

Quiz Programme

III B.Sc. 19/12/18

Quiz Programme conducted in B.Sc.
(M.P.C.S) Students on Analytical Skills.

Students are divided into two groups.

Group A

Nityapooja Reddy
Venkatesh
Praveen
Arabian

Group B

Mahendra
Rambabu
Nagarej
Venkatramana

① Ravi is fourteenth from the right end in a row of forty boys what is his position from left end

(a) 24 (b) 25 (c) 26 (d) 27 (e) none

Ans. (d) 27

② If the seventh day of the month, day, date and time basing on the sequence of the sentences relating to them is three days earlier than Friday, what day will it be the 19th day of the month

(a) Sunday (b) Monday (c) Wednesday
(d) Saturday

Ans. (a) Sunday

3) How many 3's are there in the following sequence which are neither preceded by 6 nor immediately followed by 9?

9 3 6 6 3 9 5 9 3 7 8 9 6 3 9 6 3

A) one B. Two C. Three D. Four E. none

Ans. (B) Two.

4) Find out the two signs to be interchanged to making following equation correct:

$$5 + 3 \times 8 - 12 \div 4 = 3$$

A) + and - (B) - and \div (C) + and \times

D) + and \div

Ans. (B) - and \div

5) How many times in a day the hands of a clock are straight?

A) 22 (B) 24 (C) 44 (D) 48

Ans. C (44)

6) How many days are there from 2nd Jan. 1995 to 15 March, 1995?

Ans. 73

Exp: Jan Feb March $30 + 28 + 15 = 73$ days

7) The first Republic day of India was celebrated on 26th January, 1950.

Ans. Thursday.

(8) AC, FH, KM, PR, ?

(A) UN (B) VW (C) UX (D) TV

Ans. (A) UN.

(9) B, F, D, F, ?, H, J, ?, L

(A) I, M (B) M, I (C) I, N (D) J, M

Ans.

(10) Choose the alternative which is closely resembles the water-image of the given combination. QUARREL

Ans. UONVBEEI

(11) Which of the following diagrams indicates the best relation between Examinations, Questions and Practice?

(A) (B) (C) (D)

Ans. (C)

(12) The value of $\left[(10)^{150} \div (10)^{146} \right]$

Ans. $(10)^{150} \div (10)^{146} = \frac{(10)^{150}}{(10)^{146}} = 10^{150-146} = 10^4 = 10000$

(13) $\left(\frac{x^b}{x^c} \right)^{(b+c-a)} \cdot \left(\frac{x^c}{x^a} \right)^{(a+b)} \cdot \left(\frac{x^a}{x^b} \right)^{(a+b-c)} = ?$

(A) x^{abc} (B) 1 (C) x^{a+b+c} (D) x^{a+b+c}

Ans. (B) 1

(14) If a Number N is increased by $P\%$ then the number after decrease is

$$\text{Ans: } N \times \left[\frac{100 - P}{100} \right] \%$$

(15) Find the Simple Interest on Rs 30,000/- at $16\frac{2}{3}\%$ per annum for 9 months

Sol. $P = \text{Rs. } 30,000$, $R = \frac{50}{3}\%$ p.a and

$$T = \frac{9}{12} \text{ years} = \frac{3}{4} \text{ years}$$

$$\begin{aligned} \therefore \text{S.I.} &= \frac{(P \times R \times T)}{100} \\ &= \text{Rs. } \left(30,000 \times \left(\frac{50}{3} \right) \times \left(\frac{3}{4} \right) \times \left(\frac{1}{100} \right) \right) \\ &= \text{Rs. } 3750. \end{aligned}$$

(16) 16 men can do a piece of work in ten days. How many men are needed to complete the work in 40 days?

Sol. $M_1 = 16$, $D_1 = 10$, $D_2 = 40$, $M_2 = M_2$

$$M_1 D_1 = M_2 D_2$$

$$M_2 = 16 \times \frac{10}{40} = 4 \text{ men.}$$

(17) In how many ways can the letters of the word 'LEADER' be arranged?

Sol. 1L, 2E, 1A, 1D, and 1R

$$= \frac{6!}{(1!) (2!) (1!) (1!) (1!)} = 360$$

(18) A die is thrown. What is the Probability of getting a six.

Ans. Probability = $\frac{1}{6}$.

(19) If $P(A) = \frac{1}{4}$, $P(B) = \frac{1}{2}$, $P(A \cup B) = \frac{1}{8}$ then

$P(A \cap B) = ?$

$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

$$P(A \cap B) = P(A) + P(B) - P(A \cup B)$$

$$= \frac{1}{4} + \frac{1}{2} - \frac{1}{8} = \frac{1}{8}$$

(20) The surface area of a cube is 600 cm^2 . The length of its diagonal is

Ans: $10\sqrt{3} \text{ cm}$.

