IUJ Research Aptitude Test for Part-Time Ph. D. Programme in Management

The Research Aptitude Test will be for a duration of 2 hours. It will be divided into four sections, as per the details furnished below; each section will carry equal marks (25 each), totaling 100 marks.

Please note that the specimen questions, given below, are only indicative. IUJ reserves the right to change the pattern of questions, without notice.

1. Research Aptitude 25 Marks
   a. Research Meaning, ethics and characteristics

   Sample Question:

   A good researcher lays his hands on

   a. A specific area and tries to understand it in minute details
   b. Several areas and tries to understand them at fundamental level
   c. Any area, as long as manpower and funding are available in plenty
   d. All the above

   Ans. (a)

   b. Type of Research

   Sample Question:

   Which research paradigm is based on the pragmatic view of reality?

   a. quantitative research
   b. qualitative research
   c. mixed research
   d. none of the above

   Ans. (c)

   c. Methods of Research

   Sample Question:

   Which scientific method focuses on testing hypotheses developed from theories?

   a. Deductive method
   b. Inductive method
   c. Hypothesis method
   d. Pattern method

   Ans. (a)
d. Thesis Writing: Its Characteristics & Format

Sample Question:

Where do you provide a step-by-step account of what the researcher and participants did during the research study?

a. Introduction
b. Abstract
c. Procedure
d. Design

Ans. (c)

2. Reading Comprehension 25 Marks

A Passage focused on a functional domain, with questions to be answered. The question paper will have multiple passages, each covering one domain (Marketing, Finance and HR). The candidate can choose to answer any one of them. The questions can be Multiple Choice or Essay type of answer.

Sample Question: Following passage is from ‘Marketing’ domain.

“You are both Director of Marketing and the most senior salesperson for Uniweave, a large producer of Carpets weaving machines sold in Asia. You have just been contacted by Vice President, Purchase for Carpets of India (COI). She has told you that COI is considering the purchase of several large carpets weaving machines, and asked you to visit COI and make an initial presentation about Uniweave machines. Your research on COI tells you that it has been in business for over 100 years. Presently it makes only expensive, hand-woven carpets in traditional Indian styles, and sells these to fine carpet stores throughout Asia. People buy these carpets for their homes and businesses. You have heard that COI is considering expanding its market by offering less expensive, machine-woven carpets, many in non-traditional styles. You also discover that COI was founded in 1910, and has always been owned by the members of the family. At present, six members of that family, ranging from 25 to 83 years old, control the firm.”

a) Describe the strategy you would use with COI to help convert them to as a Uniweave customer. This strategy should address the major distinct issues that are important in this potential purchasing situation. Discuss what these distinct issues are, and then, for each issue, give an example of a specific action you would use to address that issue. (15 Marks)

b) Next, assume you are a consumer who is considering purchasing a fine carpet for your home and has included COI carpets in your consideration set. Discuss four kinds of perceived risk that you might experience, and describe how each would affect you as a prospective carpet purchaser. For each kind of perceived risk, propose a marketing action that COI might take to lower that kind of perceived risk. (10 Marks)
3. **Logical Reasoning**

   a. **Arguments, deductive & inductive research**

      **Sample Question:**

      **Instruction:** Each problem consists of three statements. Based on the first two statements, the third statement may be true, false, or uncertain.

      Blueberries cost more than Strawberries.
      Blueberries cost less than Raspberries.
      Raspberries cost more than both Strawberries and Blueberries.

      If the first two statements are true, the third statement is
      a) True
      b) False
      c) Uncertain

      Ans. (a)

   b. **Logical & Venn diagram**

      **Sample Question:**

      **Instruction:** Each of these questions given below contains three elements. These elements may or may not have some inter linkage. Each group of elements may fit into one of these diagrams at (A), (B), (C), (D) and/or (E). You have to indicate the group of elements which correctly fits into the diagrams.

      Which of the following diagrams indicates the best relation between Women, Mothers and Engineers?

