

**Senior Secondary**  
**Transportation and Warehouse Management**  
**Sample Paper**

**Time : 3 Hours**

**Maximum Marks: 80**

**Part-A**

All questions are compulsory. Select the correct answer out of the given options for question 1 to 40. 1 x 4 = 40

1. In India, Roads clutch approximately \_\_\_\_\_ percent of the country's passenger passage.
  - a) 40
  - b) 50
  - c) 75
  - d) 85
2. India's \_\_\_\_\_ do not have access to all-weather roads.
  - a) Towns
  - b) Hamlets
  - c) Cities
  - d) Metropolitan
3. A van or pickup trailer may be used for short places in order to fetch the \_\_\_\_\_ cargoes.
  - a) Odd size
  - b) Heavy machinery
  - c) light & small
  - d) Dangerous
4. The \_\_\_\_\_ has been a major investor in the transport segment in India.
  - a) Financial Corporation of India
  - b) Indian Financial Corporation
  - c) Reserve Bank of India
  - d) World Bank

5. The system of packing in \_\_\_\_\_ transport is less complex.
- a) Road
  - b) Rail
  - c) Air
  - d) Sea
6. As per the statistics, in our Nation, it is understood that there exists only \_\_\_\_\_ long roads per 100 sq. km area.
- a) 25 km
  - b) 34 km
  - c) 50 km
  - d) 67 km
7. The longest national highway in India is National Highway \_\_\_\_\_ at 3508 kms.
- a) 2
  - b) 44
  - c) 63
  - d) 102
8. For carrying general haulage \_\_\_\_\_ type of trucks is most regularly used.
- a) Flatbed
  - b) Box truck
  - c) curtain sided
  - d) tanker carrier
9. When the organization wanted to send large pieces like construction equipment's, building supplies and containers \_\_\_\_\_ type of road goods consignments are used.
- a) Flatbed
  - b) Temperature controlled
  - c) car carrier
  - d) tanker carrier
10. Car carrying shipments are divided into \_\_\_\_\_.
- a) Two
  - b) Three
  - c) Five
  - d) Six

11. At present, \_\_\_\_\_ has the majority rapid transit systems in the world.
- a) China
  - b) Japan
  - c) USA
  - d) Australia
12. Most of the \_\_\_\_\_ commuter rail services share their tracks with other passenger and freight trains.
- a) China
  - b) British
  - c) Japan
  - d) Thailand
13. The first monorail prototype was created in the year \_\_\_\_\_.
- a) 1789
  - b) 1820
  - c) 1911
  - d) 1936
14. The first elevated railway was built in \_\_\_\_\_ and Greenwich between 1836 and 1838,
- a) New York
  - b) Brussels
  - c) London
  - d) Tokyo
15. \_\_\_\_\_ is referred as the 'electric street railways'.
- a) Tram
  - b) Elevated
  - c) Commuter
  - d) Monorail
16. \_\_\_\_\_ are powered by cable traction, and designed exclusively for steep inclines.
- a) Commuter rail
  - b) Elevated rail
  - c) Street car
  - d) Funiculars

17. The fell mountain railway system was designed and developed by a \_\_\_\_\_ engineer named John Barrowclough Fell.
- a) Japan
  - b) French
  - c) German
  - d) British
18. \_\_\_\_\_ railways are often also referred as 'tourist railroads' and can be seen across the World.
- a) Funiculars
  - b) Mountain
  - c) Heritage
  - d) Tram
19. \_\_\_\_\_ way rail was first introduced by John Curr.
- a) Mountain
  - b) Plate way
  - c) Elevated
  - d) Commuter
20. A rack railway, also referred as a \_\_\_\_\_ railway,
- a) Street car
  - b) Mono
  - c) Cog
  - d) Heritage
21. Siachen Glacier, is the \_\_\_\_\_ largest glacier on earth and largest in the Himalayas.
- a) First
  - b) Second
  - c) Third
  - d) Fourth
22. The main Himalayan River systems are the \_\_\_\_\_.
- a) Godavari
  - b) Tapi
  - c) Krishna
  - d) Ganga

23. The rivers such as the \_\_\_\_\_ rivers move towards the shallow valleys.
- a) Peninsular
  - b) Hindus
  - c) Himalaya
  - d) Jhelum
24. The origin of Indus is lies in the northern slopes of the Kailash series in \_\_\_\_\_.
- a) Pakistan
  - b) Tibet
  - c) Nepal
  - d) Bhutan
25. The river Chenab is also referred as \_\_\_\_\_.
- a) Mahanadi
  - b) Narmada
  - c) Chandranhaga
  - d) Godavari
26. The river Beas is referred as \_\_\_\_\_.
- a) Bara lacha
  - b) Bhaga
  - c) Kangra
  - d) Kulu
27. The entire length of the river Ravi is stretched with around \_\_\_\_\_ kms.
- a) 175
  - b) 350
  - c) 550
  - d) 710
28. The Sutlej originates from the \_\_\_\_\_ Lake.
- a) Rakas
  - b) Manasarivar
  - c) Rupar
  - d) Shipki

