

Joint CSIR-UGC NET for JRF and Eligibility for Lectureship

Section-A

General Aptitude

Volume-1

Contents

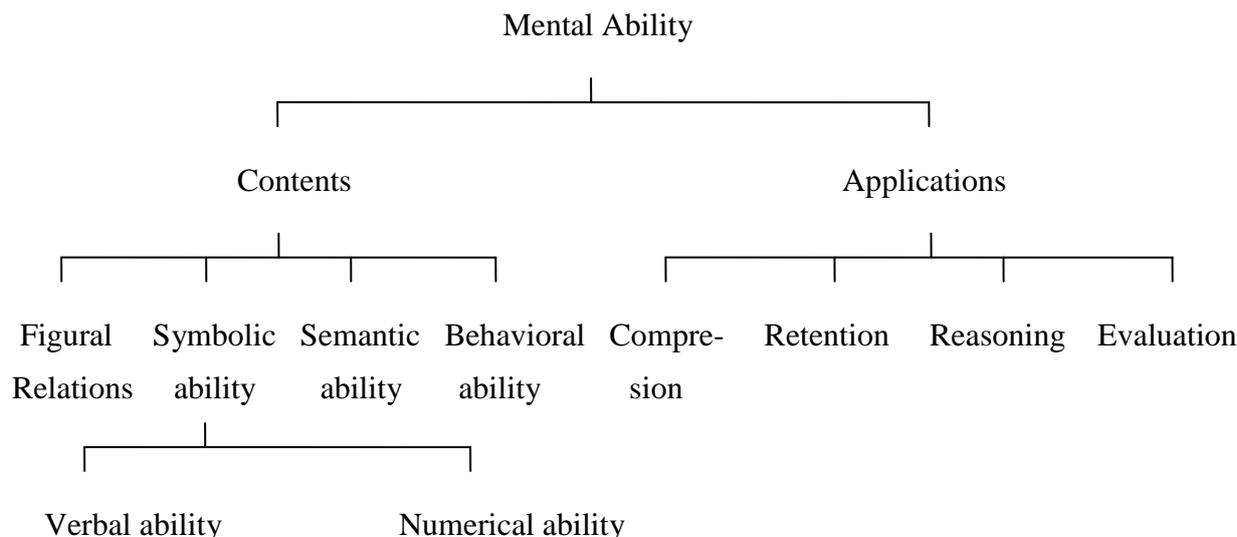
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General Aptitude

1. INTRODUCTION

Mental ability is a complex capability developed over the years and having definite interrelated aspects like content or structure of mental ability and application of these in different persons. This interrelationship can be best explained by the following Table:

These terms require some explanation.



Contents of Mental Ability

1. The ability for ‘figural relations’ means the capacity to understand and manipulate objects. People used to dealing with machines parts, tools, puzzle completions, graphs, diagrams, etc. or working fast with their hands, will excel in this. This is also called ‘concrete intelligence’ and ‘performance IQ’ by psychologists.
2. The ability to deal with symbols means basically a mental exercise. The capacity to think effectively with words as symbols as well a ‘numbers’ as symbols is included. This is also called ‘verbal ability’ and ‘numerical ability’. Experienced teachers, writers, journalists and linguists are likely to excel in verbal ability. On the other hand, mathematicians, statisticians, scientists and astrologists are likely to excel in ‘numerical ability’. The best combination of verbal and numerical ability is called ‘abstract intelligence’ by psychologists.
3. Semantic ability is the capacity to deal with ‘meanings’ or to read between lines. This includes originality, flexibility, foresight and ‘shifting of meaning’ from the material

at hand towards 'brevity' and 'conciseness'. This could also be called 'insight into written material with originality'. Semantic ability is also at the abstract level but is different from verbal ability. While verbal ability deals with the relation between words and letters, semantic ability deals with 'ideas'— their analysis and construction of new and original ideas.

4. Behavioral ability is also known as 'social intelligence'. This is the ability to deal effectively with other people, to evaluate and judge the behavior of persons or groups of persons. It includes the capacity to understand emotions, actions, interactions and outcomes of reactions of persons to each other.

This is an absolutely essential ability because we are social beings. Effectiveness in the relationships between parents and children, students and teachers, employers and employees, management and workers, leaders and followers, interviewers and interviewees— all these depend on the ability to understand and judge human behavior.

Applications of Mental Ability

Individuals differ in their styles of application of intellect. Some excel in one while others excel in other styles. The various applications of intellect are:

(a) Comprehension: This includes grasp and understanding of the given material only without going beyond the material provided. This can also be called 'cognitive style'. Recognition of familiar objects, sounds, melodies, etc., is included here but analytical ability is not.

(b) Retention: After comprehension, some individuals are able to transfer the material into 'retention' and are able to recall it quickly. Recalling the right mater at the right time, with accuracy and speed, is a key to success. This is also called 'memory ability'.

(c) Reasoning: This includes the logical application of comprehended and retained material. The ability to grasp object relations, relations of ideas, ability of analysis and synthesis, and convergent and divergent thinking are included in this area. Reasoning is a style of higher order complex mental ability.

