

Proforma of Question Paper for New Syllabus – 2009

Full Marks – 100

Mathematics

Time – 3 Hours

*[Answer of questions of the **First Part** of the Question paper must be written **serially** in the **First page** of the Answer script. All calculations and drawings must be done in the right hand side margin of the script in proper place. No Table or Calculator will be allowed, $\pi = 22/7$ should be assumed. Graph papers will be supplied as required.]*

Part : I (OBJECTIVE) – 25 marks

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|-------|-----|----------------------------|-----|
| 1. | (a) | Arithmetic – 3 Questions | (1) |
| | (b) | Algebra – 4 Questions | (1) |
| | (c) | Geometry – X X X X X | (1) |
| | (d) | Mensuration – 2 Questions | (1) |
| | (e) | Trigonometry – 2 Questions | (1) |
| | (f) | | (1) |
| | (g) | | (1) |
| | (h) | | (1) |
| | (i) | | (1) |
| | (j) | | (1) |
| | (k) | | (1) |
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| 2. | (a) | Arithmetic – 1 Question | (2) |
| | (b) | Algebra – 3 Questions | (2) |
| | (c) | Geometry – 2 Questions | (2) |
| | (d) | Mensuration – X X X X X | (2) |
| | (e) | Trigonometry – 1 Question | (2) |
| | (f) | | (2) |
| | (g) | | (2) |

PART—II

(A) ARITHMETIC – 10 marks + Obj – 5 marks

03. Answer ANY TWO questions : (5+5)
- (a) Ratio & Proportion; Mixture, Partnership,
 - (b) Rule of three; Percentage
 - (c) Simple & Compound Interest
 - (d) Profit & Loss

(B) ALGEBRA – 25 marks + Obj – 10 marks

04. Resolve into factors (ANY ONE) (a) OR (b) : (3+3)
- (a) Square Formula
 - (b) Cube Formula / Middle Term Breaking / Vanishing Method
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05. Answer ANY ONE (a) OR (b) : (4)
- (a) Find the H.C.F. of the following expressions :
 - (b) Find the L.C.M. of the following expressions :
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06. Solve ANY ONE (a) OR (b) : (3)
- (a) Simul Eqn.
 - (b) Quad Eqn

07. Answer ANY ONE (a) OR (b) : Problems on Equation (4)
- (a) On Simul Eqn.
(b) On Quad Eqn
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08. Answer ANY ONE (a) OR (b) : (5)
- (a) Solve the following two equations graphically :
(b) Draw the graphs of the following in equations and mark the solution region satisfying them simultaneously :
two equations only
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09. Answer ANY ONE (a) OR (b) : (3)
- (a) Simplify : Simple Fraction
(b) Surds
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10. Answer ANY ONE (a) OR (b) : (3)
- (a) Ratio & Proportion
(b) Variation
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(C) GEOMETRY – 21 marks + Obj – 4 marks

11. Answer questions (a) OR (b) and (c) OR (d) : Theorem (6+6)
- (a) Theorem from class – IX
(b) Theorem from class – IX
(c) Theorem from class – X
(d) Theorem from class – X
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12. Answer ANY ONE (a) OR (b) : Riders (3)
- (a) From Class – IX
(b) From Class – X
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13. Answer ANY ONE (a) OR (b) : Construction (6)
- (a) From Class – IX
(b) From Class – X
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(D) MENSURATION – 8 marks + Obj – 2 marks

14. Answer any TWO questions : (4+4)
- (a) From Class – IX Quadrilateral, Triangle, Circle
(b) From Class – X Prism, Pyramid, Cylinder, Sphere, Cone
(c) From Class – X Prism, Pyramid, Cylinder, Sphere, Cone
(d) From Class – X Prism, Pyramid, Cylinder, Sphere, Cone
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(E) TRIGONOMETRY – 11 marks + Obj – 4 marks

15. Answer any TWO questions : (3+3)
- (a) Circular Measure
(b) Trigon Ratios
(c) Standard Angles
(d) From any one chapter
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16. Answer ANY ONE (a) OR (b) : Height & Distance (5)
- (a)
(b)
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