

CP-8645

Sub. Code

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M.B.A. DEGREE EXAMINATION, APRIL 2018

Second Semester

Airline and Airport Management

HUMAN RESOURCE MANAGEMENT

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Human Resource Management.
2. What are the objectives of HR Planning?
3. Define Job Analysis.
4. Define recruitment.
5. Write the benefits of Training.
6. What is meant by Performance Appraisal?
7. How would you define ESOP?
8. What is meant by Career Development?
9. Define Industrial conflict.
10. State some names of central trade unions in India.

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the various challenges of HRM.

Or

- (b) Discuss the various factors affecting HRP.

12. (a) Explain the process of recruitment.

Or

- (b) Explain the internal sources of recruitment with their relative merits and demerits.

13. (a) Explain on-the-job and off-the-job training methods.

Or

- (b) Elucidate the various types of promotion and evaluate the basis of promotion with their relative merits and demerits.

14. (a) Summarize the areas, importance and limitations of Non-financial Compensation.

Or

- (b) Explain the purpose and various problems of Employee Benefits.

15. (a) Explain the government machinery for prevention of industrial disputes.

Or

- (b) Elaborate the role of trade unions in maintaining industrial peace.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) 'HR Managers play a pivotal role in managing today's workforce'. Discuss.

Or

- (b) How does workplace diversity affect HR Function? Discuss.

17. (a) Organizations have adopted to E — Recruitment methods. Examine the Pros and Cons.

Or

- (b) As a HR Manager how would you plan out an Induction program for middle level manager? Discuss.

18. (a) Examine the influence of Knowledge management in HR Function.

Or

- (b) Trace out the impact of Training and Development on employee performance and productivity.

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M.B.A. DEGREE EXAMINATION, APRIL 2018

Second Semester

Airline and Airport Management

BUSINESS RESEARCH METHODS

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define Research.
2. Define sampling.
3. What is research design?
4. Define Interval scale.
5. What is Primary data?
6. Define Observation.
7. What is meant by Exploratory variable?
8. What is the difference between Type I and Type II error?
9. Define research report.
10. Define synopsis.

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Formulate the basic steps in research process.

Or

- (b) Explain the technique of sampling.

12. (a) Identify the pros and cons of casual research.

Or

- (b) Discuss the different types of scales.

13. (a) Discuss the criteria you use for a good questionnaire.

Or

- (b) Discuss the role of direct observation as a business research method.

14. (a) Discuss the procedure for computing one way ANOVA.

Or

- (b) Classify different types of correlation in detail.

15. (a) What precautions one should be taken while preparing research report?

Or

- (b) Discuss the need for preparing rough draft.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the application areas of research and explain its importance in business.

Or

- (b) Explain in detail about the major types of research designs.

17. (a) Elucidate how would you apply questionnaire technique.

Or

- (b) Explain the purposes of statistical analysis of research data.

18. (a) Explain about research report and its format.

Or

- (b) Classify and explain briefly about multivariate techniques.
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M.B.A. DEGREE EXAMINATION, APRIL 2018

Second Semester

Airline and Airport Management

QUANTITATIVE TECHNIQUES

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define operation research.
2. Why do you apply artificial variable?
3. What is two phase method?
4. Define feasible solution.
5. Interpret the need for Optimum solution in transportation.
6. What is critical path?
7. What are the Methods of Matrices?
8. What is measure of certainty in PERT?
9. Define Queue.
10. List the advantages of simulation.

Part B $(5 \times 5 = 25)$ Answer **all** questions.

11. (a) **Product Mix Decision @ Whoppy Soft Drinks** The production manager for the Whoppy soft drink company is considering the production of 2 kinds of soft drinks: regular (R) and diet (D). The company operates one “8 hour” shift per day. Therefore, the production time is 480 minutes per day. During the production process, one of the main ingredients, syrup is limited to maximum production capacity of 675 gallons per day. Production of a regular case requires 2 minutes and 5 gallons of syrup, while production of a diet case needs 4 minutes and 3 gallons of syrup. Profits for regular soft drink are Rs. 3.00 per case and profits for diet soft drink are Rs. 2.00 per case.

Write the formulation for this linear program.

