

**INDIA METEOROLOGICAL
DEPARTMENT
QUESTION BANK
OF
INTEGRATED MET. TRAINING COURSE
(IMTC)
FINAL EXAMINATION
BASED ON 1-11 BATCHES (2013-2021)
PAPER-V: AVIATION METEOROLOGY**

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QUESTION BANK FOR FINAL EXAMINATION
BASED ON QUESTION FROM BATCH 1 TO 11**

PAPER –V : AVIATION METEOROLOGY

Q 1. Fill in the Blanks

1. The ARFOR/ Local forecast is issued for an aerodrome andNM around.
2. Documentation shall be provided in MET. T-3 form for flights up to.....NM.
3. TREND forecast appended in METAR is valid for.....hours.
4. There areWMO Regional Associations to provide co-operation among National Meteorological and Hydrological Services.
5. The meteorological office in India which is responsible for compiling TAF bulletins for ROBEX scheme is.....

Q 2. State true and false with brief reasons

1. Aerodrome warning need not be transmitted beyond aerodrome.
2. A local Special report of improvement in conditions can immediately be disseminated to ATC
3. Air Pressure and temperature determine the air density and hence determine the lift of the aircraft.
4. In case of occurrence of incidents, the relevant documents need not be taken possessions of and sealed.
5. The actual identity of the VVIP should be indicated in the VVIP message

Q 3. Choose the Correct Option

1. METAR VIJP 141430Z VRB02KT 2500 –RA SCT05 OVC090 27/26 Q1000 NOSIG

In the above METAR, the term “NOSIG” means

- (a) No significant weather in the next 2 hours
 - (b) No Significant change in the reported condition in next 2 hours.
 - (c) The METAR is not significant.
 - (d) No SIGMET valid for the station.
2. METAR VIDP 141500Z 14003KT 2800 BR SCT030 FEW040CB OVC080 29/26 Q0999 TEMPO TS
- (a) In the given METAR the term “BR” means
 - (b) ‘Broken’ clouds
 - (c) Patches of fog
 - (d) The present weather reported is Mist
 - (e) The wind reported is breeze.
3. The publication of Civil Aviation Authority which gives details of all services and facilities at an aerodrome is:
- (a) AIP India
 - (b) AAI India
 - (c) Manual on Meteorological Services to Aviation in India.
 - (d) Civil Aviation Requirements, India.
4. The primary channel for communication of aviation met messages is:
- (a) AMSS of IMD
 - (b) AFTN of AAI
 - (c) OLBS of IMD
 - (d) RTH of IMD
5. What is the WMO data type designator for METAR/
- (a) SA
 - (b) SP
 - (c) SM
 - (d) FC

6. What is the immediate action a current weather assistant is to take upon receiving information of an aircraft accident occurred at or in the vicinity of the local aerodrome.
 - (a) Intimate the head quarter
 - (b) Seal all the relevant documents
 - (c) Visit the site of the accident
 - (d) Record a special current weather in case more than 5 min have elapsed since the recording of the previous observation
7. Advisories for tropical cyclones in Bay of Bengal is being issued by
 - (a) TCAC Dhaka
 - (b) TCAC Kolkata
 - (c) TCAC Mumbai
 - (d) TCA Chennai
8. METAR should be filed for transmission
 - (a) Within 30 minutes of actual time of observation.
 - (b) Not later than 5 minutes after the actual time of observation
 - (c) Not later than 15 minutes after the actual time of observation.
 - (d) None of the above
9. TAF for international transmission is transmitted under the Header
 - (a) FTIN
 - (b) FKIN
 - (c) FCIN
 - (d) None of the above
10. VOLMET broadcast in India is made by
 - (a) VIDP and VECC
 - (b) VECC and VABB
 - (c) VABB and VOMM
 - (d) VABB and VECC
11. What weather should be reported if RH is 68% and the visibility is 800m
 - (a) Haze
 - (b) Fog
 - (c) Smoke

- (d) Mist
12. An Aerodrome warning for thunder storm (TS) shall be issued by duty officer of an AMO to its own airport for a maximum validity period of
- (a) 7 Hours
 - (b) 4 Hours
 - (c) 3 Hours
 - (d) None of these
13. TS in METAR as present weather shall be reported when
- (a) TS heard
 - (b) Lightning seen
 - (c) TS heard and lightning seen
 - (d) Any of (a), (b), (c) above occurs
14. In a METAR, an aeronautical observer on duty reported wind as 0000KT when
- (a) Wind speed is 3 KT
 - (b) Wind speed is more than 3 KT
 - (c) Wind speed is less than 1 Kt
 - (d) Wind is variable
15. In a MET REPORT, an aeronautical observer has reported wind as “250/20KT MAX 35 MIN 10” when
- (a) Total variation of wind is more than 180 degree
 - (b) Average wind speed is 20 KT and variation in gustiness is from 10 KT to 35 KT.
 - (c) Total variation of wind is less than 180 degree.
 - (d) All Above
16. In a METAR, the present weather was given as FZRA. The station could be
- (a) VILH
 - (b) VEKO
 - (c) VANP
 - (d) VOMM

17. An additional report shall be issued when visibility at a station changes to or passes through
- (a) 550m, 1200m, 2000m, 2500m& 400m
 - (b) 800m,1500m,3000m&5000m
 - (c) 600m,350m&150m
 - (d) None of these
18. TAF is issued by an AMO for domestic flights at a periodicity of
- (a) 3 hours
 - (b) 6 hours
 - (c) 9 hours
 - (d) None of the above

Q 3. Short Answer Type Questions

1. List three major responsibilities of a MWO.
2. List the meteorological instruments installed at airfields for provisions of meteorological services to aviation.
3. What are the parameters observed/assessed by the Meteorological Instruments?
4. Objectives of Tropical Cyclone Advisory centre (TCAC).
5. Objectives of ICAO
6. Write down the content of first intimation sent to DGM (CAMD) in case of accident.
7. Describe the effect of Pressure on aircraft operation.
8. Describe the effect of Temperature on aircraft operation.
9. Describe the effect of Visibility on aircraft operation.
10. Describe the effect of Wind on aircraft operation.
11. Describe the effect of Base of low cloud on aircraft operation.
12. List the products to be included in the Briefing Folder for an flight from Mumbai (VABB)(ETD 0610 IST) to Kolkata (VECC)(ETA 0850 IST) flying at FL 390 with the destination alternate aerodrome as Bhubaneshwar.
13. At a particular station, the relative humidity was 68% and the visibility was 800 meter. What shall be the correct weather to be reported, Mist, Haze or Fog. Justify the answer.

14. In a particular MET REPORT, the weather is given as “HVY FG”. Is the reporting procedurally correct? Justify.
15. In a MET REPORT, the wind was reported as “ WIND VRB28KT”. Is it correct to report wind direction as “VRB” when the wind speed is 28 KT? Justify.
16. In a particular METAR it is seen in the place of visibility group “1400SW 6000N”. Is the reporting procedurally correct? Justify the answer.
17. At a particular aerodrome, TSRA was the observed weather and the condition was expected to remain the same for the next two hours. The duty officer appended the trend forecast as “NOSIG”. DO you consider the trend forecast issued is correct? State the reason.
18. There was 6 okta cloud at 5000 meter and 1 okta CB at 750 meter. The observer reported the cloud group in METAR as “NSC”. Is the reporting procedurally correct? Explain.
19. The duty officer at an AMO came to know that a CB cell is nearing an airport where the met service is being provided by its associated AMS. What should be the immediate action of the duty officer of the AMO with respect to this information?
20. The visibility at a station was 1500 meter in thunderstorm as per the report of 1100 UTC. After the shower the visibility improved rapidly to 3000 at 1120 UTC. The current weather observer issued a local special report to the ATC at 1120 UTC for improvement in visibility. Is the act of the current weather procedurally correct? Justify.
21. In the briefing folder for a flight at FL070, an aviation met office provided low level wind and temperature charts and SIGWX chart from OLBS to cover the en-route weather conditions along with relevant METAR and TAFs. Do you consider the en-route weather condition is adequately covered? Justify.
22. In an aerodrome warning, the validity period was given from 0900 UTC to 1600UTC. Do you think the validity period is correct? State the reason.
23. An Aircraft accident occurred at an airport at 0503 UTC and the last routine current weather observation was taken at 0500 UTC. The current weather assistant did not record a special current weather observation when he got the information about the accident around the same time. Do you consider the act of the current weather observer is correct? State the reason.

24. An Aeronautical observer on duty heard a thunder and he reported thunderstorm at the aerodrome, however no lightning was see or precipitation was observed at the aerodrome. Do you think the observer's reporting is correct? State the reason.
25. At a particular airport there were two runway visual values available representing the two touchdown zones of two runways. The observer at that station reported only one value in the METAR. Do you think the reporting is correct? State the reason.
26. In a METAR from VOICI, the present weather was given as "FZRA". Do you think the present weather is reported correctly? State the reason.
27. In an area forecast, the base of the CB was given as 750 m and the top of CB was forecast to be at 3000 meter. Do you think the forecast values are correct? State the reason.
28. A volcanic ash SIGMET issued by MWO Chennai was received at MWO Kolkata. Do you consider this a wrong message? State the reason.
29. A Thunderstorm was seen approaching an aerodrome which is being served by an AMS. Is it necessary for the AMS to intimate this observation to its associated AMO? State the reason.
30. In a particular METAR it is seen in the place of visibility group "1400SW 6000N". Is it a correct reporting? State the reason.
31. In an aerodrome warning, the validity period was given from 0900 UTC to 1600UTC. Do you think the validity period is correct? State the reason.
32. An Aircraft accident occurred at an airport at 0503 UTC and the last routine current weather observation was taken at 0500 UTC. The current weather assistant did not record a special current weather observation when he got the information about the accident around the same time. Do you consider the act of the current weather observer is correct? State the reason.
33. An Aeronautical observer on duty heard a thunder and he reported thunderstorm at the aerodrome, however no lightning was see or precipitation was observed at the aerodrome. Do you think the observer's reporting is correct? State the reason.
34. At a particular airport there were two runway visual values available representing the two touchdown zones of two runways. The observer at that station reported only one value in the METAR. Do you think the reporting is correct? State the reason.

35. In a METAR from VOCL, the present weather was given as “FZRA”. Do you think the present weather is reported correctly? State the reason.
36. In an area forecast, the base of the CB was given as 750 m and the top of CB was forecast to be at 3000 meter. Do you think the forecast values are correct? State the reason.
37. A volcanic ash SIGMET issued by MWO Chennai was received at MWO Kolkata. Do you consider this a wrong message? State the reason.
38. A Thunderstorm was seen approaching an aerodrome which is being served by an AMS. Is it necessary for the AMS to intimate this observation to its associated AMO? State the reason.
39. In a particular METAR it is seen in the place of visibility group ”1400SW 6000N”. Is it a correct reporting? State the reason.

40. Explain the following message:

VOHS 020500Z AD WRNG 01 VALID 020530/020930 SFC WSPD 30 KT FROM
230 DEG FCST NC=

41. Explain the following TAF:

TAF VOBL 202300Z 2100/2109 27010KT 4000 HZ SCT015 BKN080 TEMPO
2102/2104 1500 +TSRA SCT008 OVC080 FEW030CB BECMG 2106/2108 6000
FEW020 SCT 100=

42. Explain the following message.

- a. VOMM 111815Z AD WRNG 1 VALID 181845/182245
- b. TS WITH SFC WSPD 25KT FROM 290 DEG FCST NC=

43. Explain the following SIGMET.

VECF (CALCUTTA FIR)
VECF SIGMET 2 VALID 141430/141730 VECC-
VECF KOLKATA FIR EMBD TS OBS WI N2500 E08625 - N2440 E08820 - N2145
E08810 - N2210 E08540 - N2500 E08625 TOP FL340 MOV E 10KT NC=

44. Explain the following SIGMET.

VECF SIGMET 2 VALID 141430/141730 VECC-
VECF KOLKATA FIR EMBD TS OBS WI N2500 E08625 - N2440 E08820 - N2145
E08810 - N2210 E08540 - N2500 E08625
TOP FL340 MOV E 10KT NC=

45. Explain the following Aerodrome Warning.

VOMM 110700Z AD WRNG 2 VALID 110730/111030 SFC WSPD 35KT MAX 55
FCST NC=

46.

47. Explain the following TAF:

TAF VOHS 201500Z 2018/2124 09005KT 5000 HZ FEW020 SCT100 TEMPO
2109/2110 1500 TSRA FEW020 SCT100 FEW 030CB BECMG 2115/2117 3000
HZ=

48. Explain the following message

VIDP 020930Z AD WRNG 01 VALID 021030Z/021430Z TS SFC WSPD 30KT
FROM 270 DEG FCST AT 021030Z=

49. Explain the following METAR

METAR VAAH 201710Z 05006KT 3000HZ SCT020 FEW030CB BKN080 24/16
Q1011 NOSIG=

50. Interpret the following aerodrome warning:

VEBS AD WRNG 1 VALID 150800/151200 TS FROM 360 DEGREE DIRECTION
SFC WSPD 15 KT MAX 25 FCST INTSF.

