

Aptitude

(for D. Arch, Diploma (ME,CE,EE,CS,EC, Bio medical Engg) , B. Sc (IT),B.C.A.)

General instructions

1. Each section comprises of 30 questions.
2. All questions are compulsory.
3. Each right answer would be awarded 4 marks.
4. There is no negative marking.
5. Duration would be of 1 hour 30 mins.

1. ELFA, GLHA, ILJA, _____, MLNA

- (a) OLPA
- (b) KLMA
- (c) LLMA
- (d) KLLA

Answer; D

2. CMM, EOO, GQQ, _____, KUU

- (a) GRR
- (b) GSS
- (c) ISS
- (d) ITT

Answer: C

3. Which word does NOT belong with the others?

- (a) parsley
- (b) basil
- (d) dill
- (e) mayonnaise

Answer: D

4. Which word does NOT belong with the others?

- (a) inch
- (b) ounce
- (c) centimeter
- (d) yard

Answer: B

5. Which word does NOT belong with the others?

- (a) tyre
- (b) steering wheel
- (c) engine
- (d) car

Answer: D

6. Read the below passage carefully and answer the questions:

The government of an island nation is in the process of deciding how to spend its limited income. It has \$7 million left in its budget and eight programs to choose among. There is no provision in the constitution to have a surplus, and each program has requested the minimum amount they need; in other words, no program may be partially funded.

The programs and their funding requests are:

- * Hurricane preparedness: \$2.5 million
- * Harbor improvements: \$1 million
- * School music program: \$0.5 million
- * Senate office building remodeling: \$1.5 million
- * Agricultural subsidy program: \$2 million
- * National radio: \$0.5 million
- * Small business loan program: \$3 million
- * International airport: \$4 million

1. Senators from urban areas are very concerned about assuring that there will be funding for a new international airport. Senators from rural areas refuse to fund anything until money for agricultural subsidies is appropriated. If the legislature funds these two programs, on which of the following could they spend the rest of the money?
- (a) the school music program and national radio
 - (b) hurricane preparedness
 - (c) harbor improvements and the school music program
 - (d) small business loan program
 - (e) national radio and senate office building remodeling

Answer: A

7.If the legislature decides to fund the agricultural subsidy program, national radio, and the small business loan program, what two other programs could they fund?

- (a) harbor improvements and international airport
- (b) harbor improvements and school music program
- (c) hurricane preparedness and school music program
- (d) hurricane preparedness and international airport
- (e) harbor improvements and hurricane preparedness

Answer: B

8.If the legislature decides to fund the agricultural subsidy program, national radio, and the small business loan program, the only other single program that can be funded is

- (a)hurricane preparedness.
- (b)harbor improvements.
- (c)school music program.
- (d)senate office building remodeling.
- (e)international airport.

Answer: D

9.Odometer is to mileage as compass is to

- (a) speed
- (b) hiking
- (c) needle
- (d) direction

Answer: D

10. Marathon is to race as hibernation is to

- (a) winter
- (b) bear
- (c) dream
- (d) sleep

Answer: D

11. Window is to pane as book is to

- (b) novel
- (d) glass
- (f) cover
- (g) page

Answer: D

12. Cup is to coffee as bowl is to

- (a) dish
- (b) soup
- (c) Spoon
- (d) food

Answer: B

13. Yard is to inch as quart is to

- (a) gallon
- (b) ounce
- (c) milk
- (d) Liquid

Answer: B

14. Play is to actor as concert is to

- (a) symphony
- (b) musician
- (c) piano
- (d) Percussion

Answer: B

15. Pointing to a photograph of a boy Suresh said, "He is the son of the only son of my mother." How is Suresh related to that boy?

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

Answer: D

16. If $A + B$ means A is the mother of B; $A - B$ means A is the brother B; $A \% B$ means A is the father of B and $A \times B$ means A is the sister of B, which of the following shows that P is the maternal uncle of Q?

- (a) $Q - N + M \times P$
- (b) $P + S \times N - Q$
- (c) $P - M + N \times Q$
- (d) $Q - S \% P$

Answer: C

17. Introducing a boy, a girl said, "He is the son of the daughter of the father of my uncle." How is the boy related to the girl?