Or

- (b) A computer retail store sells two types of flat screen monitors: 17 inches and 19 inches, with a profit contribution of Rs. 300 and Rs. 250, respectively. The monitors are ordered each week from an outside supplier. As an added feature, the retail store installs on each monitor a privacy filter that narrows the viewing angle so that only persons sitting directly in front of the monitor are able to see on-screen data. Each 19” monitor consumes about 30 minutes of installation time, while each 17” monitor requires about 10 minutes of installation time. The retail store has approximately 40 hours of labor time available each week. The total combined demand for both monitors is at least 40 monitors each week.

How many units of each monitor should the retail store order each week to maximize its weekly profits and meet its weekly demand?

12. (a) Find the Initial Basic Feasible solution for following TP. Using NW Rule, LCM, and VAM. Which method will you select if you want to Minimize Cost?

	Destination				Supply
I	10	0	20	11	15
II	12	7	9	20	25
III	0	14	16	18	5
Demand	5	15	15	10	

Or

- (b) Analyze and solve the following transportation problem to maximize profit.

	A	B	C	D	Supply
1	15	51	42	33	23
Source	80	42	26	81	44
2	90	40	66	90	33
3	23	31	16	30	100
Demand					

Examine Initial solution using VAM.

13. (a) Explain the problem using johnsons sequence.

Or

- (b) Explain the processing n jobs and 2 Machines.

14. (a) Explain the uses and advantages of Gant chart.

Or

- (b) Elucidate steps for performing CPM.

15. (a) Classify the types of Replacement model.

Or

- (b) Interpret the characteristics of Queuing Models.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Max $Z = 300x + 400y$

Subject to

$$2x + 3y \leq 1600,$$

$$3x + 2y \leq 1500,$$

$$x + y \leq 700,$$

$$y \geq 300, x, y \geq 0.$$

Solve by Graphical Method, choose the value of x and y which maximizes profit.

Or

- (b) How do you explain PERT and CPM? State the differences between PERT and CPM.

17. (a) Explain Balanced assignment problem and Unbalanced Assignment Problem.

Or

- (b) Explain the classification of the types of Replacement model.

18. (a) Elucidate the merits and demerits Vogel approximation method (VAM) and Least Cost Method.

Or

- (b) For the single finite queing system, find the average number of customers in the system and average queue length.

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M.B.A. DEGREE EXAMINATION, APRIL 2018

Second Semester

Airline and Airport Management

PRINCIPLES OF AVIATION MANAGEMENT

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define 'Aircraft'.
2. Define the term MBO.
3. What do you mean by airport terminal?
4. State the meaning of airport apron.
5. What is the need for biometric technology?
6. What is the use of kiask in airport?
7. What is the meaning of general aviation?
8. Name the three phases of flight.
9. What is meant by level busts?
10. What do you mean by airport master plan?

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the role of aviation industry in the economic development of the country.

Or

- (b) Enumerate the functions of airline management.

12. (a) List out the functions of staff department in airline organisation.

Or

- (b) Describe the functional management area in an airport.

13. (a) Enumerate the principles of airport regulatory practices.

Or

- (b) Explain the process of passenger handling in airport.

14. (a) What are the factors determining airport location?

Or

- (b) What are the types of general aviation airports?

15. (a) What are the features of personal transportation aircrafts?

Or

- (b) Why do governments privatise airports?

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Describe the functions of line managers in airline organisation.

Or

- (b) Describe the configurations of airport.

17. (a) Describe the aviation regulatory mechanism in India.

Or

- (b) What are the uses of general aviation?

18. (a) Describe traffic control operations in the three phases of flight.

Or

- (b) Explain the causes and remedies of airport congestion.
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M.B.A. DEGREE EXAMINATION, APRIL 2018

Second Semester

Airline and Airport Management

AIR CARRIER OPERATIONS

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is meant by operations specifications?
2. What is meant by duty to care?
3. Define rest period.
4. What is stopway?
5. What is crush Ax?
6. Define HAZMAT training.
7. Distinguish between dry lease and wet lease.
8. What is observer seat?
9. What is meant by Certificated Land Airport?
10. Expand the following :
 - (a) GMT
 - (b) ETOPS
 - (c) ACARS
 - (d) FAA.

