

DMAT MASTER TEST DRILL – MOCK SET 1

Total Questions: 100

Total Time: 180 Minutes

MODULE 1: CORE MODULE (90 Minutes)

Questions 1–50

Distribution:

- Figure Sequences: Q1–Q15
 - Mathematical Equations & Numerical Reasoning: Q16–Q30
 - Latin Squares & Logical Patterns: Q31–Q50
-

SECTION A: FIGURE SEQUENCES (Q1–Q15)

Q1.

A square rotates 90° clockwise in each step:

Up $\rightarrow$ Right $\rightarrow$ Down $\rightarrow$ Left $\rightarrow$?

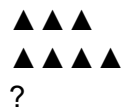
The next position is:

- A. Up
 - B. Right
 - C. Down
 - D. Left
-

Q2.

A shape sequence contains:





How many triangles will the next figure contain?

- A. 4
 - B. 5
 - C. 6
 - D. 8
-

Q3.

A circle pattern follows:

1 dot → 3 dots → 6 dots → 10 dots → ?

- A. 12
 - B. 14
 - C. 15
 - D. 18
-

Q4.

Find the missing figure pattern:



- A. □○△★◆
 - B. ○△★◆
 - C. □△★
 - D. □○★◆
-

Q5.

Number of shaded areas doubles:

$1 \rightarrow 2 \rightarrow 4 \rightarrow 8 \rightarrow ?$

- A. 12
 - B. 14
 - C. 16
 - D. 18
-

Q6.

A triangle rotates:

$45^\circ \rightarrow 90^\circ \rightarrow 135^\circ \rightarrow 180^\circ \rightarrow ?$

- A. 200°
 - B. 225°
 - C. 270°
 - D. 360°
-

Q7.

Pattern:

Mirror $\rightarrow$ Rotate $\rightarrow$ Mirror $\rightarrow$ Rotate $\rightarrow$ Mirror $\rightarrow ?$

- A. Rotate
 - B. Mirror
 - C. Flip
 - D. Reverse
-

Q8.

A figure contains:

- 1 square
- 2 triangles
- 4 circles
- 8 stars

The next figure contains:

- A. 10 hexagons
 - B. 12 hexagons
 - C. 16 hexagons
 - D. 20 hexagons
-

Q9.

Complete the pattern:

2, 6, 12, 20, 30, ?

- A. 36
 - B. 40
 - C. 42
 - D. 44
-

Q10.

Find the missing number:

5, 11, 23, 47, 95, ?

- A. 180
 - B. 185
 - C. 191
 - D. 193
-

Q11.

A pentagon rotates:

72° , 144° , 216° , 288° , ?

- A. 0°
 - B. 72°
 - C. 180°
 - D. 360°
-

Q12.

Find the odd one:

- A. 64
 - B. 81
 - C. 121
 - D. 145
-

Q13.

Sequence:

1, 4, 9, 16, 25, ?

- A. 30
 - B. 36
 - C. 42
 - D. 49
-

Q14.

Sequence:

AZ, BY, CX, DW, ?

- A. EV
 - B. EU
 - C. FV
 - D. EW
-

Q15.

A cube has opposite sides:

Red–Blue
Green–Yellow
Black–White

If Red is opposite Blue, which colour cannot touch Red?

- A. Green
 - B. Yellow
 - C. Blue
 - D. Black
-

SECTION B: MATHEMATICAL EQUATIONS (Q16–Q30)

Q16.

$2 \rightarrow 6$
 $3 \rightarrow 12$
 $4 \rightarrow 20$
 $5 \rightarrow ?$

- A. 25
 - B. 30
 - C. 35
 - D. 40
-

Q17.

$6 = 42$
 $8 = 72$
 $10 = ?$

- A. 90
 - B. 100
 - C. 110
 - D. 120
-

Q18.

If:

$$x + 1/x = 5$$

Find:

$$x^2 + 1/x^2$$

- A. 21
 - B. 23
 - C. 25
 - D. 27
-

Q19.

Solve:

$$2x + 7 = 25$$

- A. 7
 - B. 8
 - C. 9
 - D. 10
-

Q20.

