

Course Code: PEA306
Course Title: ANALYTICAL SKILLS-II

Max. Marks: 40

Time Allowed: 01:00 hr.

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 on Calculator/Log table is not allowed.

- Q(1) A and B can do a job in 15 days and 10 days, respectively. They began the work together but A leaves after some days and B finished the remaining job in 5 days. After how many days did A leave?
 (a) 2 days (b) 3 days (c) 1 day (d) None of these CO1,L2
- Q(2) 3 men, 4 women and 6 children can complete a work in 7 days. A woman does double the work a man does and a child does half the work a man does. How many women alone can complete this work in 7 days?
 (a) 6 (b) 9 (c) 5 (d) 7
- Q(3) Two pipes A and B can fill a cistern in 12 minutes and 15 minutes respectively. There is also an outlet C. If all the three pipes are opened together, the tank is full in 10 minutes. How much time will be taken by C to empty the full tank?
 (a) 10 min (b) 20 min (c) 15 min (d) Data inadequate CO1,L2
- Q(4) Two pipes A and B can separately fill in 15 minutes and 10 minutes respectively and a waste pipe C can carry off 7 liters per minute. If all the pipes are opened together a full cistern is emptied in 2 hours. How many litres does the cistern hold?
 (a) 40 litres (b) 20 litres (c) 25 litres (d) 30 litres CO1,L2
- Q(5) A cistern is normally filled in 8 hours but takes two hours longer to fill because of a leak in its bottom. If the cistern is full, the leak will empty it in ?
 (a) 20 hrs (b) 28 hrs (c) 36 hrs (d) 40 hrs
- Q(6) If A can complete a work in 12 days, B in 15 days and C can do the same work in 20 days. They started the work together and B left 2 days before the completion of work after how many days B left
 (a) 11/3 (b) 23/4 (c) 11 (d) None CO1,L2
- Q(7) A leak in the bottom of a tank can empty the full tank in 6 hours. An inlet pipe fills water at the rate of 1 liters a minute. When the tank is full, the inlet is opened and due to the leak, the tank is empty in 24 hours. How many liters does the tank hold?
 (a) 480 (b) 8 (c) 7 (d) None CO1,L2
- Q(8) 'A' can complete a piece of work in 12 days 'A' and 'B' together can complete the same piece of work in 8 days. In how many days can 'B' alone complete the same piece of work?
 (a) 15days (b) 18days (c) 24days (d) 28days CO1,L2
- Q(9) 4 boys and 3 women can do a piece of work in 6 days while 2 boys and 4 women can do the same piece of work in 9 days. How much time will be taken by 7 boys and 9 women to do the same piece of work?
 (a) 3days (b) 7days (c) 8days (d) 12days CO1,L2
- Q(10) 4 men can repair a road in 7 hours. How many men are required to repair the road in 2 hours?
 (a) 17 men (b) 14 men (c) 13 men (d) 16 men
- Q(11) A, B and C can do a piece of work in 20, 30 and 60 days respectively. In how many days can A do the work if he is assisted by B and C on every third day?
 (a) 15 (b) 12 (c) 11 (d) 19 CO1,L2



- Q(12) An air conditioner can cool the hall in 40 minutes while another takes 45 minutes to cool under similar conditions. If both air conditioners are switched on at same instance then how long will it take to cool the room approximately ?
 (a) 18 minutes (b) 19 minutes (c) 22 minutes (d) 24 minutes
- Q(13) A can do a piece of work in 10 days, B in 15 days. They work together for 5 days, the rest of the work is finished by C in two more days. If they get Rs. 3000 as wages for the whole work, what are the daily wages of A, B and C respectively (in Rs):
 (a) 200, 250, 300 (b) 300, 200, 250 (c) 200, 300, 400 (d) None of these
- Q(14) A car finishes a journey in 10 hours at the speed of 80 km/hr. If the same distance is to be covered in 8 hours, how much more speed does the car have to gain?
 (a) 8 km/hr (b) 10 km/hr (c) 20 km/hr (d) 16 km/hr
- Q(15) A man completes 30 km of a journey at the speed of 6 km/h and the remaining 40 km of the journey in 5 hours. His average speed for the whole journey is?
 (a) 6 km/hr (b) 7 km/hr (c) 8 km/hr (d) 7.5 km/hr
- Q(16) If train runs at 40 kmph, it reaches its destination late by 11 min but if it runs at 50 kmph, it is late by 5 min. Find the correct time for train to complete the journey.
 (a) 11 min (b) 19 min (c) 24 min (d) 30 min
- Q(17) A train 700m. long is running at the speed of 72 km/hour. If it crosses a tunnel in 1 minute, then the length of the tunnel (in meters) is
 (a) 700 (b) 600 (c) 550 (d) 500
- Q(18) Twice the speed of boat in downstream is equal to the thrice the speed in upstream, the ratio of speed of boat in still water to the speed of the current is
 (a) 1 : 5 (b) 5 : 1 (c) 1 : 3 (d) 2 : 3
- Q(19) A person crosses a 200 m long street in 5 minutes. What is his speed in km per hour
 (a) 11 (b) 2.4 (c) 90 (d) None
- Q(20) Without any stoppage a person travels a certain distance at an average speed of 80 km/h and with stoppage he covers the same distance at an average speed of 60 km/h. How many minutes per hour does he stops ?
 a. 45 min b. 30 min c. 20 min d. 15 min
- Q(21) Two trains starts from Delhi to Patna and Patna to Delhi at the same time. They complete their journey in 10 and 16 hrs respectively. If the train from Delhi to Patna goes with a speed of 80km/hr, what is the speed of the train in km/hr from Patna to Delhi?
 (a) 10 (b) 20 (c) 50 (d) None
- Q(22) Two trains of equal length take 10 seconds and 15 seconds respectively to cross a telegraph post. If the length of each train be 120 meters, in what time will trains cross each other travelling in opposite direction?
 a. 16 sec b. 15 sec c. 12 sec d. 10 sec
- Q(23) Walking at 80% of his normal speed, a man is 20 mins late to his office. Find the normal time taken by him in minutes to reach his office
 (a) 80 (b) 10 (c) 23 (d) None
- Q(24) The speed of a boat when travelling downstream is 32 kmph whereas when travelling upstream it is 28 kmph. What is the speed of the boat in still water?
 (a) 27kmph (b) 29kmph (c) 31kmph (d) none of these
- Q(25) A police chases a thief. Their respective speeds are 8 and 6 km/hr. If the police started 10 min late, at what distance he will catch the thief?
 (a) . 2 km (b) 4 km (c) 8 km (d) 16 km
- Q(26) 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) 71.11 km/h (b) 61.11 km/h (c) 51.11 km/h (d) 31.11 km/h