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the qualifications and responsibilities director of operations under FAR Part 121.

Or

- (b) Explain the qualifications and responsibilities director of maintenance under FAR part 121.

12. (a) What is meant by operational control? Briefly explain.

Or

- (b) What are the airworthiness requirements? Briefly explain.

13. (a) Explain CVR and FDR about its purpose.

Or

- (b) Write a short note on flight attendant.

14. (a) Briefly explain people express exemption 3585.

Or

- (b) Anti drug test is conducted on whom? How many types of tests are there? Briefly explain.

15. (a) Explain flight time limitations and rest requirements for domestic operations.

Or

- (b) What are the prohibitions concerning the use of Alcoholic beverages on board of the aircraft?

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the operational specifications for an air-carrier in detail.

Or

- (b) Explain the different types of training imparted to crew members and dispatchers under FAR 121 Subpart N.

17. (a) Explain the types of manuals used in air carrier operations.

Or

- (b) Describe airworthiness standards imposed by FAA on transport category aircrafts.

18. (a) Narrate the difference between dispatcher release document and flight release document.

Or

- (b) Explain the types of records and reports maintained by the air carrier under FAR 121 Subpart V.

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M.B.A. DEGREE EXAMINATION, APRIL 2018

Second Semester

Airline and Airport Management

AIRLINE AND AIRPORT MARKETING

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What are Air Services Agreements?
2. What is the use of distribution channel in airline industry?
3. What do you mean by market segmentation?
4. What do you mean by fleet?
5. What is Revenue Management?
6. Define CRM.
7. What is meant by multi point alliance?
8. Define all cargo airports.
9. What is meant by ALP?
10. Define low cost airport.

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) What are the advantages and disadvantages of the travel agency distribution system?

Or

- (b) Explain the various segmentation variables in the air passenger traffic.

12. (a) Distinguish between uniform pricing and differential pricing.

Or

- (b) Explain marketing mix with reference to the airline industry.

13. (a) Explain the impact of technology factors on airline marketing.

Or

- (b) Discuss the importance of advertisement in marketing of airline services.

14. (a) What are the factors influencing the revenue of an airport?

Or

- (b) Write a brief note on catchment area.

15. (a) What are the gate guardian? Explain briefly.

Or

- (b) Briefly explain the four types of airport.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain Porter's five force and their application in the airline industry.

Or

- (b) Explain the components of relationship marketing strategy.

17. (a) Enumerate the distribution channel strategies of airline marketing.

Or

- (b) What are the differences between air passenger market and air freight market?

18. (a) Explain in detail the roles of the actors involved in the air transport value chain.

Or

- (b) London Heathrow airport – A best in class provider in the airport business. Explain.

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M.B.A. DEGREE EXAMINATION, APRIL 2018.

Second Semester

Airline and Airport Management

PRINCIPLES OF LOGISTICS MANAGEMENT

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define logistics.
2. Identify the objectives of business logistics.
3. How is SCM Strategy used?
4. Define Business Strategy.
5. Define scheduling.
6. What is meant by Planning Networks?
7. List any two roles of technology for logistics.
8. What do you understand by the term of outbound logistics?
9. Give three benefits of Probabilistic inventory models.
10. Define Organization structure.

Part B**(5 × 5 = 25)**Answer **all** questions.

11. (a) How would you describe the various drivers in supply chain?

Or

- (b) Explain the logistics structure and its importance with examples.

12. (a) State the importance and objectives of supply chain.

Or

- (b) Evaluate the concept of risk pooling.

13. (a) Classify the logistics and supply chain.

Or

- (b) Discuss the various elements of strategies for transportation.

14. (a) List the advantages of using distribution network.

Or

- (b) Brief about the problems and prospects of global logistics.

15. (a) Explain how to measure and control the logistics performance.

Or

- (b) Define control process. And discuss the framework of it.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain logistics structure required for manufacturing industries in detail.

Or

- (b) Use of new technologies will help in effective asset utilization in logistics supply chain-Discuss.

17. (a) Location of warehouse is a vital one for retail business — Discuss.

Or

- (b) List down the Transportation drivers and specify their strength and weaknesses with suitable example.