(21) If the length of diagonal of a cube is $4\sqrt{3} \text{ cm}$, then its surface area is

Ans: 96.

~~sol~~ $\sqrt{3} a = 4\sqrt{3}$ so $a = 4$

surface area = $6a^2 = 96 \text{ sq. cm}$.

22 The volume of a cube is 2744 cu cm . its surface area is

Ans: ~~1176~~ 1176 cm^2 .

sol. $a^3 = 2744$, so $a = 14$

surface area = $6a^2 = 1176$

(23) 7, 10, 8, 11, 9, 12, ?

Ans: 10

(24) 5, 9, 17, 29, 45, ?

Ans 65

The pattern is $+4, +8, +12, +16, \dots$

(25) The sum of first 25 natural numbers is

Ans 1035.

The winner group is A.

Signature of the student:

K. Nitya pooja Reddy

R. Prathab

M. Venkatesh

M. Nagadaya

S. Arabjan

Y. Rambabu

M. Venkatesaramana



Quiz Programme

21/12/2019

① Missing number in the series ?

10, 18, 28, 40, 54, 70?

- (a) 85 (b) 86 (c) 87 (d) 88

Ans. (d) $10 \xrightarrow{+8} 18 \xrightarrow{+10} 28 \xrightarrow{+12} 40 \xrightarrow{+14} 54 \xrightarrow{+16} 70 \xrightarrow{+18} 88$

② Missing term in the series is.

3F, 6G, 11I, 18L, ?

- (a) 21O (b) 25N (c) 21P (d) 27O

Sol (d) Numbers: $3 \xrightarrow{+3} 6 \xrightarrow{+5} 11 \xrightarrow{+7} 18 \xrightarrow{+9} 27$
Letters: $F \xrightarrow{+1} G \xrightarrow{+2} I \xrightarrow{+3} L \xrightarrow{+4} (P)$

③ Which of fractions is greater than $\frac{3}{4}$ and less than $\frac{5}{6}$?

- (a) $\frac{1}{2}$ (b) $\frac{2}{3}$ (c) $\frac{4}{5}$ (d) $\frac{9}{10}$

Ans (c) , $\frac{3}{4} = 0.75$, $\frac{5}{6} = 0.833$, $\frac{1}{2} = 0.5$, $\frac{2}{3} = 0.66$,
 $\frac{4}{5} = 0.8$, $\frac{9}{10} = 0.9$

Clearly 0.8 lies between 0.75 and 0.833
 $\therefore \frac{4}{5}$ lies between $\frac{3}{4}$ and $\frac{5}{6}$.

④ If the sum and product of two numbers is 12 and 35, respectively, sum of its reciprocal is

- (a) $\frac{12}{35}$ (b) $\frac{1}{35}$ (c) $\frac{35}{8}$ (d) $\frac{7}{2}$

Ans (a) , let the two numbers be x and y.

Then $x + y = 12$ (1)

$xy = 35$ (2)

$\therefore \frac{x+y}{xy} = \frac{12}{35} \Rightarrow \left(\frac{1}{y} + \frac{1}{x} \right) = \frac{12}{35}$

\therefore sum of the reciprocals of given numbers
 $= \frac{12}{35}$

5) A girl introduced a boy as the son of the daughter of the father of her uncle. The boy is girl's

- (a) Uncle (b) Nephew (c) Cousin (d) Son

sol. None of these.

Father of uncle \rightarrow Grand father
 Daughter of grand father \rightarrow Uncle's sister or mother
 Son of mother \rightarrow Brother.

6) If the average of the numbers 51, 68.6, 57.4, 55.2 and x is 53. Find the value of x .

- (a) 34.2 (b) 26.4 (c) 51 (d) 24.2

sol. (d)

$$\text{Average} = \frac{51 + 68.6 + 57.4 + 55.2 + x + 61.6}{6}$$

$$\Rightarrow 53 = \frac{293.8 + x}{6}$$

$$\Rightarrow 293.8 + x = 318$$

$$\Rightarrow x = 318 - 293.8 = 24.2$$

7) If 25% of $a = 35\%$ of b , then $a:b$ is

(a) 7:5 (b) 5:7 (c) 3:4 (d) 4:3

sol. (a), 25% $a = 35\%$ b

$$\Rightarrow \frac{25}{100} \times a = \frac{35}{100} \times b$$

$$\Rightarrow 25a = 35b \Rightarrow \frac{a}{b} = \frac{35}{25} = \frac{7}{5}$$

$$\therefore a:b = 7:5$$

8) Which of the following is not a leap year?