Q(27) Statement: All tables are windows.
All windows are rooms.
All rooms are buses.
Conclusions: I. Some buses are tables.

II. Some rooms are tables.

(a) if conclusion I follow

(c) if either conclusion I or II follows

(b) if conclusion II follows

(d) if both conclusion I and II follows

CO2,L3

Q(28) Statement: Some cats are dogs.
All dogs are goats.

All goats are walls.

Conclusions: I. Some walls are dogs.

II. Some walls are cats.

(a) if conclusion I follow

(c) if either conclusion I or II follows

(b) if conclusion II follows

(d) if both conclusion I and II follows

CO2,L3

Q(29) Statement: Some buildings are benches.

Some sofas are benches.

Some benches are sofas.

Conclusions: I. Some tables are sofas.

II. No table is sofa.

(a) if conclusion I follow

(c) if either conclusion I or II follows

(b) if conclusion II follows

(d) if neither conclusion I nor II follows

CO2,L3

Q(30) Jatin is 12th from either end of a row of boys. How many boys are there in that row?

(a) 21

(b) 23

(c) 45

(d) None

CO2,L3

Q(31) In a row of 40 girls, When Kamala was shifted to her left by 4 places, her number from the left end of the row becomes 10. What was the number of Sujata from the right end of the row if sujata was three places to the right of Kamala's original position?

(a) 24

(b) 11

(c) 34

(d) None

CO2,L3

Q(32) In a row of 25 boys, Mithun is twelfth from the left and Nitin is eighth from the right. How many boys are between them?

(a) 5

(b) 11

(c) 32

(d) None

CO2,L3

Q(33) In a class, 30 opted for Physics, 15 for Math's, 5 for both and 10 for other subjects. The class contains how many students?

(a) 10

(b) 50

(c) 9

(d) None

CO2,L3

Q(34) Statements:

1. Some actors are singers.

2. All the singers are dancers.

Conclusions:

1. Some actors are dancers.

2. No singer is actor.

(a) Only (1) conclusion follows.

(c) Both (1) and (2) conclusion follows.

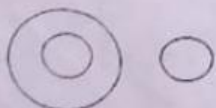
(b) Only (2) conclusion follows.

(d) None of these

CO2,L3

Q(35) Which of the following diagram indicates Best relation between traveler, Train and bus ?

(a)



(b)



(c)



(d)



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Q(36) Statements : All tables are chairs.

No chair is a couch.

Conclusions : I. At least some couches are chairs.

II. No table is a couch.

(a) Conclusion I follows

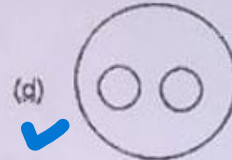
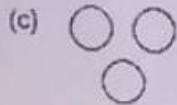
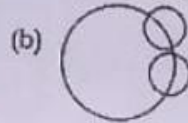
(c) Either conclusion I or conclusion II follows

☒ (b) Conclusion II follows

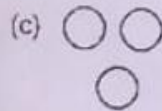
(d) Neither conclusion I or conclusion II follows

CO2,L3

Q(37) Which of the following diagrams indicates best relations between factory, product and machinery



Q(38) Which of the following diagram indicates the best relation between women, mothers and engineers ?



Q(39) Anu and Vinay are ranked seventh and eleventh respectively from the top in a class of 31 students. What will be their respective ranks from the bottom in the class?

(a) 20th and 24th

(b) 24th and 20th

☒ (c) 25th and 21st

(d) None of these

Q(40) In a row of boys, A is 13th from the left and D is 17th from the right. If in this row A is 11th from the right then what is the positions of D from the left?

a) 6th

☒ b) 7th

c) 10th

d) 14th

--End of Question paper--