      A. ![Diagram A]
      B. ![Diagram B]
      C. ![Diagram C]
      D. ![Diagram D]

      Ans. (A)

   c. **Inferences**
**Instruction:** Each question given below consists of a statement, followed by two arguments numbered I and II. You have to decide which of the arguments a ‘strong’ argument is and which a ‘weak’ argument is.

Answer
(A) If only argument I is strong
(B) If only argument II is strong
(C) If either I or II is strong
(D) If neither I nor II is strong and
(E) If both I and II are strong

**Sample Question:**
Should all the drugs patented and manufactured in Western countries be first tried out on sample basis, before giving license for sale to general public in India?

1. Yes. Many such drugs require different doses and duration for Indian population and hence it is necessary.
2. No. This is just not feasible and hence cannot be implemented.

Ans. (A)

d. **Analogies**

**Instructions:** A good way to figure out the relationship in a given question is to make up a sentence that describes the relationship between the first two words. Then, try to use the same sentence to find out which of the answer choices completes the same relationship with the third word.

**Sample Question:**
Reptile is to lizard as flower is to

a) petal
b) stem
c) daisy
d) alligator

Ans. (c)

4. **Data Interpretation**

25 marks

a) Interpretation of data

**Sample Question:**

Study the following table and answer the questions based on it.
Expenditure of a Company (in Rupees Lakhs) per Annum Over the given Years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Salary</th>
<th>Fuel and Transport</th>
<th>Bonus</th>
<th>Interest on Loans</th>
<th>Taxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>288</td>
<td>98</td>
<td>3.00</td>
<td>23.4</td>
<td>83</td>
</tr>
<tr>
<td>1999</td>
<td>342</td>
<td>112</td>
<td>2.52</td>
<td>32.5</td>
<td>108</td>
</tr>
<tr>
<td>2000</td>
<td>324</td>
<td>101</td>
<td>3.84</td>
<td>41.6</td>
<td>74</td>
</tr>
<tr>
<td>2001</td>
<td>336</td>
<td>133</td>
<td>3.68</td>
<td>36.4</td>
<td>88</td>
</tr>
<tr>
<td>2002</td>
<td>420</td>
<td>142</td>
<td>3.96</td>
<td>49.4</td>
<td>98</td>
</tr>
</tbody>
</table>

The total amount of bonus paid by the company during the given period is approximately what percent of the total amount of salary paid during this period?

a) 0.1%
b) 0.5%
c) 1%
d) 1.25%

Ans. (c)

b) Mapping analysis of data

Sample Question:

The following pie-chart shows the percentage distribution of the expenditure incurred in publishing a book. Study the pie-chart and the answer the questions based on it.

Various Expenditures (in percentage) Incurred in Publishing a Book

- Promotion Cost: 10%
- Transportation Cost: 10%
- Royalty: 15%
- Printing Cost: 20%
- Binding: 20%
- Paper Cost: 25%
If for a certain quantity of books, the publisher has to pay Rs. 30,600 as printing cost, then what will be amount of royalty to be paid for these books?

a) Rs. 19,450  
b) Rs. 21,200  
c) Rs. 22,950  
d) Rs. 26,150

Ans. (c)

c) **Analysis & Tools for data analysis**

*Sample Question:*
Which technique does help in answering – which independent factor(s) has/have led to a particular outcome?

a) Correlation  
b) Regression  
c) Coefficient of Variation  
d) Standard Deviation

Ans. (a)

d) **Quantitative &Qualitative research**

*Sample Question:*
Match the correct titles to descriptions:

**Titles**
(a) Depth interviews  
(b) Focus groups

**Descriptions**
(i) Research of this sort is almost invariably done face-to-face. Where eight or nine relevant people are brought together for an hour, or perhaps an hour and a half, to discuss something – a new product, an ad campaign, the local authority’s services for the elderly, or whatever. The respondents’ different views and experiences combine to create a unique and useful conversation.

(ii) Individual interviews often carried out after a questionnaire to question some of the more interesting information collected. People are asked to expand on the findings and express their feelings more clearly.

Ans. The correct matches are:

(a) and (ii): Depth interviews are individual interviews.

(b) and (i): Focus groups, as the name suggests, are when a group of eight or so people are brought together to discuss a topic.