51. Explain the SIGMET given below:

a. VABF SIGMET 4 VALID 141430/141830 VABB-VABF MUMBAI FIR EMBD
TS OBSD AT 1400Z WI N0002 E05900-N0003 E06200-N0001 E06300-N0000
E06200-N0002 E05900 TOP FL 390 STNR NC=

52. Explain the following TAF:

a. TAF VOTR 030900Z 0312/0321 02010KT 3000 HZ FEW010 SCT015 BKN100
TEMPO 312/0318 2000-TSRA FEW010 SCT015 FEW025CB OVC080=

53. Explain the following message:

a. VOTR 030830Z AD WRNG 1 VALID 030845/031245 TS WITH SFC WSPD
25KT FROM 050 DEG FCST=

54. Explain the following TAF:

TAF VOTR 030900Z 0312/0321 02010KT 3000 HZ FEW010 SCT015 BKN100
TEMPO 312/0318 2000-TSRA FEW010 SCT015 FEW025CB OVC080=

55. Explain the following TAF:

TAF VABB 081200Z 0815/0824 26012KT 2500 -RA SCT012 SCT018 FEW025TCU
BKN090 BECMG 0816/0821 1500 TSRA SCT010 SCT015 FEW030CB OVC080

56. Explain the following message:

VEBS 150900 ADWRNG2 VALID 150930/151330 TS FROM 320 DEG DIRECTION
SFC WSPD 30KT FCST INTSF=

57. Explain the following METAR:

METAR VEBS 150930Z VRB28KT 3000 TS BKN018 FEW030CB BKN090 27/26
Q1001 NOSIG

58. Explain the following SIGMET:

VABF (MUMBAI FIR)

VABF SIGMET 01 VALID 080900/081300 VABB- VABF MUMBAI FIR EMBD
TS OBSD AT 0830ZWI AREA N2300 E07000 N2400 E07300 N2400 E07100
N1900 E07400 N2300 E07000 Top FL 390 STNR NC=

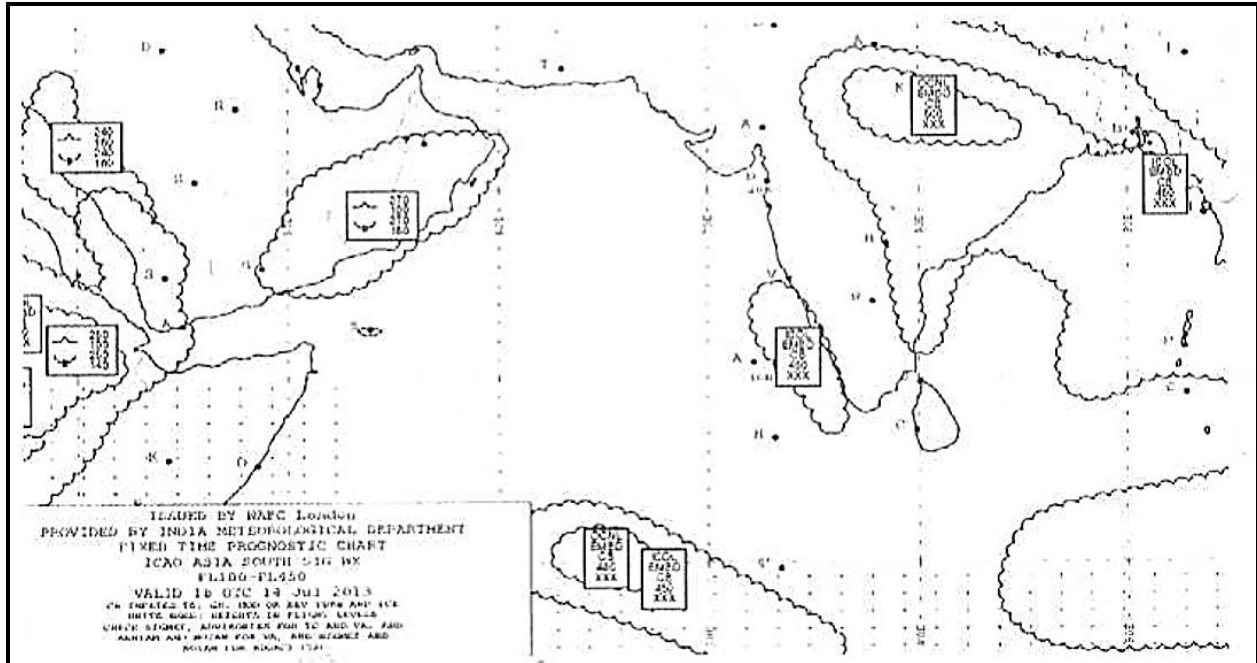
59. Explain the following message:

VOTR 030830Z AD WRNG 1 VALID 030845/031245 TS WITH SFC WSPD 25KT
FROM 050 DEG FCST=

60. List the original meteorological documents to be sealed and kept in safe custody in connection with the aircraft accident.

61. Steps for method of RVR Observation.

62. In the Given SIGWX chart



- What is the period for which the product can actually be used?
- What are the levels for which the scalloped lines represent?
- What is the meaning of { OCNL/EMBD/CB/XXX }
- Is there a possibility of icing over Indian region?

63. Consider the following messages;

- VOTR 030810Z 03009KT 3000 HZ SCT 010 SCT016 FEW 025CB BKN100
 29/22 Q1009
 NOSIG=
- VOTR 030840Z 04008KT 2000RA SCT010 SCT016 FEW025CB BKN080
 26/24 Q1009
 TEMPO 1000+RA=

Do you think it is necessary for second message to be a SPECI? State the reason.

64. Answer the following from the SIGMET

VOMF(CHENNAI FIR)

VOMF SIGMET 4 VALID 261000/621500 VOMM-

VOMF CHENNAI FIR TC LEHAR OBS AT 0300Z N1230 E09000 CB TOP FL 480 WI
 120 NM OF CENTRE MOV WNW 06KT INTSF FCST AT 1500Z TC CENTRE N1318
 E08812=

- a) Which is the region for which this SIGMET is valid?
- b) What is the period of validity of this SIGMET?
- c) Centre of TC given as “N1318 E08812” pertains to what time?
- d) What is the height of top of CB?
- e) What is speed and direction of movement of TC?
- f) What is forecast for intensify of the system?

65. Complete the following table using appropriate priority indicators and transmission times of the given messages:

Type of the message	Transmission Times	Priority Indicators
SIGEMT Message		
Volcanic Ash and Tropical Cyclone Advisory information and		
Special Air-reports		
TAF		
SPECI		
Amended TAF and Corrections toTAF		

66. Explain the following METAR giving the range of the reported values:

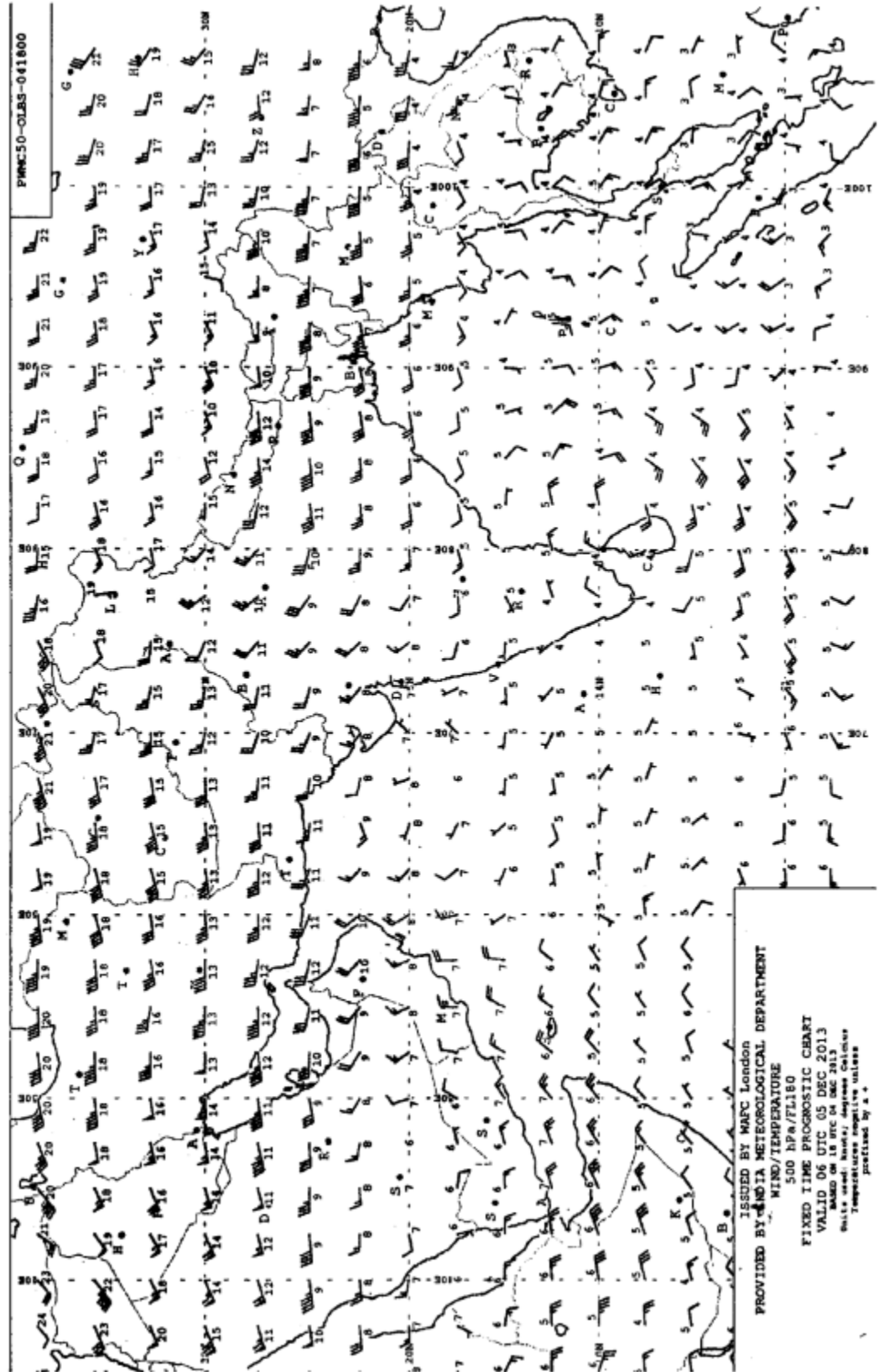
METAR VIDP 141500Z 24012KT 3600 BR SCT030 BKN080 17/11 Q0999 NOSIG=

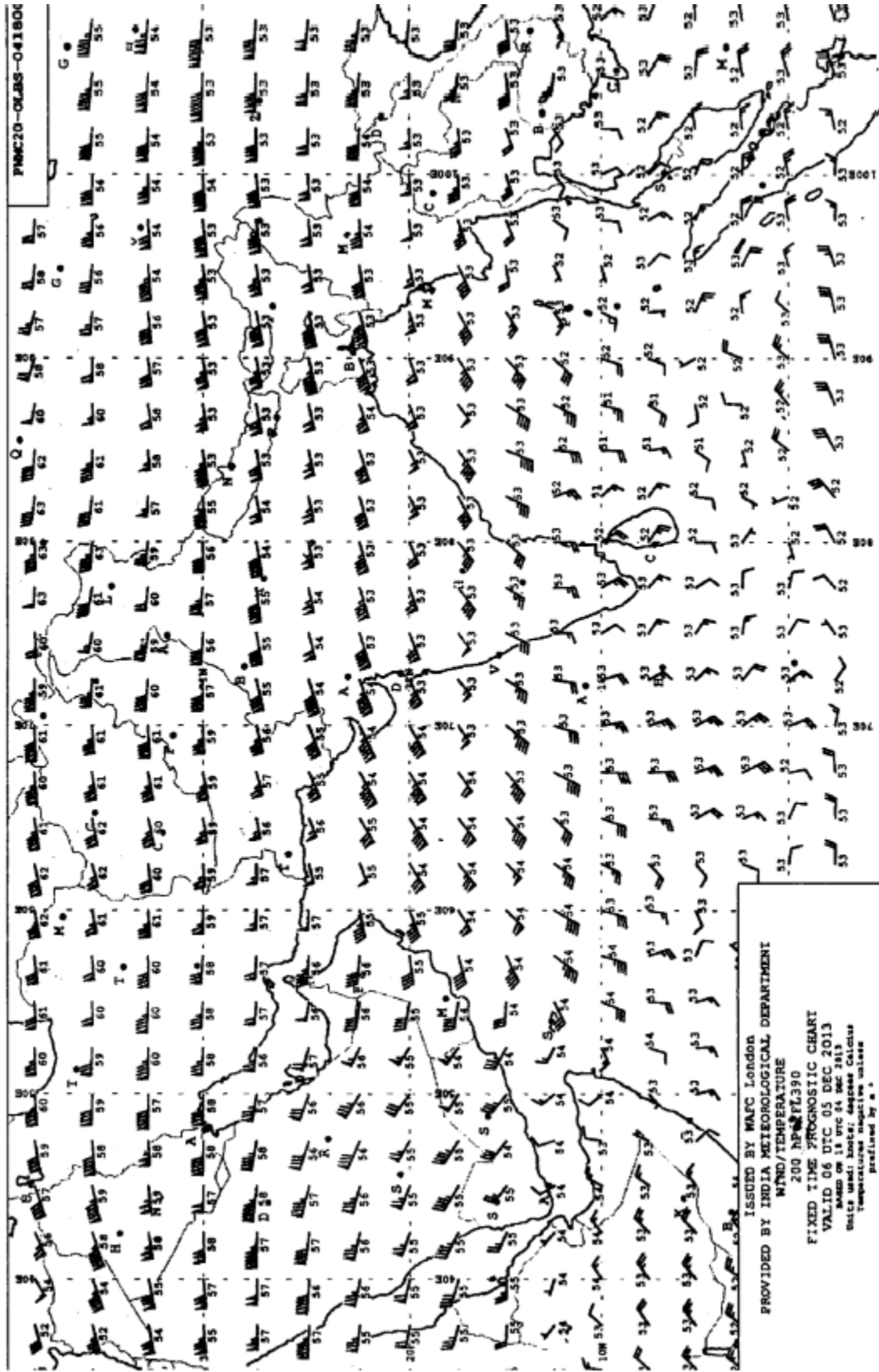
67. What are the products to be included in the briefing folder for a flight from New Delhi(VIDP)(ETD 0810 IST) to Kolkata (VECC)(ETA 1010 IST) flying at FL 390 with the destination alternate as Bhubaneswar(VEBS).

