INSTRUCTIONS

Answer must be written in the medium specified in the Admission Certificate issued you, which must be stated clearly on the cover of the answer book in the space provided for the purpose. No Marks will be given for the answers written in a medium other than that specified in the Admission Certificate.

Candidates should attempt all questions strictly in accordance with the instructions given under each question.

The number of marks carried by each question is indicated at the end of the question.
1. **Answer any two of the following in about 250 words each.**

   \(20 \times 2 = 40\)

(a). Discuss the interests of USA along with China in their aspirations for Asia Pacific security. What are the hindrances in their ways?

(b). Recently India has expanded her relations with various smaller countries in her neighborhood. Evaluate the footsteps of Indian foreign policy in this context.

(c). Critically analyze the effects of Palestinian statehood bid on internal Palestinian Politics and the global cause for a Palestine State.

2. **Answer any three of the following in about 150 words each:**

   \(12 \times 3 = 36\)

(a). Critically analyze the status of fight against hunger at global level in the light of Global Hunger Index 2010 (GHI).

(b). Comment on the contribution of India in tackling piracy in the Gulf of Aden.

(c). What are the objectives of South Asian Free Trade Area (SAFTA)? Evaluate its achievements in the light of recent summit.

(d). Write a note on Shanghai Co-operation Organization (SCO), marking the growing interests of India in it. Also, describe the outcomes of its last summit.

3. **Answer any two of the following in about 150 words each:**

   \(12 \times 2 = 24\)

(a). Comment on the Third World demand for a New International Economic Order.

(b). FDI has now been opened to Indian retail sector. Evaluate its role and consequences.

(c). Inequality is said to be predominant within the structure of WTO. Then, how can we expect it to provide a fair trading platform to the member nations?
4. Answer any two of the following in about 250 words each.

20 x 2 = 40

(a). “Ever rising price of petrol and petroleum products has become the most irritating factor for both, the government as well as citizens as it dictates the prices of most of other commodities.” What is your opinion about the introduction of APM (administered price mechanism) in petroleum sector? Will it help?

(b). What are the measures taken by the govt. of India to strengthen MSP (Minimum support price)? How does it seek to serve the best of the interests of Indian farmers? What are the ground realities?

(c). What are the challenges in tackling the issue of black money in India? Suggest some effective measures to deal with the problem.

5. Answer any three of the following in about 100 words each:

10 x 3 = 30

(a). Evaluate the significance of TAPI project in strengthening the geo-economic status of India.

(b). Write a short note on Indo-German co-operation in skills development.

(c). North-East India as the gateway to Indo-Bangladesh ties. Comment.

(d). What are the challenges before India to secure permanent membership in UN Security Council? Discuss.

6. Answer any two of the following in about 100 words each:

10 x 2 = 20

(a). Comment on various steps taken by India to tackle Terror financing.

(b). Explain briefly India's demographic dividend. What are the challenges before India in garnering this dividend?

(c). Increasing Indian export is a sign of a robust Domestic Economy. Comment.
7. Answer any four of the following in about 100 words each:

(a). Give an account of the carbon projects in India, registered under CDM (clean development mechanism). Discuss the prospects of carbon trading in India.

(b). What is OTEC? Discuss its significance for energy security in India.

(c). What do you understand by 'Dementia'? Suggest some effective measures to address this challenge with special reference to the latest Dementia India Report.

(d). Briefly analyze India's efforts to safeguard its traditional knowledge.

(e). What do you mean by plant tissue culture? Explain its uses in Indian agriculture sector.

8. Answer any six of the following in not more than 50 words each.

(a). Ever Greening

(b). DNA barcoding

(c). Stealth Technology

(d). Artificial Leaf

(e). Electrically Conducting Polymers (ECPs)

(f). Dead water zones

(g). Urban Forestry

9. (a). Consider the following Table:

<table>
<thead>
<tr>
<th>Factories</th>
<th>Average wage Per Week</th>
<th>Standard Deviation (SD)</th>
<th>No. of Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>34.5</td>
<td>5</td>
<td>476</td>
</tr>
<tr>
<td>B</td>
<td>28.5</td>
<td>4.5</td>
<td>524</td>
</tr>
</tbody>
</table>

(a) Which of the 2 factories spend more on wages?