A train covers 360 km in 6 hours.

Speed?

- A. 50 km/h
 - B. 60 km/h
 - C. 70 km/h
 - D. 80 km/h
-

Q21.

A price increases by 20% and decreases by 20%.

Overall change?

- A. No change
- B. 4% decrease

- C. 4% increase
 - D. 8% decrease
-

Q22.

Find next:

3, 7, 15, 31, 63, ?

- A. 95
 - B. 127
 - C. 129
 - D. 135
-

Q23.

Average of:

10, 20, 30, 40, 50

- A. 25
 - B. 30
 - C. 35
 - D. 40
-

Q24.

A worker completes a task in 12 days.

How many workers are needed to finish it in 4 days?

- A. 2
 - B. 3
 - C. 4
 - D. 6
-

Q25.

A number multiplied by 5 and increased by 10 equals 60.

Number?

- A. 8
 - B. 10
 - C. 12
 - D. 14
-

Q26.

240 km journey:

First half at 60 km/h

Second half at 40 km/h

Average speed?

- A. 45
 - B. 48
 - C. 50
 - D. 55
-

Q27.

Find:

15% of 400

- A. 40
 - B. 50
 - C. 60
 - D. 70
-

Q28.

A machine efficiency improves from 70% to 84%.

Increase:

- A. 10%
 - B. 12%
 - C. 14 percentage points
 - D. 20%
-

Q29.

If:

$$5 + 3 = 64$$

$$7 + 2 = 81$$

$$9 + 1 = ?$$

- A. 90
 - B. 100
 - C. 81
 - D. 110
-

Q30.

A dataset average is 18.

Adding one value 38 increases average to 20.

Original values?

- A. 8
- B. 9
- C. 10
- D. 11

Latin Squares

Instruction:

In a Latin Square, every symbol/number appears **exactly once in each row and column.**

Q31.

Complete the missing number:

1 2 3 4 ?
2 3 4 5 1
3 4 5 1 2
4 5 1 2 3
5 1 2 3 4

- A. 1
 - B. 2
 - C. 3
 - D. 5
-

Q32.

Find the missing value:

1 2 ? 4
2 3 4 1
3 4 1 2
4 1 2 3

- A. 1
 - B. 2
 - C. 3
 - D. 4
-

Q33.

Complete the Latin Square:

A B C D
B C D A
C ? A B
D A B C

- A. A
- B. B

- C. C
 - D. D
-

Q34.

Which number completes the square?

1 3 5
3 5 ?
5 1 3

- A. 1
 - B. 3
 - C. 5
 - D. 7
-

Q35.

A 6×6 Latin Square uses symbols:

A B C D E F

How many times will symbol "C" appear in the entire square?

- A. 4
 - B. 5
 - C. 6
 - D. 7
-

Q36.

Complete:

2 4 6 8
4 6 8 2
6 8 ? 4
8 2 4 6

- A. 2
- B. 4

- C. 6
 - D. 8
-

Q37.

In a valid 5×5 Latin Square, each row contains:

- A. Same number repeated five times
 - B. Every symbol exactly once
 - C. Only prime numbers
 - D. Increasing numbers only
-

Q38.

Find missing symbol:

A B C D
B C D A
C D A ?
D A B C

- A. A
 - B. B
 - C. C
 - D. D
-

Q39.

If a Latin Square has 8 symbols, each symbol appears:

- A. 4 times
 - B. 6 times
 - C. 8 times
 - D. 16 times
-

Q40.

A 4×4 Latin Square contains:

1 2 3 4

How many total cells are present?

- A. 8
 - B. 12
 - C. 16
 - D. 20
-

Logical Analytical Reasoning

Q41.

All engineers are researchers.

Some researchers are professors.

Which statement is definitely correct?

- A. All professors are engineers.
 - B. Some researchers may not be engineers.
 - C. No engineer is a professor.
 - D. All researchers are engineers.
-

Q42.