68. Kindly refer to Appendix I the wind experienced by a flight at

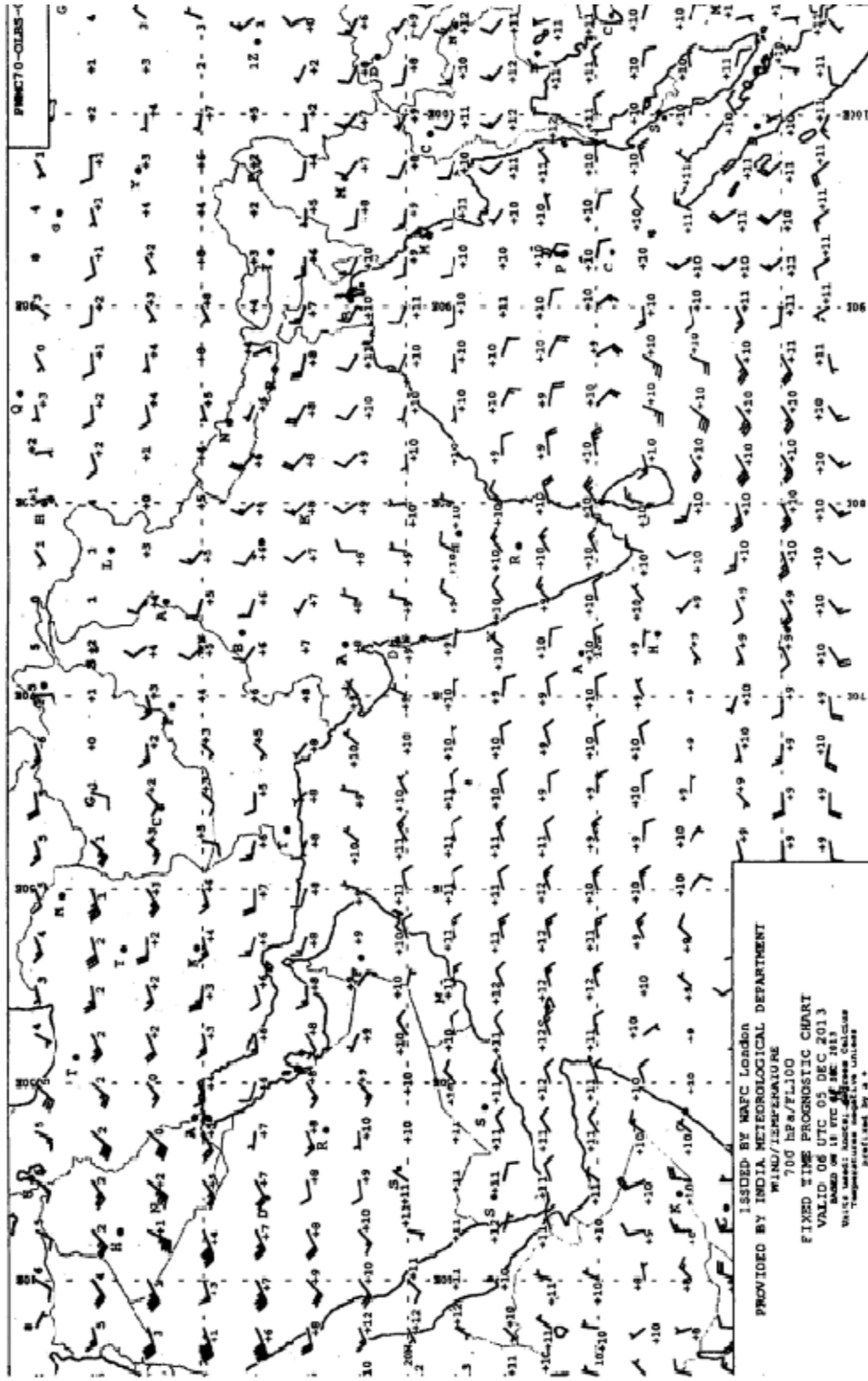
- a) FL 100
- b) FL 180
- c) FL390 from Delhi to Kochi, Via Bhopal.

69. Refer Appendix II what will be the significant weather experienced by a flight at 200 hPa?





Appendix1(c)



70. Answer the following questions based on given SIGMET

VECF SIGMET 01 VALID 120400/121000 VECC

VECF Kolkata FIR TC PHALIN OBS AT 1200Z N1706 E08648 CB TOP FL 450
WI 100 NM OF CENTRE MOV NW 07KT INTSF FCST 1000TC CENTRE N1842
E08506=

- a) Which is the region for which this SIGMET is valid?
- b) What is the period for validity of this SIGMET?
- c) Centre of TC given as “N1842 E08506” pertains to what time?
- d) What is the height of top of CB?
- e) What is the speed and direction of movement of TC?
- f) What is the forecast change in the intensity of the system?

71. List Content of first intimation of aircraft accidents

72. List documents to be sealed in connection with aircraft accidents.

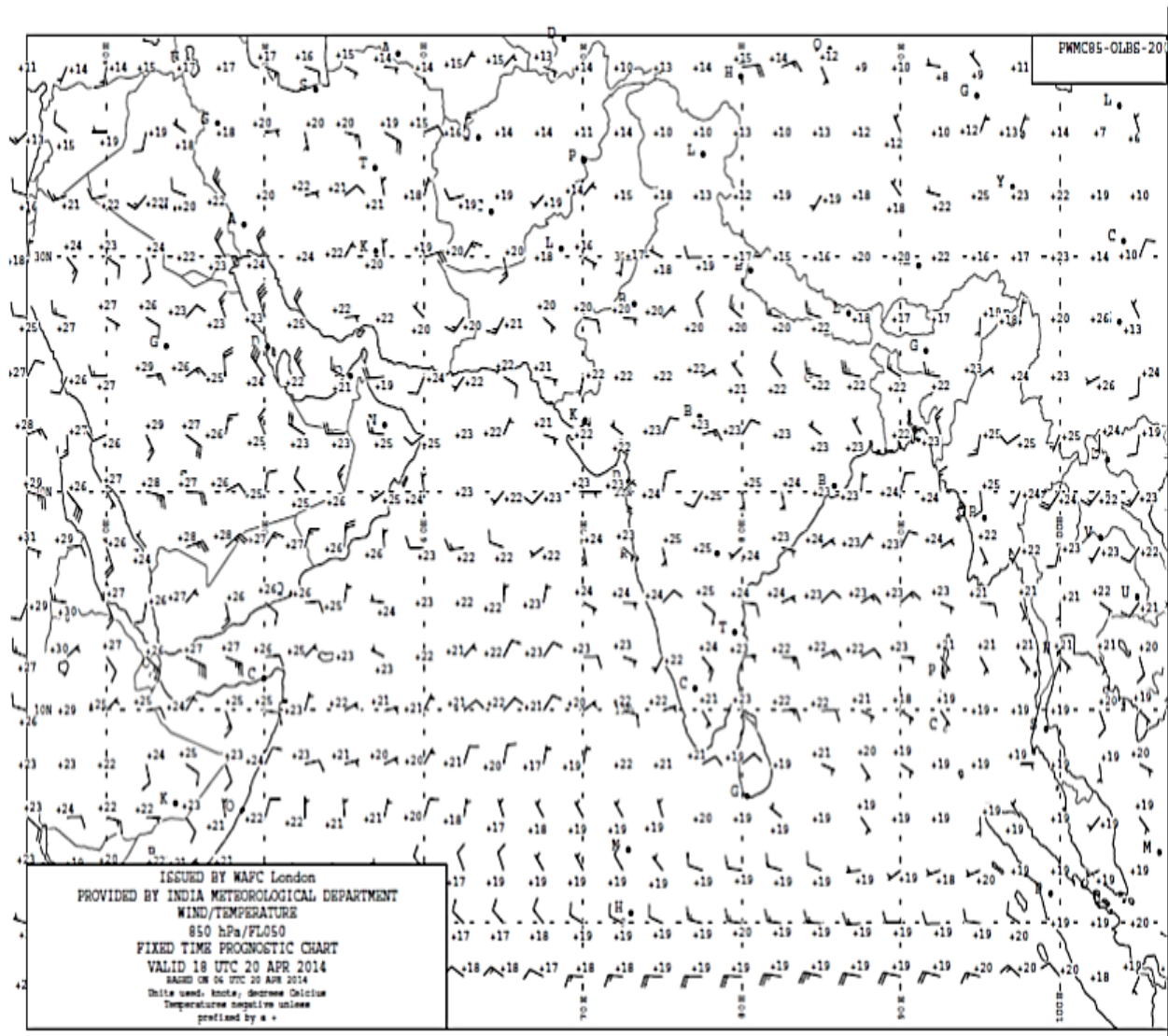
73. What are the documents to be included in the briefing folder for a flight from New Delhi (VIDP)(ETD 0810 IST) to Kolkata (VECC)(ETA 1010 IST) flying at FL 390 with the destination alternate as Bhubaneswar, Via, Bhopal.

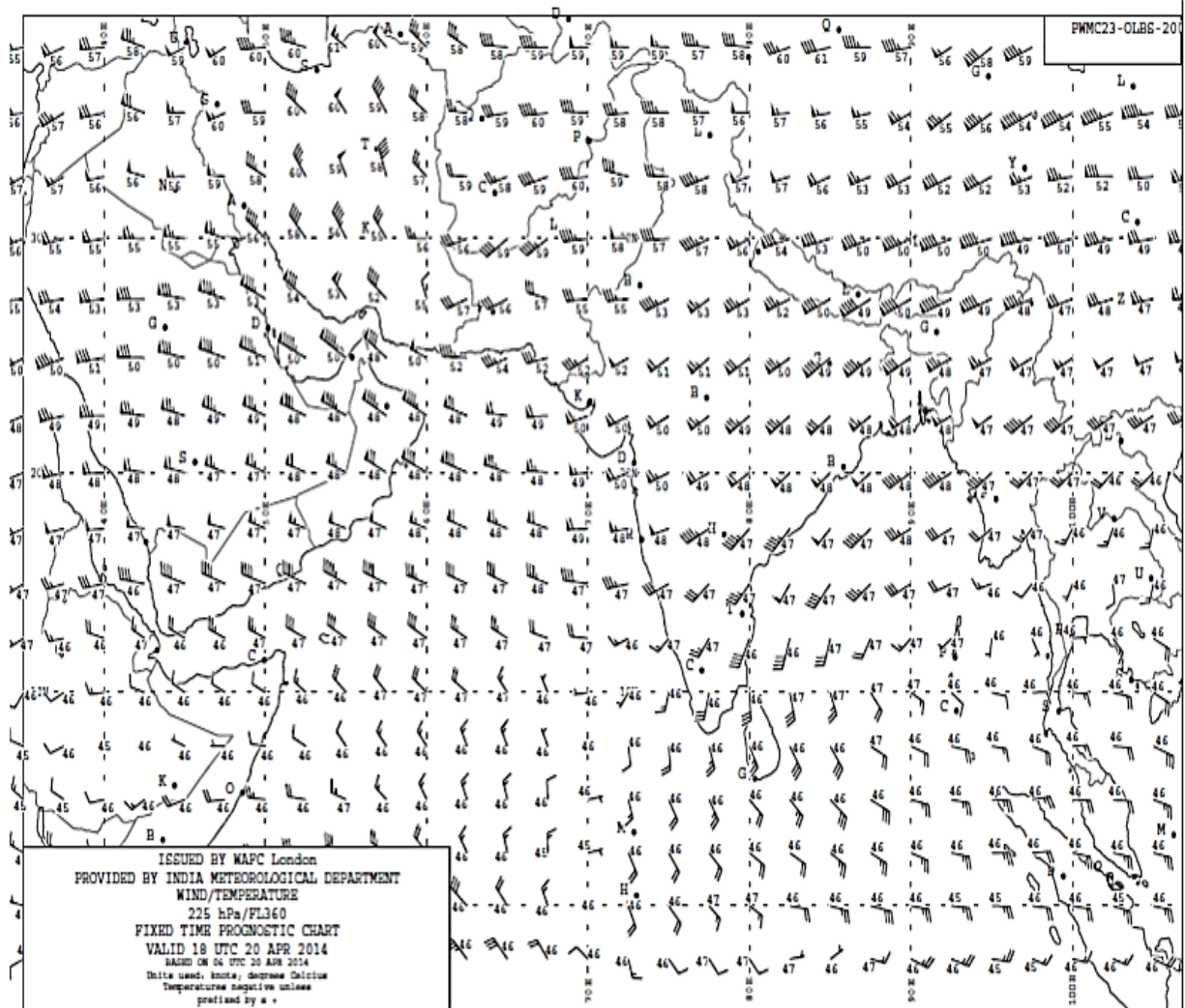
74. Kindly refer Appendix I. What will be the wind and air temp likely to be experienced by a flight level at

