

Ph.D. Entrance Examination
November - 2022
Part - A
(General Analytical Skill / Mental Ability & Reasoning)
Time : 25 Minutes
Maximum Marks : 25

Note :

- (i) This question booklet comprises of 25 questions.
 - (ii) All questions are compulsory.
 - (iii) The question booklet along with answer sheet is to be handed over by the candidate to the Invigilator at the end of the examination.
 - (iv) There is no negative marking.
 - (v) Each question carries one mark.
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Choose the correct alternative from the following options :

1. Look at this series: 7, 10, 8, 11, 9, 12, ___ What number should come next?
(a) 7 (b) 10 (c) 13 (d) 9
2. Look at this series: 589654237, 89654237, 8965423, 965423, _____ What number should come next?
(a) 58965 (b) 65423 (c) 89654 (d) 96542
3. Look at this series: (1/9), (1/3), 1, ____, 9, What number should come next?
(a) 3 (b) 2/3 (c) 6 (d) 27
4. Look at this series: VI, 10, V, 11, __, 12, III What number should come next?
(a) II (b) IV (c) IX (d) 14
5. Look at this series: 8, 6, 9, 23, 87, ... What number should come next?
(a) 128 (b) 226 (c) 324 (d) 429
6. WXCD, UVEF, STGH, QRIJ,
- (a) OPKL (b) AYBZ (c) JIRQ (d) LRMS
7. APK, BQL, CRM, DSN,
- (a) TEO (b) ETO (c) EOT (d) TOE

8. AB, DEF, HIJK, , STUVWX,
 (a) LMNO (b) LMNOP (c) MNOPQ (d) QRSTU
9. Which word does not belong with the others?
 (a) Parsley (b) Basil (c) Dill (d) Mayonnaise
10. Which word does not belong with the others?
 (a) Rye (b) Sourdough (c) Pumpernickel (d) Loaf

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.(use analogy for question no. 11 and 12)

11. Insect : Disease :: War : ?
 (a) Army (b) Defeat (c) Arsenal (d) Destruction
12. Float : Sink :: Boat : ?
 (a) Ship (b) War (c) Submarine (d) Missile
13. If the total cost of 3 chairs and 2 tables is Rs. 1200 and the total cost of 12 chairs and 8 tables is Rs. 4800, then the cost of each chair can be Rs. 200 and each table can be of:
 (a) Rs. 200 (b) Rs. 300 (c) Rs. 400 (d) Rs. 500
14. If $a + b = 11$ and $a^2 - b^2 = 11$, find the value of ab .
 (a) 18 (b) 28 (c) 30 (d) 24
15. Which one of the following is not a prime number?
 (a) 31 (b) 61 (c) 71 (d) 91
16. A fruit seller had some mangoes. He sells 40% mangoes and still has 420 mangoes. Originally, he had:
 (a) 800 mangoes (b) 1050 mangoes
 (c) 672 mangoes (d) 700 mangoes
17. The length of the bridge, which a train 130 metres long and travelling at 45 km/hr can cross in 30 seconds, is:
 (a) 200 m (b) 225 m (c) 245 m (d) 250 m

18. Which number completes the puzzle?



- (a) 30 (b) 36 (c) 49 (d) 48

19. Introducing a girl, a man said, "She is the daughter of the son of the father of my brother." How is the girl related to the man?

- (a) Brother (b) Nephew (c) Uncle (d) Father

20. Pointing to a boy Soumitra said, "He is the son of the only sister of my father." How is Soumitra related to the boy?

- (a) Uncle (b) Cousin (c) Father (d) Grandfather

21. In a certain code 'REQUEST' is written as 'S2R52TU'. How is 'ACID' written in that code?

- (a) 1394 (b) IC94 (c) B DJE (d) 1D3E

22. In a certain code 'SHIFT' is written as 'UFKDV'. Which of the following words is written as 'COVID'?

- (a) EMXCV (b) EMXGF (c) EXGFT (d) EMXKF

23. In a certain code 'CURATIVE' is coded as 'BSVDDUHS'. How is 'STEAMING' coded in that code?

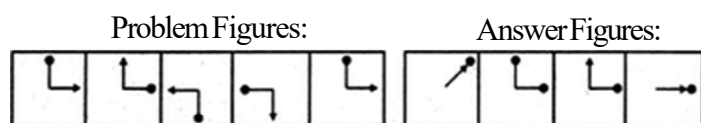
- (a) BFUTFMHL (b) TUFBFMHL
(c) BFUTLHFM (d) BFUTHOJN

24. Find the odd one out.

Shave, Chop, Cut, Whittle, Erase

- (a) Chop (b) Erase (c) Whittle (d) Shave

25. Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.



- (a) 1 (b) 2 (c) 3 (d) 4