If:

$P \rightarrow Q$

$Q \rightarrow R$

Then:

- A. $P \rightarrow R$
 - B. $R \rightarrow P$
 - C. $Q \rightarrow P$
 - D. P and R are unrelated
-

Q43.

A student ranks 12th from the top and 19th from the bottom.

Total students?

- A. 29
 - B. 30
 - C. 31
 - D. 32
-

Q44.

Find the odd pair:

- A. Keyboard – Computer
 - B. Engine – Car
 - C. Heart – Human Body
 - D. Book – Library
-

Q45.

Complete analogy:

Algorithm : Computer

Formula : ?

- A. Mathematics
 - B. Calculator
 - C. Equation
 - D. Science
-

Q46.

A university introduces online learning. After one year, student attendance increases.

Which conclusion is strongest?

- A. Online learning definitely caused the increase.
 - B. Online learning may have contributed to higher attendance.
 - C. Students dislike classrooms.
 - D. Teachers became unnecessary.
-

Q47.

A company increases salaries, but productivity remains unchanged.

Most logical conclusion:

- A. Money never motivates employees.
 - B. Other factors affect productivity.
 - C. Salaries should be reduced.
 - D. Employees are lazy.
-

Q48.

Which argument is strongest?

- A. Renewable energy is popular.
 - B. Renewable energy reduces emissions because it produces less greenhouse gas pollution.
 - C. Renewable energy looks attractive.
 - D. Renewable energy is expensive.
-

Q49.

A research paper claims:

"Students who use tablets perform better."

Which information is most important before accepting this conclusion?

- A. Tablet colour
 - B. Sample size and research method
 - C. Brand of tablet
 - D. Student age only
-

Q50.

A researcher repeats the same experiment and gets similar results.

This demonstrates:

- A. Bias
- B. Reliability
- C. Opinion
- D. Assumption

Question	Answer
----------	--------

31	A
----	---

32	C
----	---

33	C
----	---

34	A
----	---

35	C
----	---

36	C
----	---

37	B
----	---

38	D
----	---

39	C
----	---

40	C
----	---

41	B
----	---

42	A
----	---

43	B
----	---

44	D
----	---

45	A
----	---

46	B
47	B
48	B
49	B
50	B

MODULE 2: SUBJECT MODULE (90 MINUTES)

QUESTIONS 51–100

Difficulty Level: Advanced (Master's Admission Level)

SECTION A: CRITICAL REASONING & ACADEMIC THINKING

Questions 51–65

Q51.

A university introduces AI-based learning tools. After one year, examination scores improve by 15%.

Which conclusion is most justified?

- A. AI tools are the only reason for improvement.
 - B. AI tools may have contributed, but other factors should be analysed.
 - C. Students no longer need teachers.
 - D. Examinations became easier.
-

Q52.

All data scientists use programming languages.
Some programmers are researchers.

Which statement is logically valid?

- A. All researchers are data scientists.
 - B. Some researchers may use programming languages.
 - C. No researchers use programming languages.
 - D. All programmers are data scientists.
-

Q53.

A company claims:

"Employees working remotely are more productive."

Which evidence would weaken this claim?

- A. Remote workers save commuting time.
 - B. Productivity was measured only in one department.
 - C. Many employees prefer flexible work.
 - D. Technology improves communication.
-

Q54.

A city wants to reduce traffic congestion by increasing public transport.

Which assumption is necessary?

- A. Public transport capacity is sufficient for additional users.
- B. Cars will become cheaper.
- C. Fuel prices will increase.
- D. Roads will become wider.

Q55.

A researcher observes that students who attend workshops score higher.

Which alternative explanation should be considered?

- A. Workshops are always ineffective.
 - B. Highly motivated students may attend workshops more frequently.
 - C. Students dislike workshops.
 - D. Exams are unnecessary.
-

Q56.

Which source provides the strongest academic evidence?

- A. Social media discussion
 - B. Personal opinion article
 - C. Peer-reviewed research paper
 - D. Online advertisement
-

Q57.

A study finds correlation between exercise and higher grades.

What can be concluded?