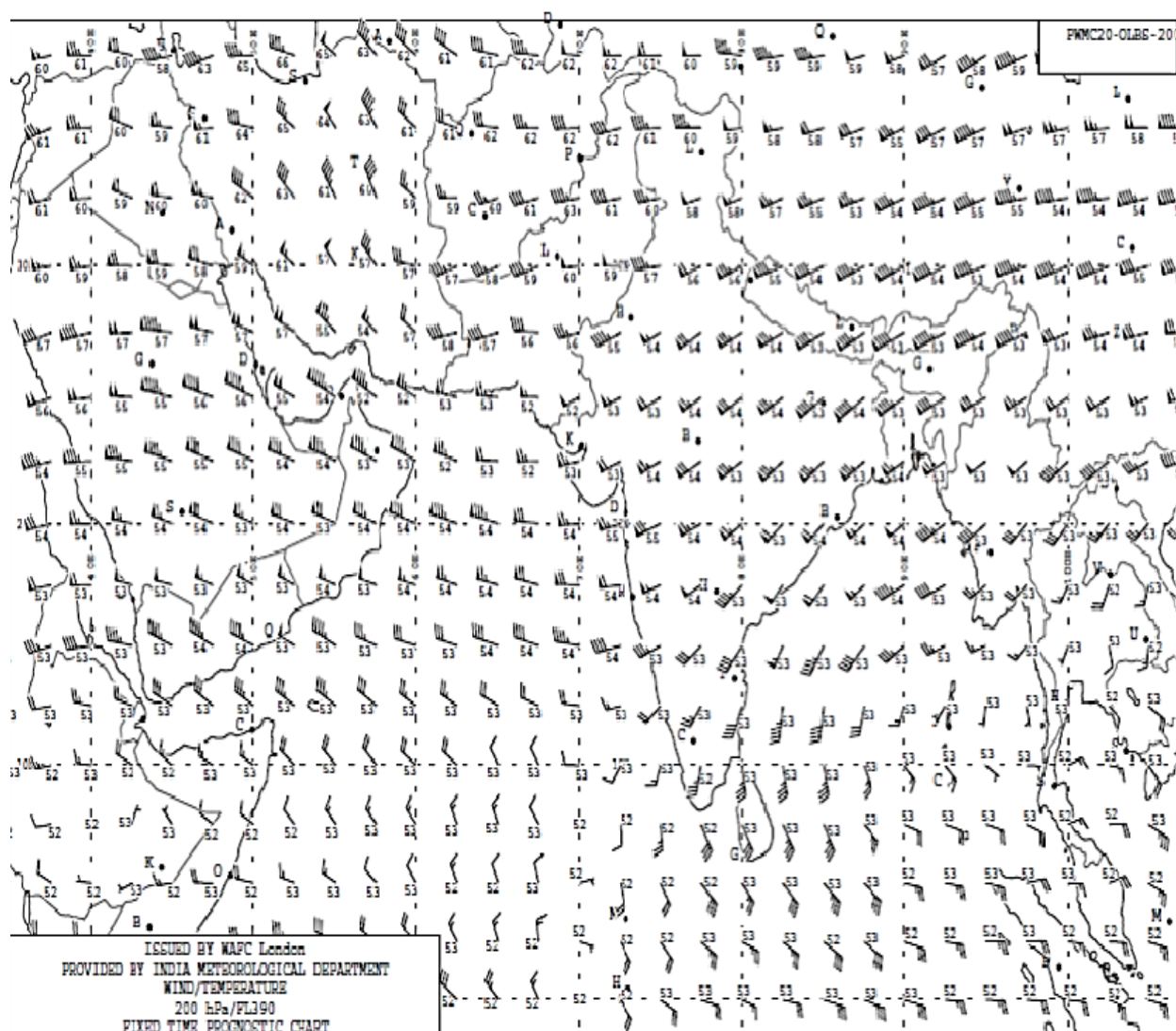
- a) FL 050
- b) FL360
- c) FL 390

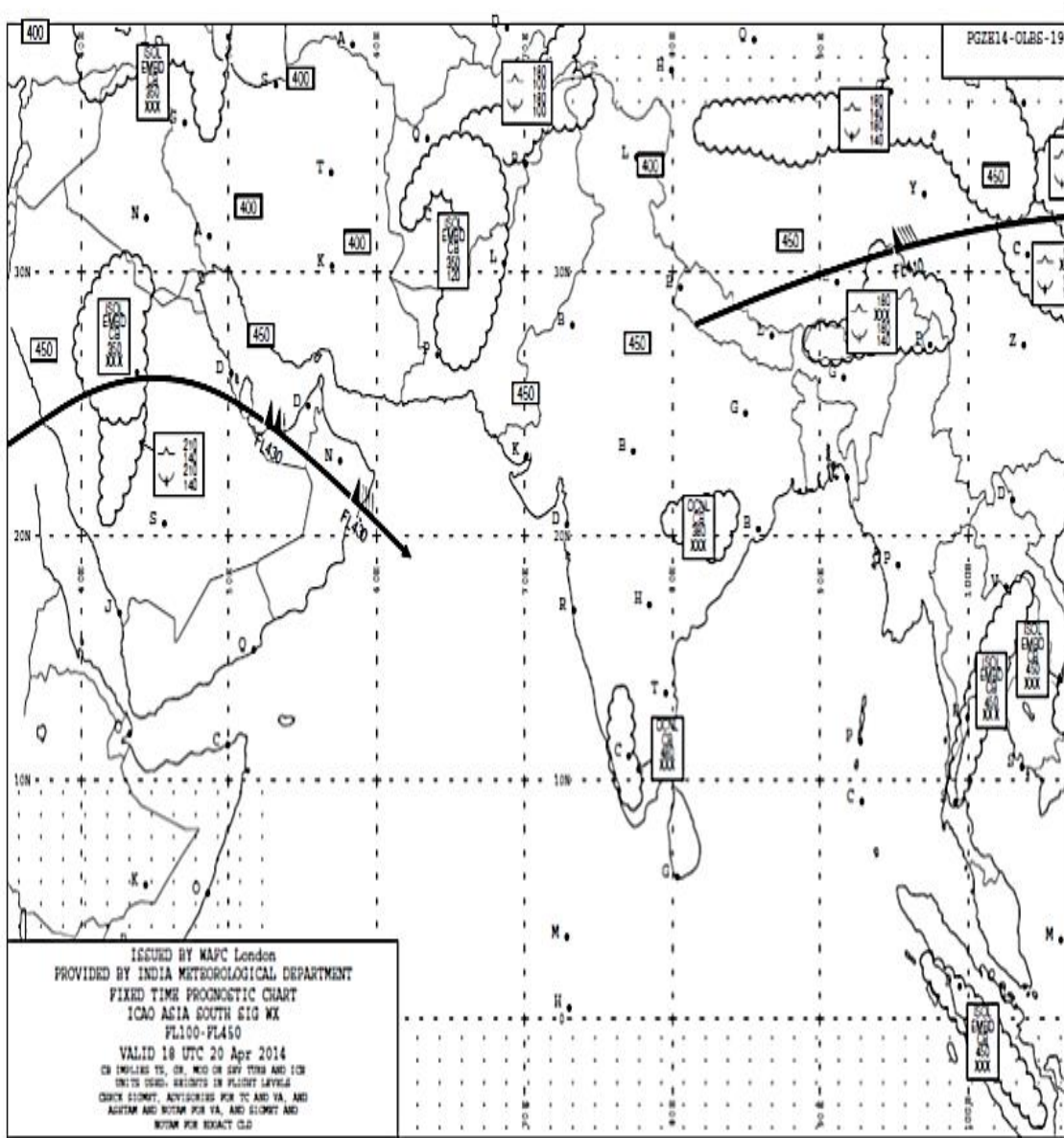
From Delhi to Thiruvanthapuram, via Bhopal.

75. What significant weather is likely to be experienced by a flight at FL 340 as can be inferred from Appendix II





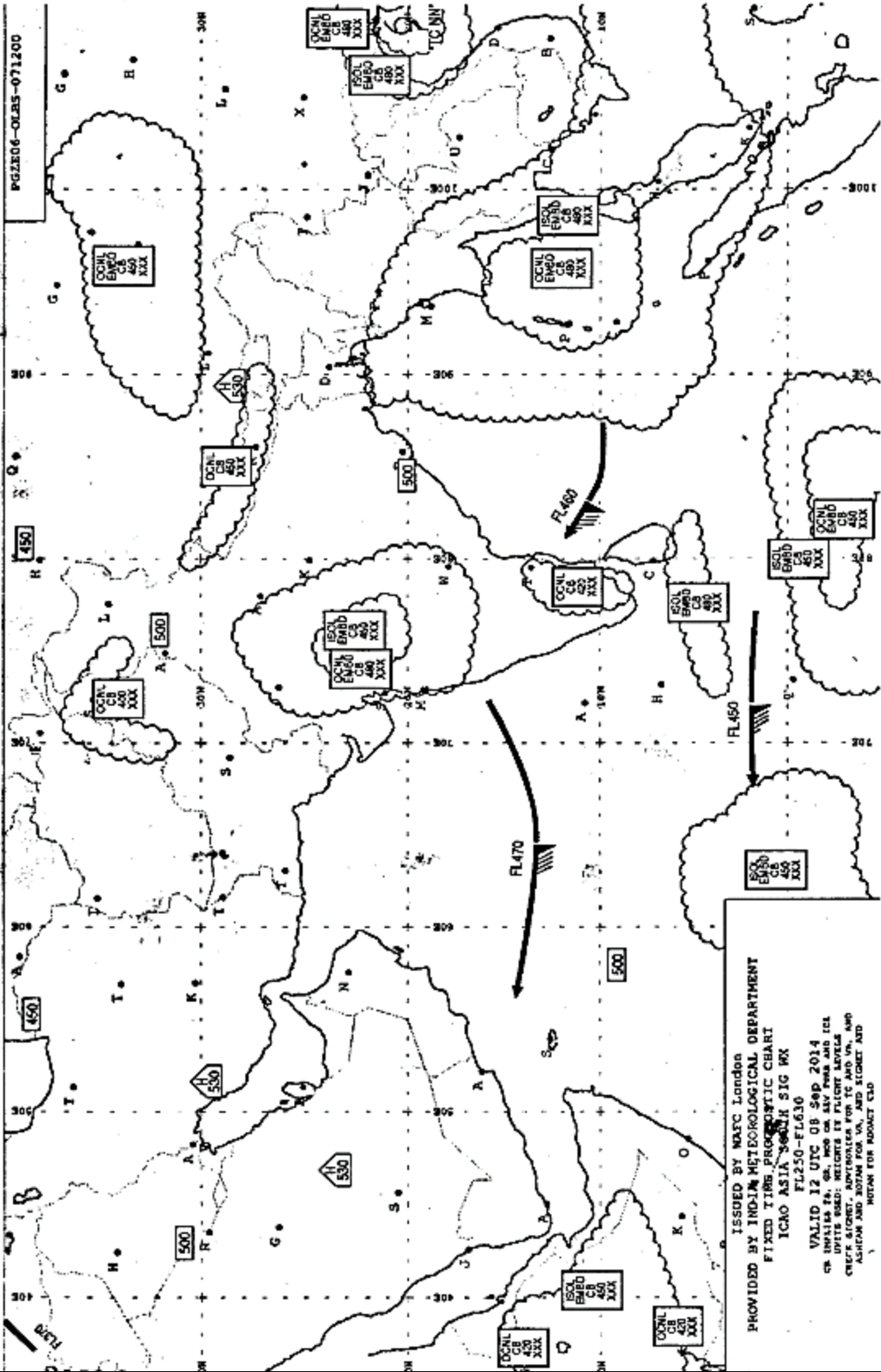




76. In a particular MET REPORT, the weather was given as “SHRA”. Is the reporting procedurally correct? Justify.
77. At an aerodrome surface wind speed was expected to reach 25 Knots. The duty Forecaster issued only “Warning for light aircraft” not an “aerodrome warning”. Do you consider the duty forecaster acted appropriately.
78. Specify the products to be included in the briefing folder for a flight from NEW DELHI-VIDP (ETD 0810 IST , alternate Jaipur -VIJP) to Kolkata-VECC (ETA 1010 IST, alternate Bhubaneswar- VEBS) flying at FL390.
79. What significant weather is likely to be experienced by a flight at FL 340 as can be inferred from attachment A?
80. Kindly refer to attached prognostic charts issued by WAFC London valid up to 12 UTC of 8 September 2014 of
- a) flight levels 100
 - b) FL 180
 - c) FL 390
81. What will be the wind and air temperature likely to be experienced by a flight at
- a) FL 100 (b)FL 180 (c)FL 390 From Kolkata to Ahmadabad.