18. (a) Critically review the current trends in logistics Organization structure example from Indian companies.

Or

- (b) Elucidate the Recent trends in logistics control with suitable examples.
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M.B.A. DEGREE EXAMINATION, APRIL 2018

Fourth Semester

Airline and Airport Management

AVIATION MAINTENANCE MANAGEMENT

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define "Entropy".
2. What is the effect of redesign as regards aircraft maintenance?
3. State "Task-Oriented activities".
4. Define "Preventive Maintenance".
5. What is "P.P.C." and what are its activities?
6. What is R.I.I?
7. State the characteristics of MSG.3 approach.
8. State the functions of Q.A.
9. Explain overhaul shops.
10. Define "Redundance" and "M.E.L."

Part B**(5 × 5 = 25)**Answer **all** questions.

11. (a) Explain “Process Oriented Maintenance”.

Or

- (b) Enumerate the airline uses of computer.

12. (a) What are airline certifications? Explain them briefly.

Or

- (b) Explain the responsibilities of maintenance safety Program Manager.

13. (a) Explain the five objectives of aviation maintenance program.

Or

- (b) State the list of activities of maintenance that should be audited.

14. (a) Explain the organisation for oversight functions.

Or

- (b) Explain the material directorate of a midsized airline.

15. (a) Explain technical publications organisation and its activities.

Or

- (b) Explain briefly airplane maintenance techniques.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail various regulatory documents.

Or

- (b) Explain the elements of a reliability program.

17. (a) Explain the manager level functions of Aircraft Maintenance Directorate.

Or

- (b) Explain the responsibilities of M.C.C.

18. (a) Explain human factors in aircraft maintenance.

Or

- (b) Explain basic inspection policies.
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M.B.A. DEGREE EXAMINATION, APRIL 2018

Fourth Semester

Airline and Airport Management

AIR TRAFFIC CONTROL

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define criticism.
2. What is gate keeping?
3. Name and explain briefly about three levels of behaviour.
4. What is situation awareness?
5. Define ergonomics.
6. What are the sources of errors?
7. What is team conformity?
8. Define stress.
9. Define perception.
10. What is C.N.S?

Part B**(5 × 5 = 25)**Answer **all** questions.

11. (a) Explain accident proneness model theory in modeling error.

Or

- (b) Explain the classification of human errors.

12. (a) Briefly explain four kinds of visual illusions.

Or

- (b) Draw the structure of an eye and explain its importance in ATC environment.

13. (a) What is communication? What are the barriers that affect communication in ATC environment?

Or

- (b) What is cognitive bias? Explain the various types of cognitive bias.

14. (a) Explain GNSS and state its advantages.

Or

- (b) Explain why humans are better in their abilities than machines.

15. (a) What are the factors associated with post traumatic stress disorder?

Or

- (b) Explain the cognitive abilities that are required during the selection of air traffic controllers.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) What is stress? Explain how to manage stress.

Or

- (b) Explain the levels of behaviour in detail and its impact on A.T.C.

17. (a) In liveware-hardware conflict, we cannot say which one is better, humans are good in some, while machines are good in some other. Elucidate.

Or

- (b) What is fatigue? Explain the effects of fatigue.

18. (a) What are the controller-pilot communication failure?

Or

- (b) Briefly explain about ADS and ADS-B.
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M.B.A. DEGREE EXAMINATION, APRIL 2018

Fourth Semester

Airline and Airport Management

AVIATION RULES AND REGULATIONS

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Write the purpose of promulgation of Civil Aviation Requirement? (CAR)
2. Define 'Mandatory modification'.
3. What is identification plate? What information should it contain?
4. What is certificate of approval?
5. What is CAR-145 approved organisation?
6. What is special flight permit?
7. What is the purpose of defect investigation in maintenance of aircraft?
8. What are the categories of AME license under CAR-66 licensing system?

9. Write the crew composition of aircraft.
10. What are the parts of aircraft to be included and not to be included in Minimum Equipment List (MEL)?

Part B (5 × 5 = 25)

Answer **all** questions.

11. (a) List out the various sections of civil Aviation Requirements (CAR).

Or

- (b) Explain different types of modifications carried on aircraft.

12. (a) Explain type certificate (TC), restricted type certificate (RTC) and supplemental type certificate (STC).