- A. Exercise definitely causes higher grades.
 - B. There is an association between exercise and grades.
 - C. Exercise has no effect.
 - D. Grades cause exercise.
-

Q58.

Which represents a scientific hypothesis?

- A. Climate change is interesting.
- B. Plants exposed to more sunlight will grow faster.

- C. Science is important.
 - D. Research is difficult.
-

Q59.

A university replaces printed books with digital resources.

The most likely immediate effect:

- A. Printing costs decrease.
 - B. All students achieve higher marks.
 - C. Libraries disappear.
 - D. Teachers become unnecessary.
-

Q60.

Which practice improves research reliability?

- A. Increasing sample size
 - B. Ignoring contradictory results
 - C. Changing results to fit expectations
 - D. Using personal opinions
-

Q61.

A researcher rejects a true hypothesis.

This is called:

- A. Type I error
 - B. Type II error
 - C. Sampling error
 - D. Measurement error
-

Q62.

A survey collects responses from only volunteers.

The main concern is:

- A. Randomisation
 - B. Selection bias
 - C. Increased accuracy
 - D. Perfect representation
-

Q63.

Which statement is an example of plagiarism?

- A. Using your own analysis
 - B. Citing another author's work
 - C. Copying text without acknowledgement
 - D. Summarising with references
-

Q64.

Replication in research means:

- A. Repeating a study to verify results
 - B. Changing the hypothesis
 - C. Removing data
 - D. Avoiding experiments
-

Q65.

A university compares two teaching methods.

The best approach is:

- A. Compare results using controlled conditions.
 - B. Select the preferred method randomly.
 - C. Ask only one student.
 - D. Ignore statistical evidence.
-

SECTION B: DATA INTERPRETATION

Questions 66–80

A university survey analysed student enrolment:

Department	Students
Engineering	240
Computer Science	180
Business	120
Humanities	60

Total Students = 600

Q66.

Engineering students represent:

- A. 30%
 - B. 40%
 - C. 45%
 - D. 50%
-

Q67.

Computer Science students exceed Humanities students by:

- A. 100
 - B. 120
 - C. 140
 - D. 160
-

Q68.

Engineering + Computer Science students represent:

- A. 60%
 - B. 65%
 - C. 70%
 - D. 75%
-

Q69.

Business students represent what fraction of total students?

- A. $\frac{1}{3}$
 - B. $\frac{1}{4}$
 - C. $\frac{1}{5}$
 - D. $\frac{1}{6}$
-

Q70.

If Computer Science enrolment increases by 20%, new students:

- A. 196
 - B. 210
 - C. 216
 - D. 220
-

Q71.

If 30 Business students transfer to Engineering, Engineering becomes:

- A. 250
 - B. 260
 - C. 270
 - D. 280
-

Q72.

The ratio of Engineering to Humanities students is:

- A. 2:1
 - B. 3:1
 - C. 4:1
 - D. 5:1
-

Q73.

If total students increase by 100 while proportions remain unchanged, Engineering students become approximately:

- A. 260
 - B. 280
 - C. 300
 - D. 320
-

Q74.

Which department has the lowest representation?

- A. Engineering
 - B. Computer Science
 - C. Business
 - D. Humanities
-

Q75.

Average students per department:

- A. 120
 - B. 150
 - C. 160
 - D. 180
-

Q76.

A dataset contains:

20, 25, 30, 35, 40

Mean is:

- A. 25
 - B. 30
 - C. 35
 - D. 40
-

Q77.

The median of:

12, 18, 20, 25, 30

is:

- A. 18
 - B. 20
 - C. 25
 - D. 30
-

Q78.

A correlation coefficient of +0.85 indicates:

- A. Strong positive relationship
 - B. Strong negative relationship
 - C. No relationship
 - D. Random data
-

Q79.

A graph showing changes over years is best represented by:

- A. Pie chart
- B. Line graph
- C. Histogram
- D. Table

Q80.

A probability of 0.75 means:

- A. 25% chance
 - B. 50% chance
 - C. 75% chance
 - D. Impossible event
-

SECTION C: QUANTITATIVE & ACADEMIC REASONING

Questions 81–100

Q81.