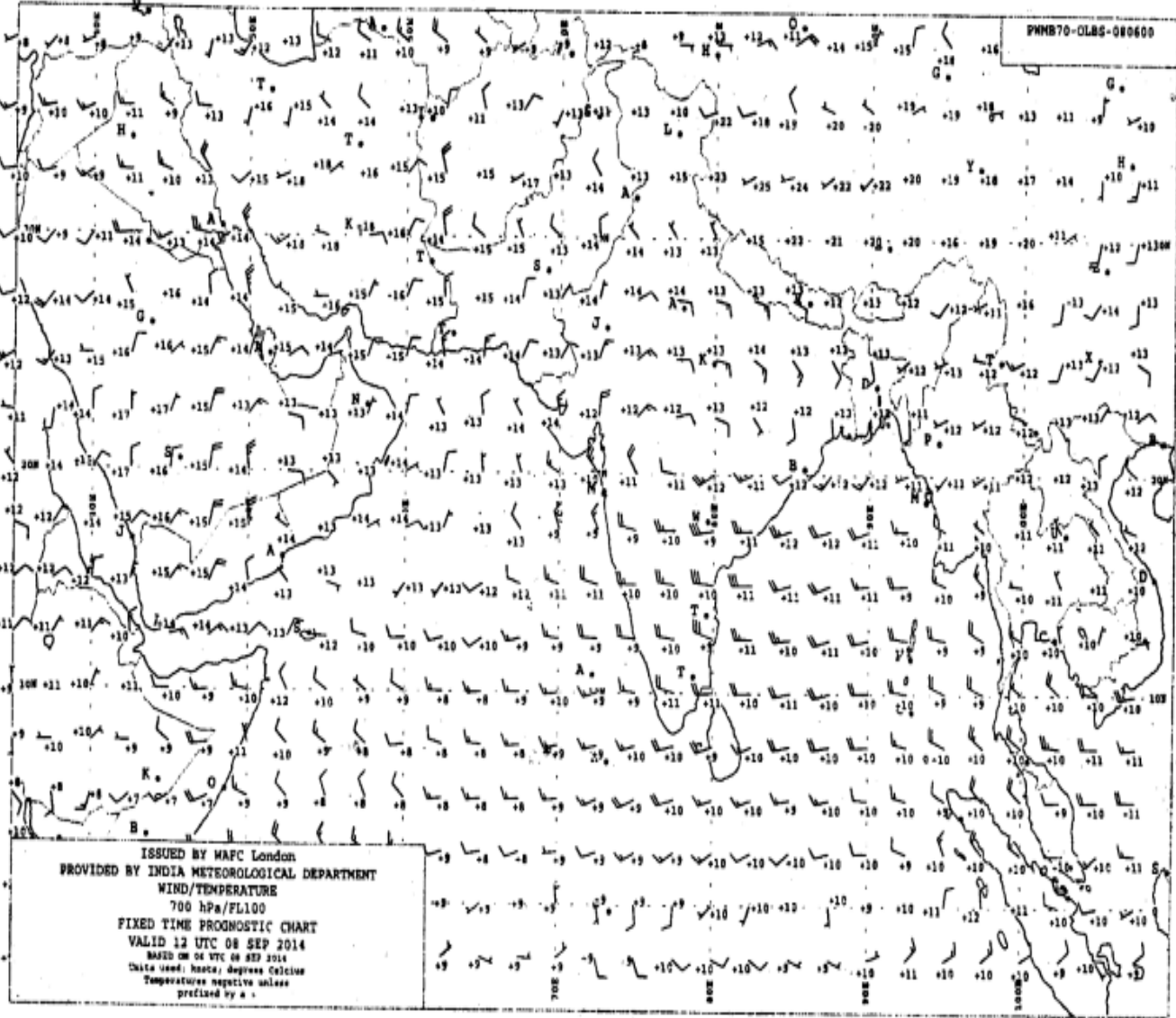
Attachment A

PGZEX06-OLRS-071200

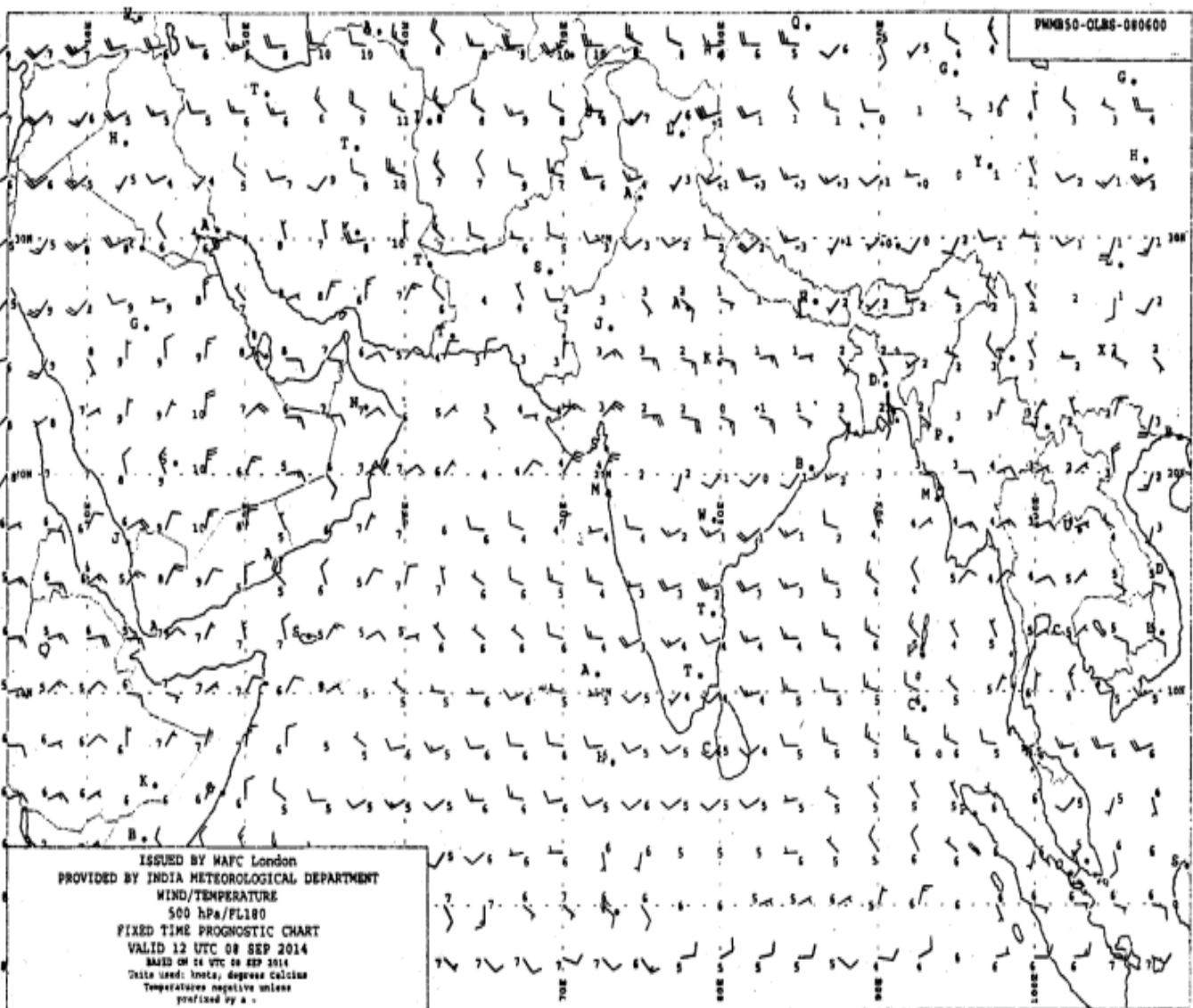


ISSUED BY MAFS London
PROVIDED BY INDIAN METEOROLOGICAL DEPARTMENT
FIXED TIME PROGNOSTIC CHART
ICAO ASIA 360LN SIG WX
FL250-FL630
VALID 12 UTC 08 Sep 2014
OR INVALID 12, OR, WOP OR ANY PWS AND ICAO OFFICE HEADQUARTERS IN PLEASANT HAVEN, AND CRYSTAL AND 307AM FOR VAL AND SECRET AND NOTAM FOR ROBERT 5140

PNMB70-CLAS-080600

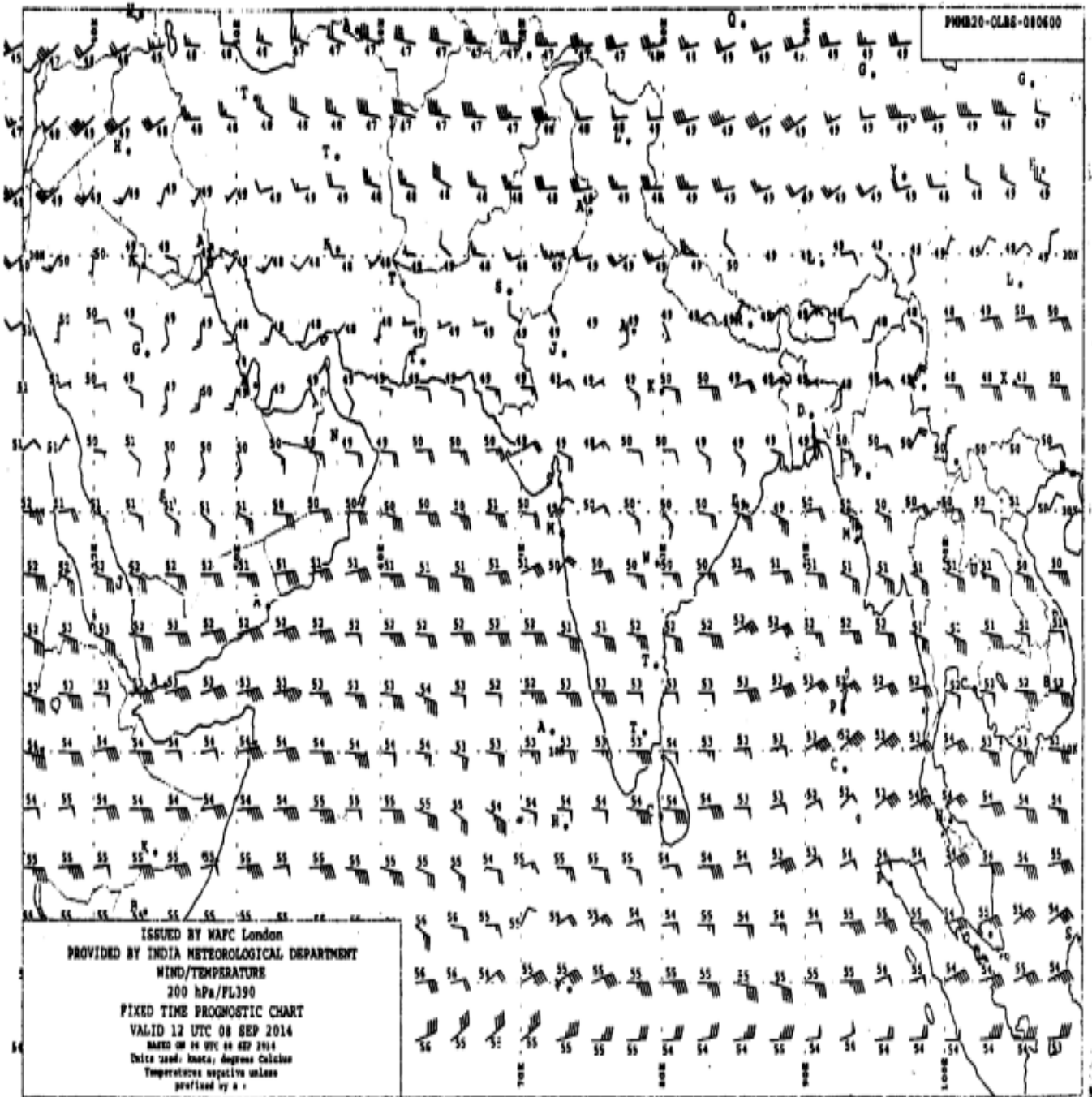


FMMSO-OLBS-080600



ISSUED BY WAFPC London
PROVIDED BY INDIA METEOROLOGICAL DEPARTMENT
WIND/TEMPERATURE
500 hPa/FL180
FIXED TIME PROGNOSTIC CHART
VALID 12 UTC 08 SEP 2014
BASED ON 06 UTC 08 SEP 2014
Units used: knots, degrees Celsius
Temperatures negative unless
prefixed by a -

FIG20-CLAG-010400



ISSUED BY WAFPC London
PROVIDED BY INDIA METEOROLOGICAL DEPARTMENT
WIND/TEMPERATURE
200 hPa/FL390
FIXED TIME PROGNOSTIC CHART
VALID 12 UTC 08 SEP 2014
BASED ON 04 UTC 06 SEP 2014
Units used: knots, degrees Celsius
Temperatures negative unless
prefixed by a -

82. Answer the questions following the SIGMET:

VOMF SIGMET 04 VALID 261000/261500 VOMM-

VOMF CHENNAI FIR TC LEHAR OBS AT 0300Z N1230 E09000 CB TOP FL480
WI 120NM OF CENTRE MOV WNW 06 KT INTSF FCST 1500Z N1318 E08812=

- a) Which is the region for which this SIGMET is VALID?
- b) What is the period of validity of this SIGMET?
- c) Centre of TC given as “N1318 E08812” pertains to what time?
- d) What is the height of top of CB?
- e) What is the speed and direction of movement of TC?
- f) What is the forecast change in the intensity of the system?