(b) Which of the 2 factories has more stability in payment of the wages?
(b). In a mountaineering trip organized by a college, there were in all 100 persons including 4 mountaineering experts hired by the college on payment of Rs. 50 each. There were 80 students, each of whom paid Rs. 20. Members of the teaching staff paid Rs. 50 each. The number of servants was 6 of whom 2 were women. Servants were not charged at all. After adding the Principal contribution and subtracting the fee to be paid to the mountaineering experts, the average contribution from the troupe of 100 persons comes out to be Rs. 20. The number of females in the troupe was 24% of whom, 2 ladies were teaching staffs.

(i) Tabulate the above information.

(ii) What was the number of girl students?

(iii) What was the Principal’s contribution?

10.(a). A basket contains 26 letters of English Alphabet. You are asked to draw one letter randomly and if the drawn letter is M, you will be given a prize of Rs. 1,000 and if it is X, Rs. 500 and if, Q Rs. 200 and if T, Rs. 100. Now

(a) What is the probability that you will win at least Rs. 100/-?

(b) What is the probability that you will not win any prize.

(c) What is the probability of your winning the top-most prize of Rs. 1,000.

10.(b) A speaks truth in 70% cases and B in 40% of the cases. In what percentage of cases, are they likely to contradict each other stating the same fact?

11. In a small town, a survey was conducted in respect of profit made by 1,000 retail shops. The following results were obtained:

<table>
<thead>
<tr>
<th>Profit or loss (in '000 Rs.)</th>
<th>No. of Shops</th>
<th>Profit or loss (in '000 Rs.)</th>
<th>No. of Shops</th>
</tr>
</thead>
<tbody>
<tr>
<td>– 4 to – 3</td>
<td>4</td>
<td>1 to 2</td>
<td>56</td>
</tr>
<tr>
<td>– 3 to – 2</td>
<td>10</td>
<td>2 to 3</td>
<td>40</td>
</tr>
<tr>
<td>– 2 to – 1</td>
<td>22</td>
<td>3 to 4</td>
<td>24</td>
</tr>
<tr>
<td>– 1 to 0</td>
<td>28</td>
<td>4 to 5</td>
<td>18</td>
</tr>
<tr>
<td>0 to 1</td>
<td>38</td>
<td>5 to 6</td>
<td>10</td>
</tr>
</tbody>
</table>

Calculate:

(i) the average profit made by a retail shop.

(ii) total profit made by all the shops, and

(iii) the coefficient of variation of earnings.

12. The runs scored by two batsmen A and B in 5 consecutive matches are given below:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>85</th>
<th>21</th>
<th>62</th>
<th>28</th>
<th>74</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>92</td>
<td>4</td>
<td>59</td>
<td>72</td>
<td>43</td>
</tr>
</tbody>
</table>

Which of the batsmen is more consistent?
13. (a) The table below shows the average monthly household expenditure on different items for the years 2001 to 2004:

<table>
<thead>
<tr>
<th>Item</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>4,500</td>
<td>4,800</td>
<td>5,400</td>
<td>5,700</td>
</tr>
<tr>
<td>Rent</td>
<td>1,800</td>
<td>1,800</td>
<td>2,200</td>
<td>2,300</td>
</tr>
<tr>
<td>Children’s</td>
<td>650</td>
<td>800</td>
<td>1,000</td>
<td>1,200</td>
</tr>
<tr>
<td>Education</td>
<td>2,400</td>
<td>2,600</td>
<td>3,000</td>
<td>3,400</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Represent the above information by suitable diagram.

13. (b) According to the Union Budget 2004-05, the total receipts Rs. 4,77,829 crore can be approximately broken up as follows:

A. Direct Taxes 25%
B. Indirect and other Taxes 32%
C. Non-Tax Revenue Receipts 13%
D. Non-debt Capital Receipts 6%
E. Borrowings and other liabilities 24%

Represent the above by a Pie-diagram.