- (a) 2000 (b) 2100 (c) 2020 (d) 2012

Sol: '2100' is not a leap year, because it is a Century year not divisible by 400.

(9) What is the angle between the time hands at 2:20 am?

- (a) 100° (b) 50° (c) 10° (d) 70°

Sol: Angle between the time hands.

$$\theta = |30h - \frac{11}{2}m|$$

$$= |30(2) - \frac{11}{2}(20)| = |60 - 110| = 50^\circ$$

(10) How many times do the hands of a clock coincide in a day?

- (a) 20 (b) 21 (c) 22 (d) 24

Sol: (c)

The hands of a clock coincide 11 times in every 12 hours. They coincide only once, i.e. at 12 o'clock. The hands coincide 22 times in a day.

(11) 50% of (75% of Rs. 300) is

- (a) 112.5 (b) 122 (c) 123 (d) 113

Sol: (a) $50\% \text{ of } (75\% \text{ of Rs. } 300) = 50\% \text{ of } \left(\frac{75}{100} \times 300\right)$
 $= 50\% \text{ of } 225 = \frac{50}{100} \times 225$
 $= \frac{225}{2} = 112.5$

(12) The average age of a man and his son is 28 years. The ratio of their ages is 3:1 resp. What is the man's age?

- (a) 30 years (b) 32 years (c) 42 years (d) 52 years

Sol: Total age of man's and his son's age = $28 \times 2 = 56$ years.

Sol: '2100' is not a leap year, because it is a Century year not divisible by 400.

(9) What is the angle between the time hands at 2:20 am?

- (a) 100° (b) 50° (c) 10° (d) 70°

Sol: Angle between the time hands

$$\theta = |30h - \frac{11}{2}m|$$

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(10) How many times do the hands of a clock coincide in a day?

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- (a) 112.5 (b) 122 (c) 123 (d) 113

Sol: (a) 50% of (75% of Rs. 300) = 50% of $(\frac{75}{100} \times 300)$
= 50% of 225 = $\frac{50}{100} \times 225$
= $\frac{225}{2} = 112.5$

(12) The average age of a man and his son is 28 years. The ratio of their ages is 3:1 resp. What is the man's age?

- (a) 30 years (b) 32 years (c) 42 years (d) 52 years

Sol: Total age of man's and his son's age = $28 \times 2 = 56$ years.

The Ratio of their ages = 3:1

\therefore Man's age = $(\frac{3}{1}) \times 14 = 3 \times 14 = 42$ years.

(13) Find the ratio of the Profit, if Ram : Shyam : Sita invested their Capital in the ratio 3:5:9, resp for 2:3:1 time.

- (a) 2:5:3 (b) 3:2:5 (c) 5:2:3 (d) 7:5:3

Sol (a) Let the Capital of Ram, Shyam and Sita be $3x$, $5x$, $9x$ resp. Wt Ram, Shyam and Sita invest Capital $2y$, $3y$, and y for months.

Then Profit of Ram, Shyam and Sita
 $= 3x \times 2y$, $5x \times 3y$, $9x \times y$
 $= 6 : 15 : 9$
 $= 2 : 5 : 3$

(14) T, R, P, N, L, J, K

- (a) Q, G (b) J, H (c) K, H (d) K, I

Ans (b) $T \rightarrow R \rightarrow P \rightarrow N \rightarrow L \rightarrow J \rightarrow K$

(15) Tea : Cup, tobacco : ?

- (a) Leaves (b) Hookah (c) TOXIN (d) Cheroot

Ans (b) The first one is to be in the second one.

(16) Find the odd man out, 3, 5, 11, 14, 17, 21

- (a) 21 (b) 17 (c) 14 (d) 3

Ans (c), Each of the numbers except 14, is an odd number.

- 17) Today is Monday, after 61 days it will be
 (a) Sunday (b) Saturday (c) Friday
 (d) Wednesday

Ans (b),

Each day of the week is repeated after 7 days.

So, after 63 days, it will be Monday.

\therefore After 61 days, it will be Saturday.

- 18) Which of the following is equal to 3.14×10^6 ?

- (a) 314 (b) 3140 (c) 3140000 (d) none.

Ans (c) $3.14 \times 10^6 = 3.14 \times 1000000$
 $= \frac{314}{100} \times 1000000 = 3140000.$

19) $666 \div 6 \div 3 =$

- (a) 37 (b) 33 (c) 30 (d) 35

Ans (a)

$$666 = \frac{1}{6} \times \frac{1}{3} = \frac{666}{18} = 37$$

- 20) The total of A and B is 12 years more than the total age B and C, C is how many years younger than A?