83. Explain the following METAR

84. METAR VECC 020530Z 06012KT 2800 HZ FEW010 SCT015 BKN090 30/27 Q0997
BECMG 3000HZ=

85. Explain the following SIGMET:

VECF SIGMET 01 VALID 020300/020700 VECC-

VECF KOLKATA FIR EMBD TS FCST SW OF LINE N2220 E08330- N1630
E09200 TOP FL 340 STNR NC=

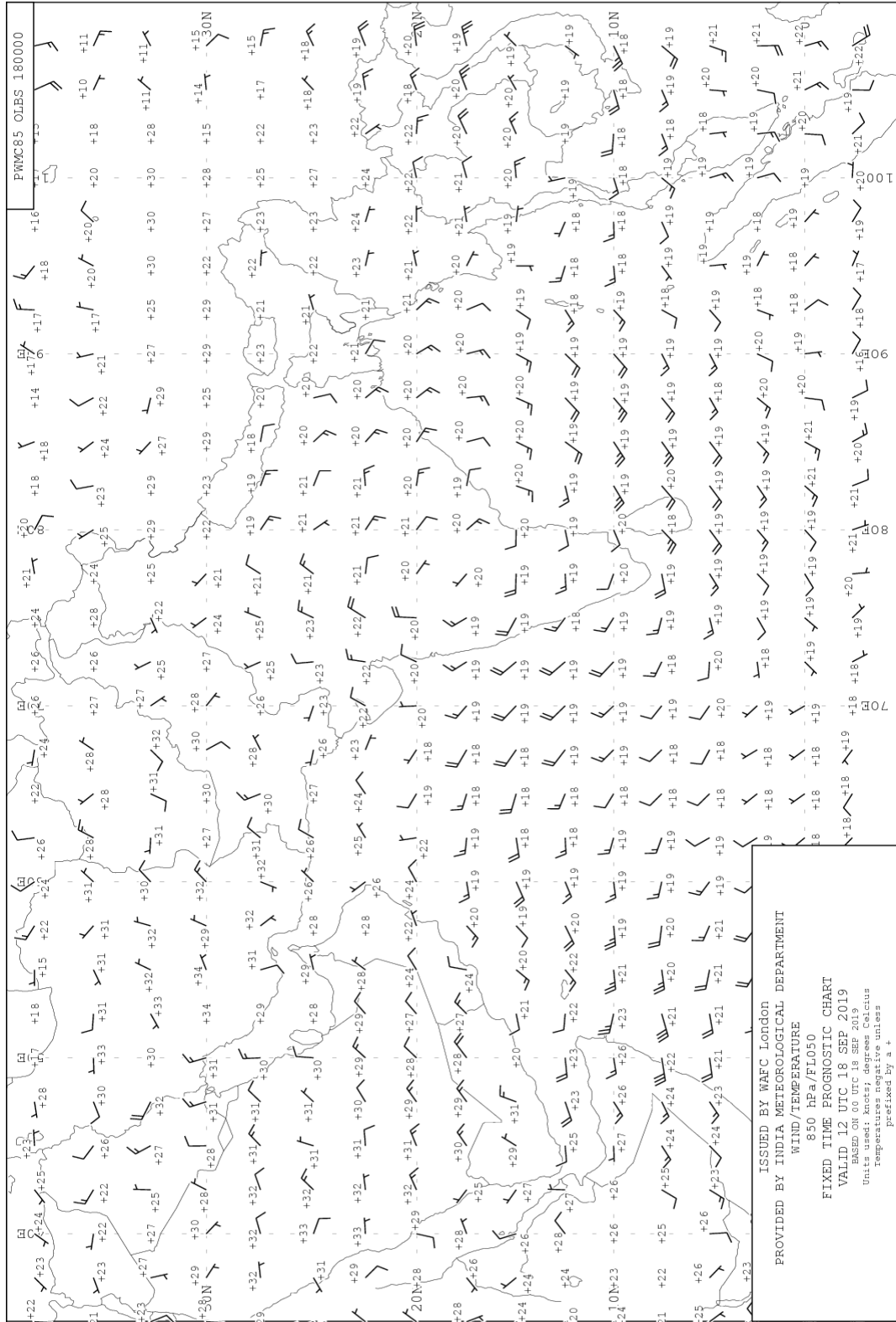
86. What are the documents to be included in the briefing folder for a flight from Kolkata (VECC)(ETA 0440 UTC) to Mumbai (VABB)(ETD 0740 UTC) flying at FL380 with the destination alternate as Pune (VAPO).

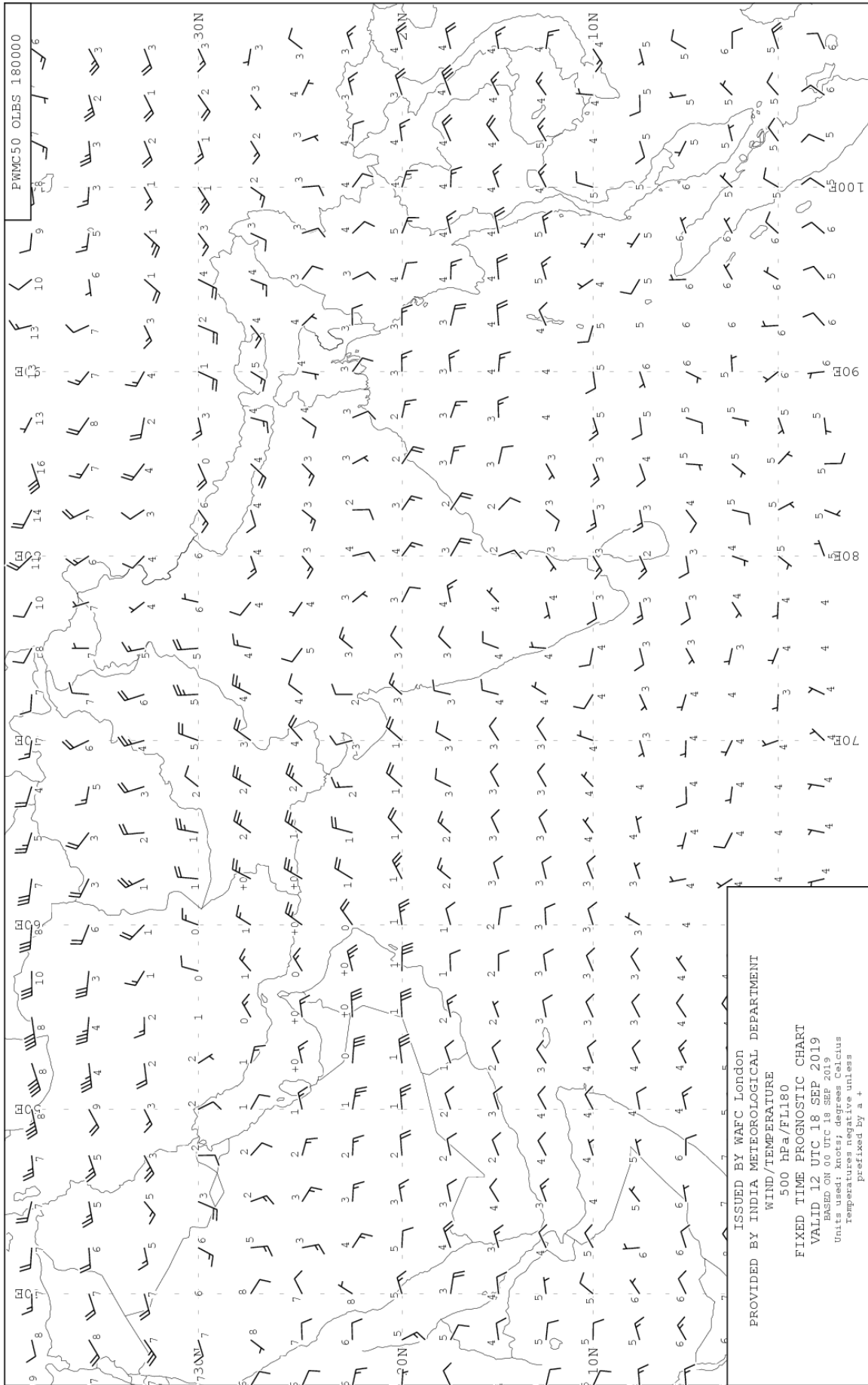
87. List Various Warnings issued for aviation in India.

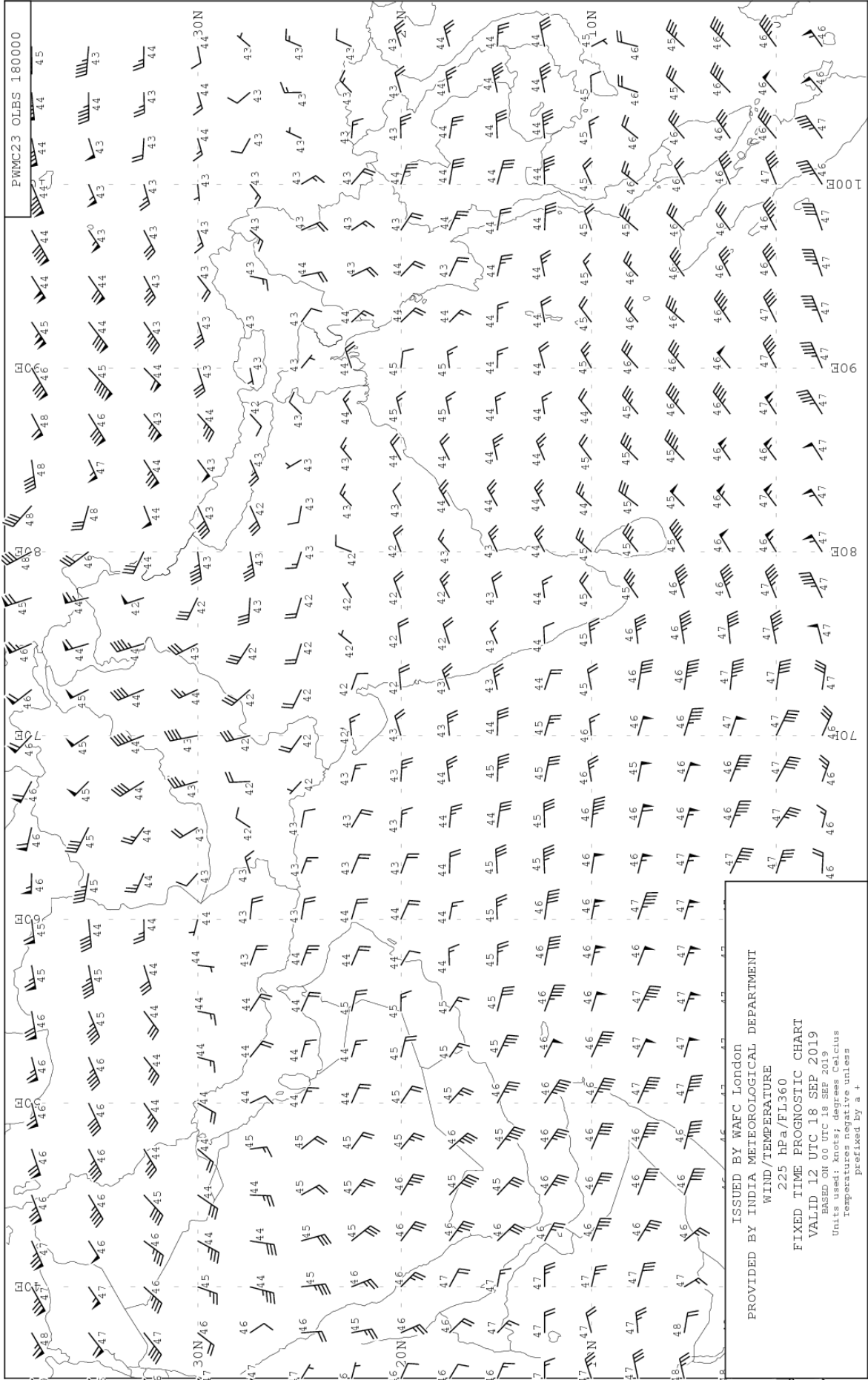
88. With Reference to SIGWX chart placed below, write the significant weather that are likely to be experienced by a flight from Srinagar (VISR) to Mangaluru (VOML)?