(d) Evaluation: This means reaching an outcome, conclusion, and implication, after reasoning, analysis and logical thinking have been applied. The evaluative style helps the individual's problem-solving ability, and insight and foresight regarding problems. This is most

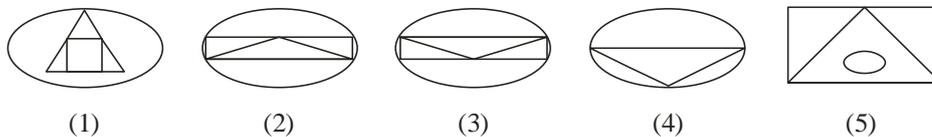
helpful usually while dealing with other persons and social situations like group conflicts and communal tensions.

Hints for Solving Questions of various Types

Figural Relations: Reasoning and Application: This is concerned with the ability to deal with the size, shape contour and direction of various figures and objects. It includes the relationship between series of objects and figures, clockwise or anticlockwise direction of changes in shape and size of objects, and spatial relation between the figures and objects.

Examples with clues:

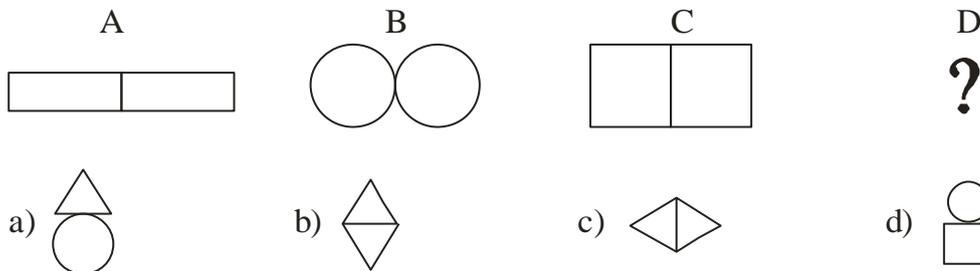
Q.1. Spot the odd one out from the following figures.



- a) 1 b) 2 c) 5 d) 4

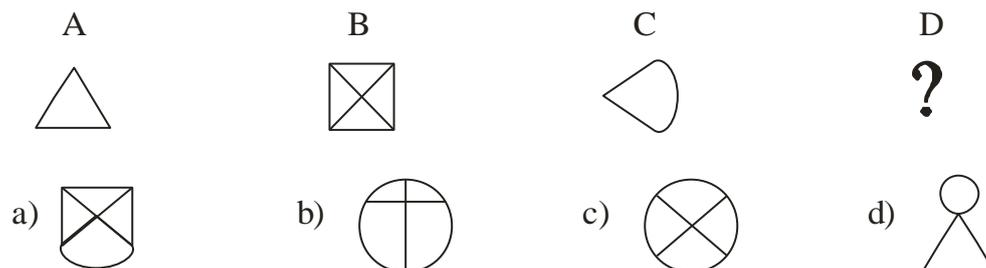
Answer: Here (c) is the correct answer because in all the given figures, circle is the outermost figure while in (c), i.e. 5, it is a square.

Q.2. Of the given figures state the one which will follow next?



Answer: (c) is the correct answer. Observe that A shows two rectangles joining each other on the left and right sides. B shows two circles, and C shows two squares joining together sideways. A, B, C, therefore, show that two figures of the same type have to join together to form D. This leaves us with alternative (b) and (c). Note that in (b) the two triangles (same figures) are joining top to bottom whereas we need the same figures joining sideways which is shown only in (c).

Q.3. Complete the series:



Answer: (c) is the correct alternative. Comprehending the relationship between A and B is very easy, i.e., B is four times A. A being a small triangle, four triangles joining together from all sides to give rise to the figure as given in B. C shows the segment of a circle and joining four such segments gives us the figure of a full circle. Full circle are represented by alternatives (b) and (c). But note carefully that the four segments of the circle given in (b) are not of equal size as is the case suggested by figure B. In (c) all the four segments are equal. So (c) is the correct alternative.

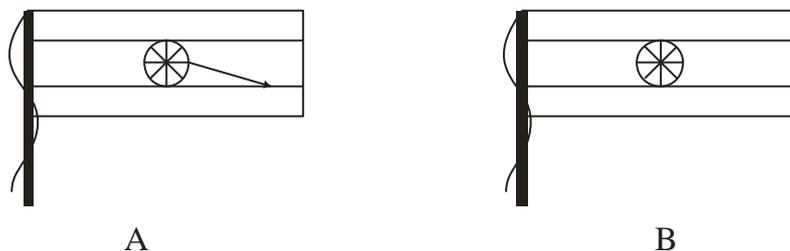
Q.4. Following are some words depicting our various body parts and their functions. Try to visualize them together in terms of their functions A. Eyes B. Ears C. Nose D. Limbs.

The following combinations go together.

- a) Only A and B b) A, B, C and D c) Only C and D d) A, B and C

Answer: The combination suggested by alternative (d) is the correct answer. A, B and C are sense-organs and their function is to provide awareness about our environment by sensing and perceiving it. D i.e., limbs help us in movement. So limbs cannot be clubbed with the other sense organs like the eyes, ears and nose.

Q.5. What do the two flags A and B represent?



- (a) A was the flag of Indian National Congress before independence and B was adopted as the National Flag of India after Independence.

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