women from the workforce despite rapid economic growth during the same period. in 2019-20, 60 percent of all males aged 15 years and more have regular salaried and self-employed jobs while 19 percent of all similarly aged females get regular and self-employment. use the additional data in the passage above to answer this and the next question. If the number of women in India in 2020-2021 is 670 million which is 24% more than in 2004-2005, what is the difference in the number of women in LFPr 2004-05 and 2021?

- (A) Less than 5 crores
- (B) between 6 and 8 crores
- (C) between 10 and 12 crores
- (D) more than 15 crores

Answer. Between 6 and 8 crores

Solution. To find the difference in the number of women in LFPR (Labor Force Participation Rate) between 2004-05 and 2021, we'll first calculate the number of women in the labor force for each of these years and then find the difference.

1. Calculate the number of women in the labor force in 2004-05: LFPR in 2004-05 = 42.7%
Number of women in LFPR in 2004-05 = (LFPR in 2004-05 / 100) * Total number of women in 2004-05

Given that the total number of women in 2004-05 is X, we can calculate:
Number of women in LFPR in 2004-05 = $(42.7 / 100) * X = 0.427X$

2. Calculate the number of women in the labor force in 2020-2021:
 LFPR in 2020-2021 = 25.1% Number of women in LFPR in
 2020-2021 = (LFPR in 2020-2021 / 100) * Total number of women in
 2020-2021

Given that the total number of women in 2020-2021 is 670 million, we can calculate: Number of women in LFPR in 2020-2021 = (25.1 / 100) * 670 million = 0.251 * 670 million = 168,170,000

3. Find the difference between the two numbers: Difference = Number of women in LFPR in 2004-05 - Number of women in LFPR in 2020-2021
 Difference = 0.427X - 168,170,000

Now, you provided that the number of women in 2020-2021 is 24% more than in 2004-05. This can be expressed as: 670 million = 1.24 * X

Solving for X (the number of women in 2004-05): X = 670 million / 1.24 = 540,322,580 (approximately)

Now, we can substitute this value of X back into the equation for the difference: Difference = 0.427 * 540,322,580 - 168,170,000
 Difference ≈ 231,000,000 - 168,170,000
 Difference ≈ 62,830,000

So, the difference in the number of women in LFPR between 2004-05 and 2020-2021 is approximately 62,830,000.

The difference is more than 60 million, which corresponds to option (B) between 6 and 8 crores.

Question 140. In 2019-20, if the number of males aged 15 years and more is 76% of the total male population and the number of females aged 15 years and more is 72% of the total female population and the total male population is 1.05 times the total female population, what is the ratio of females to males aged 15 years and more that have regular salaried and self-employed jobs?

(A) 2 : 7

(B) 3 : 10

(C) 5 : 9

(D) 1 : 3

Answer. 2 : 7

Solution. To find the ratio of females to males aged 15 years and more that have regular salaried and self-employed jobs, we need to calculate the number of females and males in this age group who have regular salaried and self-employed jobs.

Let's denote:

- F = Total female population
- M = Total male population
- F_{15} = Number of females aged 15 years and more
- M_{15} = Number of males aged 15 years and more

We are given that:

1. The total male population (M) is 1.05 times the total female population (F), so $M = 1.05F$.
2. The number of males aged 15 years and more is 76% of the total male population, so $M_{15} = 0.76M$.
3. The number of females aged 15 years and more is 72% of the total female population, so $F_{15} = 0.72F$.

Now, let's calculate the number of males and females aged 15 years and more who have regular salaried and self-employed jobs. From the provided data, we can calculate these percentages:

- Percentage of males aged 15 years and more with regular and self-employed jobs = 60% (from the statement: "60 percent of all males aged 15 years and more have regular salaried and self-employed jobs").

- Percentage of females aged 15 years and more with regular and self-employed jobs = 19% (from the statement: "19 percent of all similarly aged females get regular and self-employment").

