

# IAT 3 Railways, Harbours, Tunneling and Airports

## 1 Mark Questions

1. An area where an aircraft can land and take off, which may or may not be equipped with any navigational aids or markings 25 / 25 correct responses

Value	Count
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Aiport	0
✓ Airfield	25
Runway	0
Taxiway	0

2. Runways are numbered between 25 / 25 correct responses

Value	Count
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0- 36	0
✓ 1- 36	25
0 - 360	0
1- 360	0

3. What does this picture Indicate 18 / 25 correct responses

Value	Count
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Runway	6
✓ Taxiway`	18
Apron	1

4. Areas where the aircraft park 25 / 25 correct responses

Value	Count
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✓ Apron	25
Hanger	0
Terminal Buildings	0

5. Where are these lights placed 25 / 25 correct responses

Value	Count
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Runways	0
✓ Taxiways	25

Value	Count
Aprons	0
Hangers	0

6. What layout is this figure 25 / 25 correct responses

Value	Count
✓ Tangential	25
Intersecting	0
Triangular	0

7. What does this figure indicate 25 / 25 correct responses

Value	Count
Yaw	0
✓ Pitch	25
Roll	0

8. Piston Engine travels at a speed of 500- 800km/hr 25 / 25 correct responses

Value	Count
✓ True	25
False	0

## 2 Marks Questions

1. \_\_\_\_\_ are edged with white lights and \_\_\_\_\_ have blue lights 24 / 25 correct responses

Value	Count
Taxiways, Runways	1
✓ Runways, taxiways	24
Aprons and Taxiways	0

2. Speed has nothing to do with the planning of airport 11 / 25 correct responses

Value	Count
✓ True	11
False	14

3. Cooperation between airport managers & Local Government comes under \_\_\_\_\_ Factors in Socio- Economic Characteristics 25 / 25 correct responses

**Value Count**

✓ Internal 25

External 0

4. Identify this picture 25 / 25 correct responses

**Value Count**

✓ Wind rose diagram type 1 25

Wind rose diagram type 2 0

5. For airports with code letters A and B, ICAO recommends length of vertical curve as 30m for each 1% grade change. For airports with code letter C, D and E, ICAO recommended 17 / 25 correct responses

**Value Count**

True 8

✓ False 17

6. Width of taxiway for C type Airport is \_\_\_\_\_ m 25 / 25 correct responses

**Value Count**

10 0

✓ 15 25

20 0

25 0

7. This is extra wide area provided at the curves so that rear wheel does not go off the pavement edge. 23 / 25 correct responses

**Value Count**

✓ Fillet 23

Chamfer 2

Wide parallel runway 0

8. The \_\_\_\_\_ is an area designed to prevent erosion of surfaces adjacent to the ends of the runways which are subjected to repeated jet blasts 22 / 25 correct responses

**Value Count**

✓ Blast pad 22

Runway strip 3

9. ICAO recommendations for width of safety area: For non- instrumental runway - A,B,C,D and E= 150m. For instrumental runway using ILS = 300m.22 / 25 correct

responses

**Value Count**

✓ True 22

False 3

10. % of time, in a year, during which the cross wind component remains within the limits as specified above is wind coverage.24 / 25 correct responses

**Value Count**

Cross wind 1

✓ Wind Coverage 24

3 Marks

1. What does this diagram show23 / 25 correct responses

**Value Count**

✓ Direction, Duration, Intensity 23

Direction, duration, inertia 1

Direction, coverage, Intensity 1

2. \_\_\_\_\_ method is adopted in terrains where the soil permits the roof of the tunnel section to stand without support for a few minutes24 / 25 correct responses

**Value Count**

✓ Needle Beam 24

Linear method 1

3. \_\_\_\_\_ is an old method of tunnelling through soft ground22 / 25 correct responses

**Value Count**

Needle beam 1

Linear method 1

✓ Forepoling 22

none of the above 1

4. A circular shape tunnel has the lowest cross-sectional area to perimeter ratio.20 / 25  
correct responses

**Value Count**

True 5

✓ False 20

**5 Marks**

1. Name them22 / 25 correct responses

<b>Value</b>	<b>Count</b>
open Arpon, Frontal, T shape, Y shape and straight	3
✓ Frontal, open apron, T shape, Y shape and straight	22
Frontal, open apron, Y shape, straight and T shape	0

Name the parts23 / 25 correct responses

<b>Value</b>	<b>Count</b>
Horizontal Stabilizer, Vertical Stabilizer, Trim tabs, rudder, elevator	1
✓ Horizontal Stabilizer, Vertical Stabilizer, rudder, Trim tabs, elevator	23
Horizontal Stabilizer, Vertical Stabilizer, rudder, elevator, Trim tabs,	1

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