29. \_\_\_\_\_ river is called as the Tsangpo in Tibet.
- a) Dihang
  - b) Brahmaputra
  - c) Kangra
  - d) Chandra
30. The river Narmada is located in central part of India.
- a) East
  - b) West
  - c) Central
  - d) North
31. The Multimodal Transport Act was approved by the Indian Parliament in the year \_\_\_\_\_ .
- a) 1971
  - b) 1987
  - c) 1993
  - d) 2002
32. MTO stands for \_\_\_\_\_
- a) Multi Transshipment Order
  - b) More Than Order
  - c) Multimodal Transport Operator
  - d) Moving Through Operator
33. CONCOR was established in the year \_\_\_\_\_ .
- a) 1967
  - b) 1983
  - c) 1991
  - d) 1988
34. DFC's stand for \_\_\_\_\_ .
- a) Distance Freight Corridors
  - b) Dedicated Freight Corridors

- c) Dedicated Freight Corridors
  - d) Dead Freight Corridors
35. The cargoes which are shipped in small vessel are called as \_\_\_\_\_ vessel.
- a) Naval
  - b) Coastal
  - c) Mother
  - d) Feeder
36. The first ISO container was transported towards inland by Railways to the nation's first ICD at \_\_\_\_\_.
- a) Dighi
  - b) Bangalore
  - c) New Delhi
  - d) Guntur
37. Multimodal transport is the shipment of goods under a single agreement, but executed with at least two specific modes of transport.
- a) Two
  - b) Three
  - c) Three
  - d) Four
38. Multimodal transportation is also referred as \_\_\_\_\_ transport.
- a) Coastal
  - b) Inland
  - c) Combined
  - d) International
39. Co-modal is a \_\_\_\_\_ term coined by the EU which refers to the utilization of more than one mode of transport to distribute the most sustainable on the whole result.
- a) A
  - b) C
  - c) D
  - d) Q

40. \_\_\_\_\_ in a distribution chain refers to the movement of cargoes from port of origin to destination.
- a) De-stuffing
  - b) Palletization
  - c) Transportation
  - d) Warehousing

### **Part-B**

Answer question 41 to 45 in about 30 to 60 words each

2 x 5 = 10

- 41. Name 2 basic functions of warehousing.
- 42. Name 2 abiotic and 2 biotic factors affecting foodgrains in storage.
- 43. Name 2 key challenges in warehousing sector.
- 44. What is representative sample.
- 45. What is the procedure to verify stocks in a warehouse?

### **Part-C**

Answer question 46 to 50 in about 80 to 100 words each

3x 5 = 15

- 46. What is standard operating procedure and mention any two benefits?
- 47. Write a note on Artificial Intelligence, Augmented Reality and chat bots in relation to hospitality sector.
- 48. Explain Green Logistics
- 49. Write about National Highways & Wagon Numbering System
- 50. Elaborate on Hydrogen-powered trains

### **Part-D**

Answer question 51 to 53 in about 100 to 120 words each

5x 3 = 15

- 51. Write about inspection and types of audits carried out in warehouses?
- 52. Bring out the Strategic Objectives of International Civil Aviation Organization.
- 53. Explain roles & functions of IATA



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**Marking Scheme**

Maximum Marks : 80

<b>Part-A</b>			
<b>Q.No.</b>	<b>ANSWER KEY</b>	<b>Note</b>	<b>Marks</b>
1	D	-	1
2	B	-	1
3	C	-	1
4	D	-	1
5	A	-	1
6	B	-	1
7	B	-	1
8	C	-	1
9	A	-	1
10	A	-	1
11	A	-	1
12	B	-	1
13	B	-	1
14	C	-	1
15	A	-	1
16	D	-	1
17	D	-	1

<b>Q.No.</b>	<b>ANSWER KEY</b>	<b>Note</b>	<b>Marks</b>
18	C	-	1
19	B	-	1
20	C	-	1
21	B	-	1
22	D	-	1
23	A	-	1
24	B	-	1
25	C	-	1
26	D	-	1
27	D	-	1
28	A	-	1
29	B	-	1
30	C	-	1
31	C	-	1
32	C	-	1
33	D	-	1
34	B	-	1
35	D	-	1
36	B	-	1
37	A	-	1
38	C	-	1
39	A	-	1
40	C	-	1

