

Registration No.: _____

Course Code: PEA306
Course Title: ANALYTICAL SKILLS-II

Paper Code: B

Time Allowed: 01:00 hr.

Max. Marks: 40

Read the following instructions carefully before attempting the question paper.

1. Match the Paper Code shaded on the OMR Sheet with the Paper code mentioned on the question paper and ensure that both are the same.
2. This question paper contains 40 questions of 1 mark each. 0.25 marks will be deducted for each wrong answer.
3. All questions are compulsory.
4. Do not write or mark anything on the question paper and/or on rough sheet(s) which could be helpful to any student in copying, except your registration number on the designated space.
5. Submit the question paper and the rough sheet(s) along with the OMR sheet to the invigilator before leaving the examination hall.
6. Use of Calculator/Log table is not allowed.

Q(1) P, Q, R, S, T, U, V and W are sitting round the circle and are facing the centre:
P is second to the right of T who is the neighbour of R and V.
S is not the neighbour of P.
V is the neighbour of U.
Q is not between S and W. W is not between U and S.
Then Who is sitting opposite to U ?

- (a) Q (b) R (c) W (d) P

CO3,L3

Q(2) In a garden, there are 10 rows and 12 columns of mango trees. The distance between the two trees is 2 metres and a distance of one metre is left from all sides of the boundary of the garden. The length of the garden is

- (a) 20 m (b) 22 m (c) 24 m (d) 26 m

CO3,L3

Q(3) Statements:

All flowers are rooms.
Some rooms are windows.
All cards are windows.

Conclusions:

- I. Some cards are flowers.
II. Some cards are rooms.
III. Some windows are flowers.
IV. All cards are rooms.

- (a) None follows (b) Only II follows
(c) Only I follows (d) Only III follows

CO3,L3

Q(4) If Neena and Reena also exchange their positions between themselves, then after the exchange, Neena's position from the left will be

- (a) 6 (b) 10
(c) 12 (d) None of these

CO3,L3

Q(5) What will be last digit of the 3rd number from top when the numbers given below are arranged in descending order after reversing the position of the digits within each number?
516 125 629 741 992

- (a) 1 (b) 2 (c) 3 (d) None

CO2,L3

Q(6) In a row of Girls, Rama is fifteenth from the left and Savitri is seventeenth from the right. If in this row Rama is eleventh from the right then what is the position of Savitri from the left?

- (a) 8 (b) 10 (c) 17 (d) None

CO4,L3

Q(7) Statements: Some ships are boats. All boats are submarines. Some submarines are yatches.
Conclusion:

- I. Some yatches are boats.
II. Some submarines are boats.
III. Some submarines are ships.
IV. Some yatches are ships

- (a) All follow (b) Only II and III follow
(c) Only III follows (d) Only IV follows

CO3,L3

Registration No.: _____

Q(8) Study the following sequence of care and answer the questions that follow:
& (8 2 F 4 8 H % # &

How many such numbers are there in the above sequence that are immediately followed by a symbol and also immediately preceded by a letter?

- (a) 1
(b) 2
(c) 0
(d) 3

CO3,L3

Q(9) A is 300% more efficient than B, while A takes 30 days less than B to complete a task. In how many days do they together complete the whole work?

- (a) 10 (b) 15 (c) 12 (d) 8

CO1,L2

Q(10) A can do some work in 10 days, B can do the same work in 15 days. If they are working on alternate days, in how much time the work will be done.

- (a) 18 (b) 6 (c) 12 (d) 4

CO1,L2

Q(11) If 6 men can complete a piece of work in 18 days and 12 women can do the same work in 15 days, then in how many days can 9 men and 15 women complete the work?

- (a) 12 days (b) 15 days (c) 6 days (d) 10 days

CO1,L2

Q(12) Jack and John can construct a wall in 20 days and 24 days respectively by working separately, they worked alternatively by 2 days, if Jack started the work, how long will it take to construct a wall.

