GENERAL STUDIES (Mains 2011)
TEST (10): Full Length Test 4 – Paper II

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 150 words.  

15x 2 = 30

(a) In the light of recent West Asian Crisis and ten years of 9/11, explain the rise of Shia powers in West Asia

(b) Afghanistan has always been a battleground and can never be a State. Comment

(c) Comment on Indo-China relations with respect to the South China Sea and recent exchanges.

2. Answer any one of the following in about 250 words.  

20x1 = 20

(a) With South Africa joining the BRIC countries, IBSA has become totally an irrelevant body. Express your opinion on the usefulness of IBSA in the future

(b) With the worsening Eurozone Crisis what, according to you, are the available options for EU countries to bailout defaulting Governments.

3. Answer any eight of the following in about 50 words each.  

5x8 = 40

(a) Asian Clearing Union
(b) New Silk Road
(c) Aichi Targets
(d) Nord Stream Pipeline
(e) Indo Kyrgyzstan Recent Exchanges
(f) India- FATF
(g) Pacific Island Forum
(h) Reforms in FATA
(i) Al Shabab

4. Answer any two of the following in about 200 words each:  

20x2= 40

(a). Critically analyze the IMF's warning that the global economy is in “the danger zone”.

(b). what is the role of women in global economy? What steps would you suggest to in order to attain substantive equality between women and men?
(c). Discuss briefly the status of India's efforts vis-a-vis Millennium development goals in the light of Global Monitoring Report 2011.

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

(a). Describe briefly the institutional mechanism for effective implementation of land reforms in India.

(b). How far the BRICS forum holds the promise of providing the solution to the world financial crisis?

(c). Suggest some steps India should take to intensify its stakes in Africa's future while furthering its own economic interests as well.

(d). What are the Basel III norms? How are these norms going to impact Indian banks?

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

(a). "Wireless Next Generation Networks (NGN) are the future of communication". Elaborate.

(b). What is Green Chemistry? How can it help in creating a sustainable environment?

(c). Describe the salient features of "GAGAN". How does it improve upon the present 'GPS'?


(e). what are the neglected tropical diseases (NTDs)? Examine the role of India in controlling these diseases.

7. Answer of the following in about 150 words each: 

(a). Provide a brief analysis of the 15 years of the TRIPS' agreement. How far it has been helpful to the developing countries?
(b). Explain briefly the principles and applications of Holography.

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

(a). "Wireless phone use may increase the risk of brain cancer - WHO". Elaborate.

(b). Examine India's efforts in meeting the challenge posed by the 'e-waste'.

(c). Discuss the attempts being made to stem the decline of biodiversity.

9. The following diagram shows profit per unit earned by two factories during a year. Factory X produces 1,000 units and factory Y produces 600 units. Study the diagram carefully and answer the following questions based on this.

(i) What are the sale prices for each commodities?  1

(ii) Which factory earns more gross profit?  1

(iii) If factory X has 30 workers and factory Y has 24 workers, then which factory is incurring higher expenditure on wages per head?  2

(iv) By what amount the total rent paid by factory X exceeds the total rent paid by factory?  2

(v) Owing to a special subsidy scheme by Government, Factory X is able to reduce its expenditure on raw-material by Rs. 1,000; while the no. of units produced and price per unit remain the, then what will be profit per unit for factory X, now?  2

(vi) What are the percentages of profit for factory X & Y? Which one is higher?  2
(vii) Because of acute shortage of raw-material (used in factory Y) its cost increased sharply from Rs. 4 to Rs. 6 per unit for factory Y. As a result, the factory started incurring loss, what should be the new sale-price for factory Y sufficient enough to neutralise this loss completely without altering the level of production or the raw material?

10. (a) The following table gives the distribution of monthly income of 500 families in a certain city.

<table>
<thead>
<tr>
<th>Monthly Income ('00 Rs.)</th>
<th>No. of Families</th>
<th>Monthly Income ('00 Rs.)</th>
<th>No. of families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below-75</td>
<td>40</td>
<td>300-375</td>
<td>40</td>
</tr>
<tr>
<td>75-150</td>
<td>140</td>
<td>375-450</td>
<td>30</td>
</tr>
<tr>
<td>150-225</td>
<td>180</td>
<td>450 and above</td>
<td>20</td>
</tr>
<tr>
<td>225-300</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Draw a ‘less than’ and a ‘more than’ ogive curve for the above data on the same graph and from these find the median-value.

(b) In a series of 5 observations, the values of mean and variance are 4.4 and 8.24. If three observations are 1, 2 and 6, find the other two?

11. (a) A lady claims that by taking a cup of tea, she can exactly tell whether the milk or the liquor was first added to the cup. Her claim is as to be verified by means of an experiment with 8 cups of tea, 4 made in one way and 4 in the other, and presenting them to the lady for judgement, in a random order.

(i) Calculate the probability that on the hypothesis that the lady has no discrimination power, she would judge correctly all the 8 cups.

(ii) If the 8 cups given to the lady in 4 pairs, each pair consisting cups of each type in a random order, how would the probability of correctly judging with every cup on the same hypothesis be modified? Which of the above two designs are more suitable than the other for testing the lady’s claim and why?

(b) “A batsman X is more consistent in his last 10 innings as compared to another batsman Y. Therefore, X is also a higher run accumulator.” Comment.

<table>
<thead>
<tr>
<th>Sectors</th>
<th>% Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>12.6</td>
</tr>
<tr>
<td>Commercial</td>
<td>7.5</td>
</tr>
<tr>
<td>Industry</td>
<td>62.6</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3.9</td>
</tr>
<tr>
<td>Others</td>
<td>13.4</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

13. For 100 students of a class, the regression equation of marks in statistics \(x\) on the marks in commerce \(y\) is \(3y - 5x + 180 = 0\). The mean marks in commerce is 50 and variance of marks in statistics is \(\frac{2}{3}\)th of the variance of marks in commerce. Find the mean marks in statistics and the coefficient of correlation between marks in the two subjects.