- (b) Brother
- (d) Nephew

(f) Uncle

(h) Son-in-law

Answer: A

18. Pointing to Varman, Madhav said, "I am the only son of one of the sons of his father." How is Varman related to Madhav?

(a) Nephew

(b) Uncle

(c) Father or Uncle

(d) Father

Answer: C

19. Pointing towards a girl, Abhisek says, "This girl is the daughter of only a child of my father." What is the relation of Abhisek's wife to that girl?

(a) Daughter

(b) Mother

(c) Aunt

(d) Sister

Answer: B

20. What percentage of World's population lives in India?

(a) 16.5%

(b) 17.5%

(C) 20%

(d) 15%

Answer: B

21. Which state in India has the lowest number of females in comparison to males?

(a) Bihar

(b) Rajasthan

(C) Punjab

(d) Haryana

Answer: D

22. Air contains maximum amount of

(a) oxygen

(b) nitrogen

(c) hydrogen

(d) carbon dioxide

Answer: B

23. Nail polish remover contains

(a) acetone

(b) benzene

(c) acetic acid

(d) petroleum ether

Answer: A

24. In which State is the Buddhist site Tabo Monastery located?

(a) Arunachal Pradesh

(b) Sikkim

(C) Uttarakhand

(d) Himachal Pradesh

Answer: D

25. A shopkeeper sold an article for Rs. 2500. If the cost price of the article is 2000, find the profit percent.

- (a) 23%
- (b) 25 %
- (c) 27%
- (d) 29%

Answer: B **Answer with explanation:**

C.P. = Rs. 2000

S.P. = Rs. 2500

Profit or Gain = S.P. - C.P.

= 2500 - 2000 = 500

Apply formula: Profit % = $\frac{\text{Profit}}{\text{C.P.}} * 100$

$$= \frac{500}{2000} * 100 = 25 \%$$

26. How many times the hands of a clock coincide in a day?

- (a) 24
- (b) 22
- (c) 23
- (d) 21

Answer: The hands of a clock coincide only once between 11 O' clock and 1 O' clock, so in every 12 hours, the hands of a clock will coincide for 11 times.

∴ In a day or 24 hours, the hands of a clock will coincide for 22 (11+11) times.

B is the right option

27. If 15 men can reap the crops of a field in 28 days, in how many days will 5 men reap it?

- (a) 50 days
- (b) 60 days
- (c) 84 days
- (d) 9.333 days

Answer: Let 5 men can reap a field in x days
So, put the same quantities on the same side.

Men: Days

Now, Men and Days are inversely proportional to each other. If we increase the number of men fewer days will be required to complete the work.

Inversely proportional means

i.e., $5:15 = 28:x$

Or, $x = (28 \times 15) / 5$

Or, $x = 84$ days

Hence, 5 men can reap a field in 84 days.

C is the right option

28. A mother is twice as old as her son. If 20 years ago, the age of the mother was 10 times the age of the son, what is the present age of the mother?

- (a) 38 years
- (b) 40 years
- (c) 43 years
- (d) 45 years

Answer: Let the age of son = X years

\therefore Age of mother would be $= 2X$

As per question 20 years ago;

$$10(X - 20) = 2X - 20$$

$$10X - 200 = 2X - 20$$

$$10X - 2X = -20 + 200$$

$$8X = 180$$

$$X = \frac{180}{8} = 22.5 \text{ years}$$

\therefore Age of mother = $22.5 \times 2 = 45$ years

D is the right option

29. What is the probability of getting an even number when a dice is rolled?

(a) $1/5$

(b) $1/2$

(c) $1/3$

(d) $1/4$

Answer: The sample space when a dice is rolled, $S = (1, 2, 3, 4, 5 \text{ and } 6)$

So, $n(S) = 6$

E is the event of getting an even number.

So, $n(E) = 3$

So, the probability of getting an even number $P(E) =$

$$= \frac{3}{6} = \frac{1}{2}$$

B is the right answer

30. A can run 224 metre in 28 seconds and B in 32 seconds. By what distance A beat B?

(a) A. 36 metre

(b) B. 24 metre

(c) C. 32 metre

(d) D. 28 metre