- (a) 240/12 days (b) 240/13 days (c) 240/11 days (d) None of these

CO2,L1

Q(13) 10 women can complete a work in 7 days and 10 children take 14 days to complete the work. How many days will 5 women and 10 children take to complete the work?

- (a) 3 (b) 5 (c) 7 (d) 9

CO1,L2

Q(14) X and Y can do a piece of work in 20 days and 12 days respectively. X started the work alone and then after 4 days Y joined him till the completion of the work. How long did the work last?

- (a) 20 (b) 10 (c) 5 (d) 25

CO1,L2

Q(15) Time taken by A to finish a piece of work is twice the time taken B and thrice the time taken by C. If all three of them work together, it takes them 2 days to complete the entire work. How much work was done by B alone?

- (a) 2 days (b) 6 days (c) 3 days (d) 5 days

CO1,L2

Q(16) A can do a piece of work in 12 days, B can do same piece of work in 15 days. After A had worked for 3 days B also join A to finish the remaining work. In how many days work will be finished?

- A. 3 B. 5 C. 6 D. 8

CO1,L2

Q(17) In one hour, a boat goes 11 km/hr along the stream and 5 km/hr against the stream. The speed of the boat in still water (in km/hr) is:

- (a) 3 km/hr (b) 5 km/hr (c) 8 km/hr (d) 9 km/hr

CO2,L3

Q(18) Indrayani Express leaves Pune for Bombay at 17:30 hrs and reaches Bombay at 21:30 hrs. While, Shatabdi, which leaves Bombay at 17:00 hrs reaches Pune at 20:30 hrs. At what time do they pass each other?

- (a) 12:06 hrs (b) 16:06 hrs (c) 19:06 hrs (d) 15:06 hrs

CO2,L3

Q(19) Statements: Some boats are roads.
All waters are boats.

Conclusion: I. All roads are water.

(a) If only Conclusion I follows

(b) If only Conclusion II follows

(c) If either Conclusion I or II follows

(d) If both Conclusion I and II follows.

II. Some water is Road As possibility ?

Q(20) Number of girls are standing in a row. Between Sita and Gita, 4 number of girls are present. From the left hand side, the rank of Sita is 14 and from right hand side, the rank of Gita is 7th. Calculate the total number of girls.

- (a) 23 (b) 24 (c) 25 (d) 26

CO3,L3

Registration No.:

Q(21) Statements:

- I. Some questions are answers.
- II. Some answers are explanations.
- III. All explanations are lengthy.
- IV. No lengthy is a summary.

Conclusions:

- I. No explanation is summary.
- II. Some lengthy are answers.
- III. Some answers are not summary.

- (a) Only conclusion I follows (b) Only conclusion II follows
(c) All conclusions follow (d) Both conclusion I and II are true

CO3,L3

Q(22) "Statements: All Even are Odd. All Odd are Prime. Some Odd are Composite. No Composite is Natural.

Conclusions:

- I. Some composite are Even is a possibility.
- II. Some Prime are Natural is a possibility.
- III. Some Composite are not Odd is a possibility.
- IV. All Natural are Even is possibility."

- A] All follow B] Only I, II and III follow C] Only II, III and IV follow D] Only I, III and IV follow

CO3,L3

Q(23) 40% of the people like juice, 55% of the people like Lassi, 65% of the people like tea; then at least what % of people like all three?

- A] 0 B] 20 C] 30 D] 40

CO3,L3

Q(24) Students line up in a queue in which Ashish stands fifteenth from the left and Sachin is seventh from the right. If they interchange their places, Sachin would be fifteenth from the right. How many students are there in the queue?

- (a) 21 (b) 22 (c) 29 (d) None of these

CO3,L3

Q(25) A man on tour travels first 160 km at 64 km/hr and the next 160 km at 80 km/hr. The average speed for the first 320 km of the tour is:

- (a) 69kmph (b) 71.11kmph (c) 77kmph (d) 83.33kmph

CO2,L3

Q(26) Robert is travelling on his cycle and has calculated to reach point A at 2 P.M. if he travels at 10 kmph, he will reach there at 12 noon if he travels at 15 kmph. At what speed must he travel to reach A at 1 P.M.?