- (a) 4 years (b) 6 years (c) 8 years
 (d) 12 years

Ans (d), $(A+B) - (B+C) = 12$
 $\Rightarrow A - C = 12.$

21) 525, 813, 714 - - -

- (a) 353 (b) 329 (c) 606 (d) 120

Ans (c), Sum of the digits of the number is 12.
 $606 = 6+0+6 = 12$

22) Find out the odd one

- (a) 75 (b) 45 (c) 25 (d) 15

sol (c), It is a perfect square

23) Petrol : car :: led : ?

- (a) Pen (b) pencil (c) Metal (d) Ink

sol (b), Petrol used in car, lly led used in pencil.

24) Circle : Arc :: line : ?

- (a) Dot (b) Angle (c) line (d) Ray

sol (d) Arc is a part of circle.
lly Ray is a part of line.

25) The sum of first 30 odd numbers is ?

- (a) 300 (b) 900 (c) 930 (d) 225

sol (b), sum of first 'n' odd numbers = n^2
sum of first 30 odd numbers = $(30)^2$
= 900.

Quiz Programme is conducted among all B.Sc. M.P.C. Students. All students have divided into three groups.

Group A
S. Alam
S. Md. Chowdhury
Reddy Sekhar
S. Saleem
Arhil
Bavaddan

Group B
Lalitha
Manjrya
Najma
G. Supriya
T. Dhruithi
Rajesh

Group C
S. Shameem
Suresh
D. Chennakesava
A. Raja Kumar
Prasad
Anzarfa

score (08)

score (05)

score (12)

Winning Team is Team C
Group C

Signature of the Students

M. Lalitha	I st mpcs	M. Lalitha
G. Haripriya	2 nd MPCS	G. Haripriya
S. Najma	2 nd MPCS	S. Najma
G. Supriya	I mpcs	G. Supriya
T. Druithi	I MPCS	T. Druithi
G. Venkata Rajesh	I. M.P.C.S	G. venkata Rajesh
R. V. S. Saikalyan	I (M.P.C.S)	R. Ven Sai kalyan.
K. Prasad naidu	I (M.P.C.S)	K. Prasad naidu
M. Raj Kumar Reddy	2 nd (M.P.C.S)	M. Raj
K. Venkata Prasad	1 st (M.P.C.S)	1 st Prasad
S. Muhammad Huzair	2 nd (M.P.C.S)	S. Muhammad Huzair
D. Chenna Kesava	2 nd (MPCS)	P. Chenna
K. Surekh Kumar	2 nd (MPCS)	Surekh
S. Shameem Ahamed	2 nd (MPCS)	Shameem Ahamed
S. Bavaddin	1 st [MPCS]	S. Bavaddin
S. Akhil Ahammad	1 st [MPCS]	S. Akhil Ahammad
M. Saleem	III rd B.Sc (M.P.C.S)	M. Saleem
S. M. Alau	III rd B.Sc (M.P.C.S)	S. M. Alau
G. Mahammad Ghouse	III rd B.Sc (M.P.C.S)	Shykhaz
D. Reddis Khan	III rd B.Sc (M.P.C.S)	D. Reddis Khan

12/2/20

P. Gayathri

L. TUTOR
Dept. of Mathematics
Govt. Degree College
RAYACHOTY.

Quiz Programme

21/12/2020

Quiz competitions is conducted among all B.Sc. Students the eve of Birth anniversary of Sri Srinivasa Ramanujan "Mathematics Day" to be celebrated on - 22/12/2020.

All Students are divided into two Groups.

Group A

- ① G. Hari priya
- ② D. Venkata Srinamma
- ③ M. Raj Kumar Reddy
- ④ M. Suresh Kumar
- ⑤ S. Huzaiifa
- ⑥ D. Chenna Kesava
- ⑦ R. Sri Hari

Group B

- ① T. Druthi
- ② G. Supriya
- ③ M. Lalitha
- ④ ARSA
- ⑤ Akhil Ahamad
- ⑥ Barvaddin
- ⑦ Prasad Reddy

1. 128, 64, 32, ... ?
(a). 33 (b). 35 (c). 45 (d). 16.

Ans. 16 (d).

2. The next term in the series 2, 5, 10, 17, 26, 37, ?
(a). 50 (b). 57 (c). 62 (d). 72.

Ans. A (50).

3. The next term in the series: BDE, DSEH, FIJK, HJLN, ... ? is
(a). J56Q (b). Q62Q (c). Q62J (d). J58Q.

Ans. J58Q (d).