Or

- (b) Explain the categories of Registration of aircraft.

13. (a) Explain the requirements for CAR-M organisation.

Or

- (b) What is weight scheduled? What are the various information contained in it?

14. (a) Explain the requirements for issue of Commercial Pilot License (CPL).

Or

- (b) Differentiate Aeromobile license and RTR license.

15. (a) Explain the qualification and experience requirements of pilots carrying out flight testing of aircraft.

Or

- (b) Explain Aircraft flight manual.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the types of log books to be maintained, information contained in various sections of log book and the preservation period of log book.

Or

- (b) Explain the procedure for renewal of certificate of Airworthiness (C of A) of aircraft and also explain the validity of (C of A).

17. (a) Explain the requirements, procedure and scope of approved for CAR-145 organisation.

Or

- (b) Explain the aircraft accident reporting and investigation procedure.

18. (a) Explain the Aerodrome licensing requirement and procedure.

Or

- (b) Explain the purpose, occasions and procedure for issue of special flight permit by DGCA.

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M.B.A. DEGREE EXAMINATION, APRIL 2018

Fourth Semester

Airline and Airport Management

STRATEGIC AVIATION MANAGEMENT

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define the terms 'mission and vision'.
2. Distinguish between strategy and tactics.
3. What is meant by strategic group?
4. What purpose does SWOT analysis serve?
5. What is the meaning of strategic alternative?
6. State the meaning of turn around strategy.
7. Who is a low cost leader?
8. Define the term 'SBU'.
9. What is meant by knowledge?
10. State the meaning of corporate governance.

Part B**(5 × 5 = 25)**Answer **all** questions.

11. (a) What are the features of MBO?

Or

(b) List out the forces that drive industry competition.

12. (a) What are the strategic alternatives?

Or

(b) What are primary activities in value chain?

13. (a) How does a firm build synergy?

Or

(b) Distinguish between merger and acquisition.

14. (a) How does a firm acquire core competency?

Or

(b) What are the factors influencing ethics?

15. (a) List out the themes of turn around strategy.

Or

(b) What are the types of controls used in strategy evaluation?

Part C**(3 × 10 = 30)**Answer **all** questions.

16. (a) Explain the elements of strategic management.

Or

(b) Discuss the factors driving industry competition.

17. (a) What are the causes for conflicts? Suggest measures to solve it.

Or

- (b) Describe the process of value chain analysis.

18. (a) Discuss the concept of BCG matrix.

Or

- (b) Explain Michael porters 7S frame work.
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M.B.A. DEGREE EXAMINATION, APRIL 2018

Fourth Semester

Airline and Airport Management

AIRPORT ENGINEERING

(2016 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is Green field airport?
2. What is ARP?
3. What is stopway?
4. What is LCN?
5. Define Apron.
6. Draw the various aircraft parking configuration with neat sketch.
7. What is Aerodrome Beacon?
8. What are the goods prohibited for carriage by air?
9. List out the objectives of Air Traffic Control.
10. What are the functions of Briefing centre?

Part B**(5 × 5 = 25)**Answer **all** questions.

11. (a) Narrate the principles of airport layout with a neat sketch.

Or

- (b) Explain DGCA and its functions.

12. (a) Explain Runway markings and Taxiway markings with neat diagram.

Or

- (b) Explain Aeroplane parts with neat sketch.

13. (a) Describe the sources of Airport Revenue.

Or

- (b) Draw the flowchart of terminal passenger flows.

14. (a) Explain Runway lighting system and Taxiway lighting system.

Or

- (b) Narrate the Lounge Area Requirements.

15. (a) Explain VFR and IFR.

Or

- (b) Narrate the flight plan and its content.

Part C**(3 × 10 = 30)**Answer **all** questions.

16. (a) Explain ICAO and its functions.

Or

- (b) Explain the environmental factors to be considered with respect to Airport operations.

17. (a) Write a brief note on Apron, Holding Apron, and Terminal Apron.

Or

- (b) Explain VASI and PAPI lighting with neat sketch.

18. (a) Narrate the Airport lighting with a neat diagram.

Or

- (b) Explain Air traffic control network and the features of air traffic services.
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