- (a) 10kmph (b) 12kmph (c) 8kmph (d) 15kmph

CO2,L3

Q(27) A motorboat, whose speed in 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. The speed of the stream (in km/hr) is:

- A] 4 B] 5 C] 6 D] 10

CO2,L3

Q(28) A man takes 5hr 45min in walking to certain place and riding back. He would have gained 2hrs by riding both ways. The time he would take to walk both ways is?

- A] 8 hr 45 min B] 7 hr 45 min C] 7 hr 40 min D] 8 hr 30 min

CO2,L3

Q(29) A man goes from a place A to B at a speed of 12 km/hr and returns from B to A at a speed of 18 km/hr. The average speed for the whole journey is:

- (a) 14.4 km/hr (b) 15 km/hr (c) 15.5 km/hr (d) 16 km/hr

CO2,L3

Q(30) If a man walks 20 km at 5 km/hr, he will be late by 40 minutes. If he walks at 8 km/hr, how early from the fixed time will he reach?

- (a) 15 minutes (b) 25 minutes (c) 50 minutes (d) 90 minutes

CO2,L3

Q(31) A man can row 9 kmph in still water and he finds that it takes him thrice as much time to row up than as to row down the same distance in river. The speed of the current is?

- A] 5 kmph B] 4.5 kmph C] 5.5 kmph D] 4.75 kmph

CO2,L3

Q(32) A farmer travelled a distance of 61 km in 9 hours. He travelled partly on foot @ 4 km/hr and partly on bicycle @ 9 km/hr. The distance travelled on foot is:

- (a) 5 km (b) 12 km (c) 15 km (d) 16 km

CO2,L3

Q(33) A and B can together complete a piece of work in 8 days. If A alone can complete the same work in 48 days, in how many days can B alone complete that work?

- (a) 89 (b) 48 / 5 (c) 23 / 4 (d) None

CO6,L2

Registration No.:

- Q(34) A and B can together complete a piece of work in 5 days. If B alone can complete the same work in 30 days, in how many days can A alone complete that work?
(a) 50 (b) 8 (c) 6 (d) None CO5,L2
- Q(35) If 6 boys can complete a work in 30 days then 36 boys can complete the same work in how many days?
(a) 5 (b) 12 (c) 23 (d) None CO3,L2
- Q(36) Two pipes can fill a tank in 20 and 24 minutes respectively and a waste pipe can empty 3 gallons per minute. All the three pipes working together can fill the tank in 15 minutes. The capacity of the tank is:
(a) 60 gallons (b) 100 gallons (c) 120 gallons (d) 180 gallons CO1,L2
- Q(37) A 100 m long 3 m high and 30 cm wide wall is built by 30 men, 20 women and 50 children working 9 hours a day in 20 days. How long a wall 1.5 m high and 30 cm wide can be built by 15 men, 25 women and 35 children working 2 hours a day in 15 days (given men, women and children are equally efficient)?
(a) 30 m (b) 25 m (c) 16 m (d) 15 m CO1,L2
- Q(38) After running 200 km, a train meets with an accident and then runs at $\frac{2}{3}$ th of its former speed and reaches the destination late by 1 hr. If the accident had happened 80 km further, it would have been 30 minutes late. Find the actual speed of the train km/hr. ?
(a) 80 (b) 70 (c) 50 (d) 48 CO2,L3
- Q(39) The ratio between speeds of Two buses is 5:3. If the first bus runs 450 km in 5 hours, then what is the speed of the second bus?
(a) 45 km/hr (b) 84 km/hr (c) 60 km/hr (d) 54 km/hr CO2,L3
- Q(40) Find the ratio of swimming speed of Raj in still water to speed of river, if ratio of time taken to go 10km upstream to time taken to go 10km downstream is 11:5?
(a) 11:5 (b) 4:2 (c) 8:3 (d) 6:5 CO2,L3

--End of Question paper--