# 6. Natureofthetest

#### Section-1 MentalAbilityTest(MAT)

##### Thisisnon–verbaltest.Questionsarebasedonfiguresanddiagramsonly.Questionsaremeanttoassessgeneralmentalfunctioningofthecandidates.Thesectionisdividedintotenparashaving5questionseach.Givenbelowaresomeexamples:

**PART-I(ODD-MANOUT)**

**Directions:**

Inquestions1to5,fourfigures1,2,3and4havebeengivenineachquestion.Ofthesefourfigures,threefiguresaresimilarinsomewayandonefigureisdifferent.Selectthefigurewhichisdifferent.

1

1

**PART-II(FIGURE MATCHING)**

**Directions:**

Inquestions6to10,aproblemfigureisgivenontheleftsideandfouranswerfiguresmarked 1,2,3,4aregivenontherightside.Selecttheanswerfigure whichisexactlythesameastheproblemfigure.

3

3

**PART-III(PATTERN COMPLETION)**

**Directions:**

Inquestions11to15thereisaproblemfigureonthelefthandside,apartofwhichismissing.Observetheanswerfigures1,2,3,4ontherighthandsideandfindouttheanswerfigurewhichwithoutchangingthedirection,fitsinthemissingpartoftheproblemfigureinordertocompletethepatternintheproblemfigure.

4

4

**PART-IV(FIGURE SERIESCOMPLETION)**

**Directions:**

Inquestions16to20,therearethreeproblemfiguresonthelefthandsideandthespaceforthefourthfigureisleftblank.Theproblem figuresareinaseries.Findoutonefigure

fromamongtheanswerfiguresgivenontherighthandside,whichoccupiestheblankspaceforthefourthfigureonthelefthandsideandcompletestheseries.

**3**

**PART -V(ANALOGY)**

3

**Directions:**

##### Inquestions21to25,therearetwosetsoftwoproblemfigureseach.Thesecondsethasamarkofinterrogation(?).Thereexistsarelationshipbetweenthefirsttwoproblemfigures.Similarrelationshipshouldexistbetweenthethirdandfourthproblemfigure.Selectoneoftheanswerfigurewhichreplacesthemarkofinterrogation.

4

**4**

**PART -VI{GeometricalFigureCompletion(Triangle, Square,Circle)}Directions:**

Inquestions26to30onepartofasquareisonthelefthandsideasquestionfigureand

theotheroneisamongthefouranswerfigures1,2,3,4givenontherighthandside.Findoutthefigurethatcompletesthesquare.

**4**

4

**PART – VII(MIRRORIMAGING)**

**Directions:**

Inquestions31to35thereisaproblemfigureontheleftsideandfouranswerfiguresmarked 1,2,3,4aregivenontherightside.Selecttheanswerfigure whichisexactlythemirrorimageoftheproblemfigurewhenthemirrorisheldatXY.

3

**3**

**PART -VIII(PUNCHED HOLD PATTERN-Folding/Unfolding)Directions:**

Inquestion36to40apieceofpaperisfoldedandpunchedasshowninproblemfiguresontheleftsideandfouranswerfiguresmarked1,2,3,4aregivenonrightside.Selecttheanswerfigurewhichindicateshowthepaperwillappearwhenopened(unfolded).

3

**3**

**PART -IX(SPACE VISUALISATION)**

**Directions:**

Inquestions41to45aproblemfigureisgivenontheleftsideandfouranswerfigures,marked1,2,3,4aregivenontherightside.Selecttheanswerfigurewhichcanbeformedfromthecut-offpiecesgivenintheproblemfigure.

1

**1**

**PART –X(EMBEDDEDFIGURE)**

**Directions:**

Inquestions46to50aproblemfigureisgivenontheleftsideandfouranswerfigures,marked1,2,3,4aregivenontherightside.Selecttheanswerfigureinwhichtheproblemfigureishidden/embedded.