89. The surface wind speed at an aerodrome is expected to reach 15 knots. The duty officer issued “warning for light aircraft”. Is the warning issued appropriate? Justify.
90. State whether the following aerodrome warning is correct. Justify your answer.
VOMD 181145Z AD WRNG 1 VALID 181200/191600 TS FCST NC=
91. How many FIR’s are in Indian air space? Name the type of met office coordinating with FIR’s for met services.
92. What is TCAC?
93. What type of services it provides and to which Aviation office of IMD.
94. Whether MWO’s are supposed to prepare and disseminate SIGMET and other information’s to their FIR’s. If so, Justify.
95. In a METAR from VECC, the present weather was given as "FZRA ". Do you think the present weather is reported correctly? State the reason.
96. List out names of any six registers which are maintained by all meteorological offices.
97. What is AIP?
98. Discuss the role of CAMD and AMO’s in updation AIP.
99. How climatological maps / tables may be prepared for each FIR’s.
100. Give an example of climatological maps/Table for a FIR.
101. Define RVR
102. When is RVR needs to be reported?
103. Define accidents and incidents in Aviation?
104. (a) Kindly refer to Appendix I. What will be the wind and air temperature likely to be experienced by a flight at FL 050, FL 180, and FL 360 from Delhi to Thiruvananthapuram, via, Bhopal. (8 marks)
(b) Mention the level, direction and velocity of Jet Streams in SIGWX chart in Appendix II?
105. Draw a block diagram to explain working of RVR measuring instrument in IMD?

Appendix 1



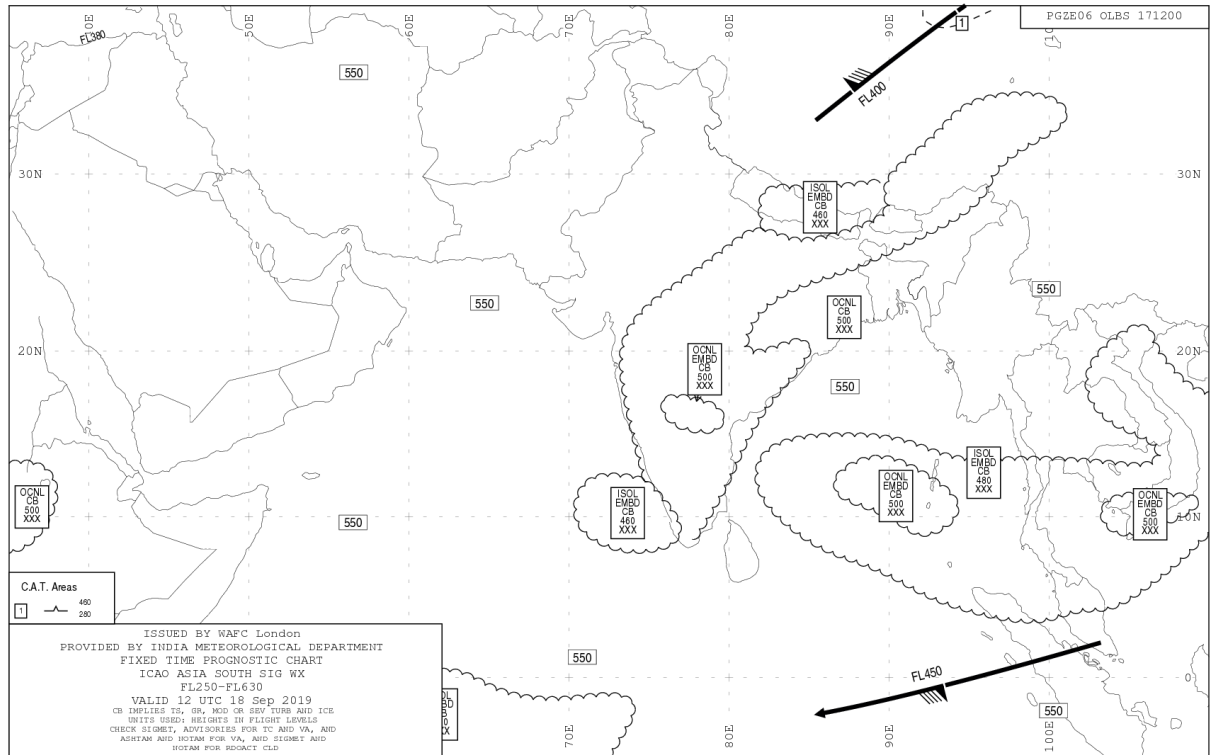




PWMC23 OLES 180000

ISSUED BY WAFc London
 PROVIDED BY INDIA METEOROLOGICAL DEPARTMENT
 WIND/TEMPERATURE
 225 hPa/FL360
 FIXED TIME PROGNOSTIC CHART
 VALID 12 UTC 18 SEP 2019
 BASED ON 00 UTC 18 SEP 2019
 Units used: Knots; degrees Celsius
 Temperatures negative unless
 prefixed by a +

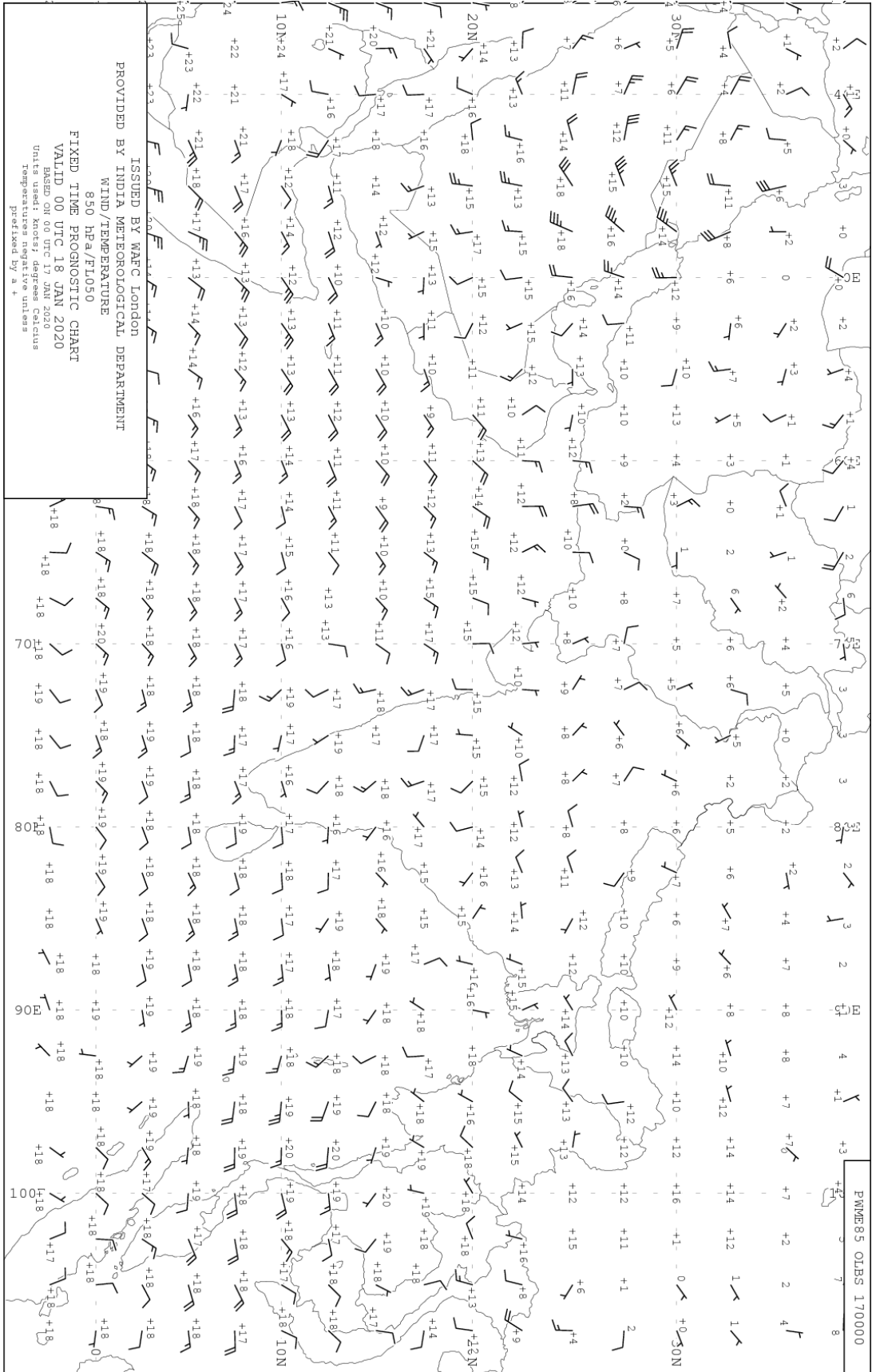
Appendix II



106. A Duty Officer observed a thunderstorm cell in the RADAR moving from east to west to the southwest sector of the aerodrome. He immediately issued aerodrome warning for thunderstorm. Do you think the warning issued for thunderstorm was correct? State the reason?
107. A Duty Officer issued SIGMET warning for Tropical Cyclone without referring TCAC bulletin. Is the method for issuing warning correct? State the reason.
108. State with brief reason whether the wind shear warning is correct.
 VIDP 110400Z WS WRNG 1 VALID 110300/110500 WS APCH RWY28 REP AT 110455Z BY B747=
109. Warning for light aircraft is issued by a Duty Officer with wind speed forecasted to reach 35 knots in gust. Is the warning issued for light aircraft correct?
110. What is the purpose of Regional offices set up by ICAO? Name the regions in which India is located.

111. An AMO is expected to have general observation skill of weather phenomenon. They are also expected to possess various procedural knowledge. List out three such procedural knowledge.
112. Name essential factors affecting flight of an aircraft.
113. Explain wind shear warning and list the phenomena for wind shear.
114. Why many Regional Association are created by WMO?
115. Justify the purpose Regional Association of their functioning.
116. How the functioning of aviation offices of IMD is different?
117. List the original meteorological documents to be sealed and kept in safe custody in connection with the Aircraft accident.
118. Explain the following message;
VOHS 020500Z AD WRNG 01 VALID 020530/020930 SFC WSPD 30 KT from 230
DEG FCST NC=
119. What are the documents to be included in the briefing folder for a flight from Kolkata (VECC) (ETD 0540 UTC) to Mumbai (VABB) (ETA 0840UTC) flying at FL 390 with the departure alternates as Bhubaneswar (VEBS),Patna(VEPT) and destination alternates as Pune (VAPO),Aurangbad(VAAU). The pilot will arrive at meteorological office for briefing at 0340UTC.
120. Kindly refer to Appendix I. What will be the wind and air temperature likely to be experienced by a flight at
- (a) FL 050
 - (b) FL 180
 - (c) FL 340
- from Kolkata to Thiruvananthapuram, via, Chennai.