Now, we can calculate the actual numbers:

- Number of males aged 15 years and more with regular and self-employed jobs (M_{jobs}) = $0.60 * M_{15}$
- Number of females aged 15 years and more with regular and self-employed jobs (F_{jobs}) = $0.19 * F_{15}$

Now, let's substitute the values and ratios:

$M = 1.05F$ (from statement 1) $M_{15} = 0.76M$ (from statement 2) $F_{15} = 0.72F$ (from statement 3)

Now, let's calculate the ratios:

$$M_{\text{jobs}} = 0.60 * M_{15} \quad F_{\text{jobs}} = 0.19 * F_{15}$$

Now, let's calculate the ratio of females to males with regular salaried and self-employed jobs:

$$(F_{\text{jobs}} / M_{\text{jobs}}) = (0.19 * 0.72F) / (0.60 * 0.76M)$$

$$(F_{\text{jobs}} / M_{\text{jobs}}) = (0.1368F) / (0.456M)$$

Now, we can simplify the ratio by dividing both the numerator and denominator by 0.456 (which is a common factor):

$$(F_{\text{jobs}} / M_{\text{jobs}}) = (0.1368F / 0.456M)$$

$$(F_{\text{jobs}} / M_{\text{jobs}}) = (0.3F / M)$$

Now, substitute $M = 1.05F$ (from statement 1):

$$(F_{\text{jobs}} / M_{\text{jobs}}) = (0.3F / 1.05F)$$

$$(F_{\text{jobs}} / M_{\text{jobs}}) = 0.3 / 1.05$$

Now, simplify the ratio:

$$(F_jobs / M_jobs) = 2 / 7$$

So, the ratio of females to males aged 15 years and more with regular salaried and self-employed jobs is 2 : 7, which corresponds to option (A).

XXVI. World fruit production went up 54 percent between 2000 and 2019, to 883 million tonnes. Five fruit species accounted for 57 percent of the total production in 2019, down from 63 percent in 2000. use the data in the passage to answer the following questions. [data source: FAO]

Question 141. What was the world fruit production in 2000?

- (A) 474 million tonnes
- (B) 517 million tonnes
- (C) 573 million tonnes
- (D) 406 million tonnes

Answer. 573 million tonnes

Solution. The passage states that world fruit production went up 54 percent between 2000 and 2019 to 883 million tonnes. To find out the world fruit production in 2000, we need to calculate the value before the 54 percent increase.

Let's assume X represents the world fruit production in 2000. After a 54 percent increase, the total production in 2019 became 883 million tonnes. Mathematically, we can express this as:

$$X + 0.54X = 883$$

Combining like terms, we get:

$$1.54X = 883$$

To isolate X, we divide both sides of the equation by 1.54:

$$X = 883 / 1.54$$

Calculating this value gives us:

$$X \approx 573 \text{ million tonnes}$$

Therefore, the world fruit production in 2000 was approximately 573 million tonnes. Thus, the answer is (C) 573 million tonnes.

Question 142. Of the five fruit species mentioned in the passage above, the share of bananas and plantains increased by 1 percentage point between 2000 and 2019, watermelons in 2019 was 6 percentage points lower than bananas and plantains in 2000, apples remained stable at 10%, and the percentage share of oranges and grapes reduced to half of bananas in 2019 . What was the percentage of bananas and plantains in 2019?

- (A) 17%
- (B) 18%
- (C) 16%
- (D) 21%

Answer. 18%

Solution. Let's break down the information given in the passage and solve the question step by step:

1. Total fruit production in 2000: 100%
2. Total fruit production in 2019: Increased by 54% to 883 million tonnes.

Now, let's analyze the changes in the five fruit species mentioned:

1. Bananas and plantains: The share increased by 1 percentage point between 2000 and 2019.

Let's denote the share of bananas and plantains in 2000 as "x."

In 2019, the share of bananas and plantains would be "x + 1."

2. Watermelons: In 2000, the share of bananas and plantains was higher than watermelons by 6 percentage points.

In 2019, the share of watermelons would be " $x + 1 - 6 = x - 5$."

3. Apples: The share of apples remained stable at 10% between 2000 and 2019.

4. Oranges and grapes: The share of oranges and grapes reduced to half of bananas in 2019.

In 2019, the share of oranges and grapes would be " $(x + 1) / 2$."

To find the total share of the five fruit species in 2019, we can sum up the individual shares: $(x + 1) + (x - 5) + 10 + (x + 1) / 2 = 57$

Simplifying the equation:

$$2(x + 1) + 2(x - 5) + 20 + (x + 1) = 114$$

$$2x + 2 + 2x - 10 + x + 1 = 114$$

$$5x - 7 = 114$$

$$5x = 121$$

$$x = 24.2$$

Since we're interested in the share of bananas and plantains in 2019, we substitute the value of x into " $(x + 1)$ ":

$$(24.2 + 1) = 25.2$$

Rounded to the nearest whole number, the percentage of bananas and plantains in 2019 is 25%.

Among the provided answer choices, the closest option is (B) 18%. However, none of the given options match the calculated percentage of bananas and plantains in 2019. It seems there may be an error in the provided answer choices or the calculations.