1

**1**

**Section2:ArithmeticTest**

Themainpurposeofthistestistomeasurecandidate'sbasiccompetenciesinArithmetic.AlltheTwenty-fivequestionsofthistestwillbebasedonthefollowing15topics

1. Numberandnumericsystem.
2. Fourfundamentaloperationsonwholenumber.
3. Fractionalnumberandfourfundamentaloperationsonthem.
4. Factorsandmultipleincludingtheirproperties.
5. LCMandHCFofnumbers.
6. Decimalsandfundamentaloperationsonthem.
7. Conversionoffractionstodecimalsandvice-versa.
8. Applicationsofnumberinmeasurelength,mass,capacity,time,moneyetc
9. Distance,timeandspeed.
10. Approximationofexpressions.
11. SimplificationofNumericalExpressions,
12. Percentageanditsapplications.
13. Profitandloss.
14. Simpleinterest.
15. Perimeter,areaandvolume.

Note:-EmphasiswillbemoreontestingofunderstandingandApplicationoftheconceptsandskillsinvolved. Inordertoprovide some guidancetothecandidatesonthetypesofquestionsthatareexpectedinArithmeticlest,someexamplesaregivenbelow-

**Example-1(TestofUnderstanding):**

Whatistheprimefactorizationof1000?

**1. 10x10x10**

**2. 2x5x5x10**

**3. 2x2x 2x5x5**

**4. 2x2x2x 5x5x5**

Afactorizationofanumberissaidtobeaprimefactorizationif(i)theproductofthefactors(takingafactorasmanytimesasitoccurs)isequaltothegivennumber,and(ii)eachfactorisaprimenumber.Hereonlyserialnumber4satisfiesboththerequirements.Assuch,serialnumber4isthecorrectanswer.

**Example2(TestofUnderstanding):**

Whatistheaverage*of*firstfouroddnumbers?

|  |  |
| --- | --- |
| 1. | 2.5 |
| 2. | 4 |
| 3. | 5 |
| 4. | 16 |

Thefirstfouroddnumbersare1.3.5and7.Theiraverage(l+3+5+7)/4.Assuch,serialnumber2isthecorrectanswer.

**Example3(TestofApplication):**

A1km.longgoodstrainisrunningatspeedofIkm.per3minutes,thetimetakenbythistraintopassthrough2kms.Longtunnelis:

* 1. 1minute
	2. 3minute
	3. 6minute
	4. *9*minute

##### Thetunnelis2km.longandthetrainisIkm.inlength,thetrainwillhavetocoveratotaldistance*of3*km.inordertopassthroughthetunnelrunningataspeedof1km,per3minutes,thetrainwilltake9minutestopassthroughibistunnelandthatisthecorrectanswer.Assuch,serialnumber4isthecorrectanswer.

**Section3:LanguageTest.**

Themainpurposeofthistestistoassessreadingcomprehensionofthecandidates.Thetestconsistsofthreepassages.Eachpassageisfollowedby5questions.Candidatesshallreadeachpassagecarefullyandanswerthequestionsthatfollow.Inaddition,therewillbe10questionstotestgrammarandwritingskillsofcandidates.

**Givenbelowisaspecimenpassageandthequestionsthatfollowthepassage.**

**PASSAGE**

Forestsareusefultousinmanyways.Theyprovideuswithtimbertobuildhousesandmakefurniture.Forestsalsoprovideuswithwoodforfuelandmakingpaper.Theyprovideshelterforbirds,wildanimalsandinsects.Forestsbringrainfall.Existenceofforestsisveryimportantforthepreservationoftheecosystem.Thefactthatwehavetocareforanecosystemisindisputablyestablished.Wiseuseoftheenvironmentanditsresourcesareessentialforman'scontinuedsurvival.

1. **Topreservetheecosystem,existenceof...............isessential.**
	1. forests
	2. animals
	3. humanbeings
	4. resources
2. **Oppositeofpreservation'is...............**
	1. conservation
	2. construction
	3. shelter
	4. destruction
3. **Whichoneofthefollowingisnotasynonymof'wise'?**
	1. Sensible
	2. Intelligent
	3. Humorous
	4. Judicious
4. **Carpentersdependonforestsbecausetheyprovide...............**
	1. woodforfuel
	2. woodformakingpaper
	3. timbertomakefurniture
	4. housesforanimals
5. **Wildanimalswillbecomehomelessif...............**
	1. papermillsaredestroyed
	2. housesarebuilt
	3. forestsaredestroyed
	4. ecosystemistakencareof