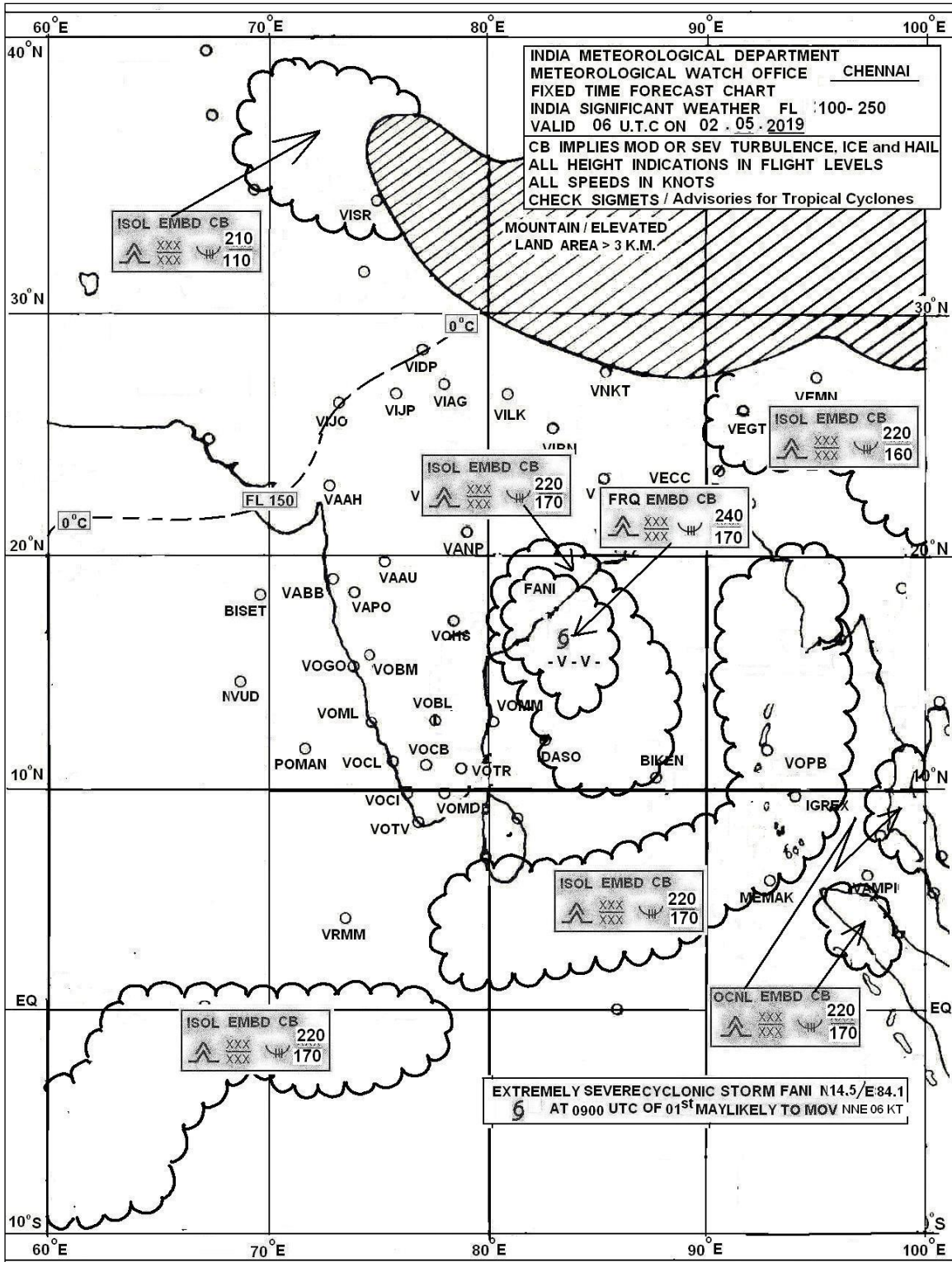
Appendix I

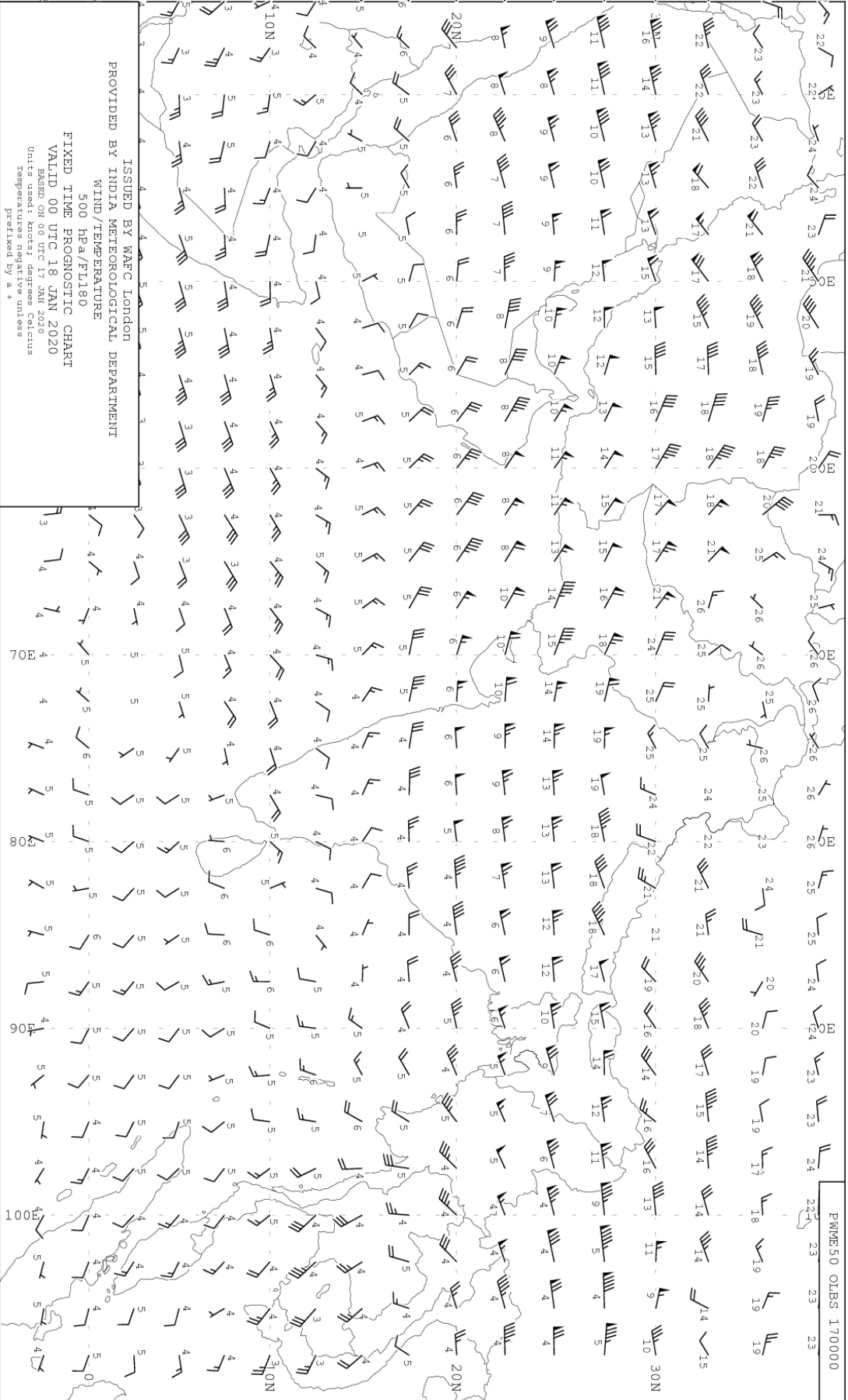


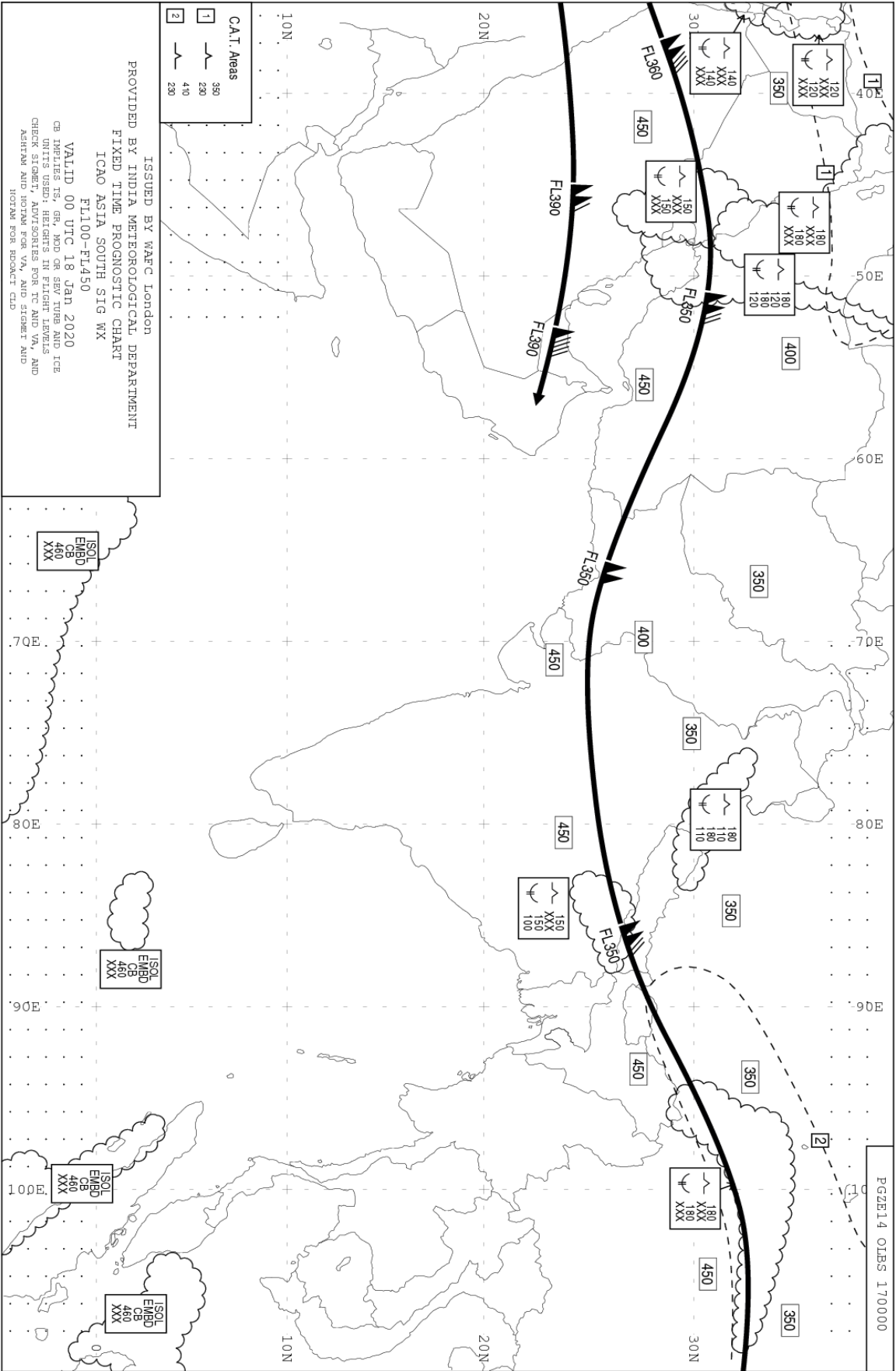
Appendix II

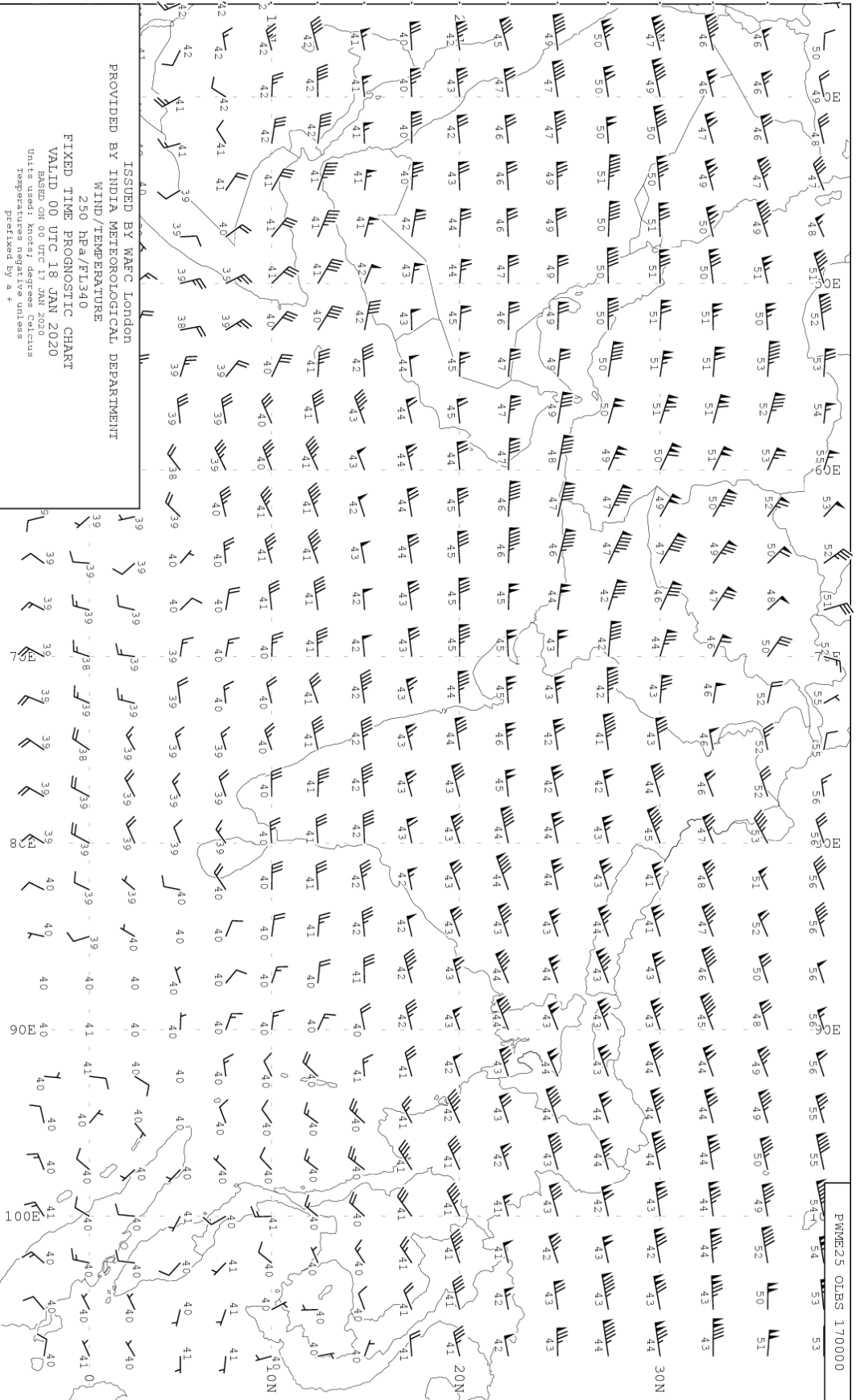
121. Kindly refer to a chart in Appendix II. What will be the significant weather that are likely to be experienced by a flight from Kolkata (VECC) to Chennai (VOMM)?
122. Kindly refer to a chart in Appendix III and answer the following questions:
- (i) What is the period for which product can actually be used?
 - (ii) What are the levels for which the product is prepared?
 - (iii) What do the scalloped lines represent?
 - (iv) Explain the meaning of **ISOL/EMBD/CB/280/XXX**.
 - (v) Is there a possibility of any clear air turbulence over the Indian Region?

Appendix III









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