4. A party was held in which a grandmother, father, mother, four sons, their wives and one son and two daughters to each of the sons were present. The number of females present in the party is
(A). 12 (b). 14 (c). 18 (d). 21.

Ans :- 14 (B).

5. P and Q are brothers. R and S are sisters. The son of P is brother of S. Q is related to R as
(A). son (b). Brother (c). uncle (d). father.

Ans :- (c) Uncle

6. In certain code, SELECTION is coded as QCTCARGMLW. The code of AMERICANS will be
(A). YKCPGAYWQ (b). BNFSJDBMR (c). QWYAGPKY (d). YQKWCYPAG.

Ans :- A (YKCPGAYWQ).

7. A is sister of B. F is daughter of G. C is mother of B. D is father of C. E is mother of D. A is related to D as

(A). Grand daughter (B). Daughter.
 (C). Daughter-in-law (d). Sister.

Ans :- (A). Grand daughter.

8. In the series AB, EDC, FQHI, ..., ?, OPQRST, the missing term is

(A). JKLMN (B). JMKLN (C). NMLKJ (d). NMKLJ.

Ans :- C. (NMLKJ)

9. Who is the first mathematician to be elected as the fellow of the Royal Society?

(A). Bhaskaracharya (B). Aryabhatt
 (C). Shripati (d). Srinivasa Ramanujan.

Ans :- D. (Srinivasa Ramanujan).

10. Who is the father of mathematics?

(A). Srinivasa Ramanujan (B). Dr. Sophie Carr
 (C). Aryabhatt (d). Archimedes.

Ans :- D (Archimedes).

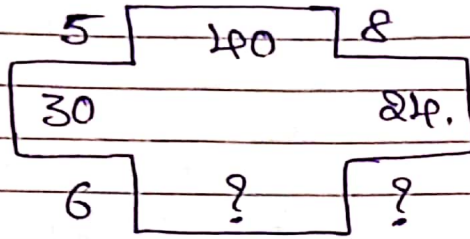
11. $2 \times 2 = 8$
 $3 \times 3 = 18$
 $5 \times 5 = 50$
 $6 \times 6 = 72$
 $10 \times 10 = ?$

Ans :- B - 200

(A) 100 (B) 200 (C) 300 (D) 400

12.

12.



(A). 3, 15 (B). 4, 24 (C). 3, 18 (D). 2, 12

Ans :- (C) 3, 18

13. Today is Monday, after 61 days, it will be
(A). Tuesday (B). Wednesday
(C). Thursday (D). Saturday

Ans :- (D). Saturday.

⇒ Each day of the week is repeated after 7 days. So, after 63 days it will be on Monday. So, 61 days.

14. If 3rd December, 1990 is Sunday, what day is 3rd January 1991?

(A). Sunday (B). Monday (C). Tuesday (D). Wednesday

Ans :- (D) Wednesday.

Clearly 3rd, 10th, 17th, 24th, 31st December 1990 Sunday. So, 1st January 1991 is Monday and 3rd January 1991 Wednesday.

15. What is the number of odd days in a leap year?

(A). 1 (B). 2 (C). 3 (D). 4

Ans :- A leap year has 366 days. During $366/7$ it gives 2 as remainder.
∴ odd days in 366 days is '2'.

16. When did the first printed book on mathematics appear?

(A). 1478 (B). 1178 (C). 1778 (d). 1578.

Ans :- B (1478)

17. Which of the following instrument used by aryabhata?

(A). Chakra yantra (B). Bhanga yantra,
(C). Dhany yantra (d). Ghati yantra.

Ans :- A (Chakra yantra).

18. Zero was invented 1st by what country?

(A). Arab (B). Japan (C). India (D). China.

Ans :-

(C). China,

19. Value of 'pi' is described in which book?

(A). Leelavathi (B). Sidhant sirmani
(C). Ganitadhyay (D). Goladhyay

Ans :- (A). Leelavathi,

20. Where did the magic square originated?

(A). India (B). China (C). USA (d). German.

Ans :- (B). China, //

Group A is got 11 marks.

B . got 8 marks.

The winner Group is Group A

Signature of the Students

K. Suresh Kumar

R. Srihari

Maham.

M. Saij

Anjola.

D. Saij

D. Sivanna

Venu Jorai

G. Hari Priya

G. Supriya

S. Bavaddin

T. Druthi

S. APsa

S. Akhil Ahammed

M. Lalitha

Sai Kalyan

K. V. Prasad

V. V. Prasad.

Ashok

Edumy

Xi Ganesh

K. Manjya Redha