A machine produces 150 items in 5 hours.

Production in 12 hours:

- A. 300
 - B. 320
 - C. 360
 - D. 400
-

Q82.

A laboratory completes 80 experiments in 10 days.

How many in 25 days?

- A. 160
- B. 180
- C. 200
- D. 220

Q83.

A student's score increases from 60 to 75.

Percentage increase:

- A. 15%
 - B. 20%
 - C. 25%
 - D. 30%
-

Q84.

A product price decreases from £500 to £400.

Percentage decrease:

- A. 10%
 - B. 15%
 - C. 20%
 - D. 25%
-

Q85.

A dataset has values:

5, 10, 15, 20, 25

Standard deviation measures:

- A. Average value
 - B. Data spread
 - C. Maximum value
 - D. Middle value
-

Q86.

A project requires 24 workers for 10 days.

If 30 workers work at the same rate, completion time:

- A. 6 days
 - B. 8 days
 - C. 10 days
 - D. 12 days
-

Q87.

A student answers 72 out of 90 questions correctly.

Accuracy:

- A. 70%
 - B. 75%
 - C. 80%
 - D. 85%
-

Q88.

A research model achieves:

Accuracy = 90%

Errors are:

- A. 5%
 - B. 10%
 - C. 15%
 - D. 20%
-

Q89.

A dataset doubles:

50 → 100

Percentage increase:

- A. 50%
 - B. 75%
 - C. 100%
 - D. 200%
-

Q90.

If:

$$3x = 27$$

x equals:

- A. 6
 - B. 7
 - C. 8
 - D. 9
-

Q91.

Solve:

$$5x + 10 = 50$$

- A. 6
 - B. 7
 - C. 8
 - D. 9
-

Q92.

A research project has four phases:

10 hours, 15 hours, 20 hours, 25 hours

Average duration:

- A. 15
- B. 17.5

- C. 18
 - D. 20
-

Q93.

Which method reduces sampling bias?

- A. Random sampling
 - B. Selecting friends
 - C. Online voluntary survey only
 - D. Choosing easiest participants
-

Q94.

A Master's student compares two algorithms using the same dataset.

Most important principle:

- A. Replicability
 - B. Personal preference
 - C. Guessing
 - D. Random choice
-

Q95.

Which measure is least affected by extreme values?

- A. Mean
 - B. Median
 - C. Range
 - D. Variance
-

Q96.

A company revenue rises:

£100,000 → £130,000

Increase:

- A. £20,000
 - B. £25,000
 - C. £30,000
 - D. £35,000
-

Q97.

A probability of 0 means:

- A. Certain event
 - B. Impossible event
 - C. Likely event
 - D. Random event
-

Q98.

Which test compares averages of two groups?

- A. Chi-square
 - B. t-test
 - C. Correlation
 - D. Regression
-

Q99.

A scientific conclusion should be:

- A. Based on evidence
 - B. Based on assumptions
 - C. Based on opinions
 - D. Based on guesses
-

Q100.

A researcher wants to prove whether a new method is better.

The best approach:

- A. Experimental comparison
- B. Personal judgement
- C. Single observation
- D. Online comments

Q	Ans	Q	Ans
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51	B	76	B
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52	B	77	B
----	---	----	---

53	B	78	A
----	---	----	---

54	A	79	B
----	---	----	---

55	B	80	C
----	---	----	---

56	C	81	C
----	---	----	---

57	B	82	C
----	---	----	---

58	B	83	C
----	---	----	---

59	A	84	C
----	---	----	---

60	A	85	B
----	---	----	---

61	B	86	B
----	---	----	---

62	B	87	C
----	---	----	---

63	C	88	B
----	---	----	---

64	A	89	C
----	---	----	---

65	A	90	D
----	---	----	---

66	B	91	A
----	---	----	---

67	B	92	B
----	---	----	---

68	A	93	A
----	---	----	---

69	D	94	A
70	C	95	B
71	C	96	C
72	C	97	B
73	B	98	B
74	D	99	A
75	B	100	A