**Part - B**

41	<ul style="list-style-type: none"> <li>To preserve goods on a large-scale in a systematic manner.</li> <li>To provides protection to goods against fire, flood, cyclone, storm, heat, moisture, etc. and also minimize post harvest losses.</li> </ul>	1 1	2
42	<ul style="list-style-type: none"> <li>Abiotic Factors: Temperature &amp; Moisture content.</li> <li>Biotic Factors : Insects &amp; Rodents.</li> </ul>	1 1	2
43	<ul style="list-style-type: none"> <li>Inadequate infrastructure.</li> <li>Non availability of land."</li> </ul>	1 1	
44	Representative samples are made by combining many smaller samples into one larger composite sample. Representative samples are grain samples that accurately represent a specific quantity of grain, such as the contents of an entire grain lot.	1 x2=2	2
45	<p>1. Periodic verification of the stored produce of its recorded quantity in the warehouse and quality is an important procedure for inventory management in the warehouse.</p> <p>Physical verification – Physical count of the units of various commodities as per the warehouse receipts issued is conducted at the prescribed interval to check the accuracy of stock position.</p> <p>Qualitative verification – During the verification of the quality of the stored goods samples are drawn from each stack to check the presence of insect infestation by analysing key parameters like damaged, discolored, weevil led (insect-damaged) or chalky grains in the sample.</p>	1  1	2
<b>Part - B</b>			
46.	<p>SOP is a written document detailing step-by-step instructions to guide the performer of a process or a function or an activity relating to adoption of best practices in performing a specific function in a most optimal way. This document lists all the activities and specifies details like what, why, how, when, where and by whom (commonly called 6 Qs) for execution of the different jobs.</p> <ol style="list-style-type: none"> <li>Well defined steps to perform a work.</li> <li>Standardization of activities irrespective of the person performing it.</li> <li>Improved safety and security in operation.</li> <li>Consistently in the end product.</li> </ol>	1  Any 4 point $\frac{1}{2} \times 4=2$	3

	<p>5. Easy to train a new employee.</p> <p>6. Sets a standard on expected performance</p> <p>7. Minimizing wastages in processes</p> <p>8. A platform for continuous improvement</p> <p>9. A document to highlight management’s standing Court of Law."</p>		
47	<p>"Artificial intelligence: It plays a diverse role within the hospitality sector. The AI-powered chat bots are an example of AI, which can be utilized for online consumer interactions, eliminating the lengthy waiting times and offering swift, bright responses to queries. Still, there are extra benefits is offered to travel and hospitality sectors through artificial intelligence technology. For example, some hotels have invented AI and voice-controlled consumer service or tourist data hubs inside their hotels. In the meantime, AI can also be utilized to sort via data, mechanically make alteration to process, and so on.</p> <p>Augmented Reality: The augmented reality technology is alike to virtual reality technology, but relatively than generating some innovative digital surroundings for users. Further it is concerned with improving the real-world surroundings via graphical or data overlays. Other than a Smartphone and an app, unlike the VR technology, it generally needs nothing. This app can be designed so that consumers can spot their phone at a hotel / restaurant and glance reviews, or opening / closing times</p> <p>Chat bots: Chat bots are considered as the major hospitality trends connected with customer service and can be particularly helpful for distributing swift responses to queries, even when staff is not available. In several cases, this can direct to first contact declaration, but the Chatbot can also collect data and pass it on to a human representative if needed."</p>	1  1  1	3
48	<p>"One of the main trends for future development will be the appearance of Green Logistics. With India focusing on Net Zero emissions across segments, Logistics firms will require to decrease their carbon footprint as well as and grow quickly. Further, the digitization will also assist in several ways. For instance, India has come up with GPS to facilitate the Toll to make sure zero wastage of fuel and resulting emissions among hundreds of Toll Plazas. Current logistics parks are construct with solar made rooftops and sell the carbon-free electricity instead of consuming it. E-commerce firms have dedicated to distribute 30 per cent of consignments by utilizing Electric Vehicles. India requires a thriving and sufficient logistics segment to attain its growth goal, and digitization is the central to distributing the same."</p>	3	3



	<p>team. Each member of the team is assigned a specific job and duration of time as agreed by both the auditor and auditee.</p> <p>Types of audit - Quality system audit and Compliance audit</p> <p>i. Quality system audit: This is referred to as a desk audit as it involves mostly a review of the documented quality system against the agreed standards and procedures.</p> <p>ii. Compliance audit: It is conducted after a quality system audit has established confirmation to reference standards of the company. This audit deals with the application of the quality system and its verification as described in their system."</p>	1x2=2	
52	<p>"In its continuing mission to support and facilitate a global air shipment structure that meets the social and economic growth and wider connectivity requires of global businesses and passengers, and admitting the clear requirement to forecast and administer the projected doubling of worldwide air shipment accommodation by 2030 without pointless adverse force on system security, effectiveness, convenience, ICAO has created five widespread Strategic Objectives:</p> <p>1. Safety:</p> <p>In order to develop the global civil aviation safety, this objective is focused mostly on the States regulation oversight potential. The Global Aviation Safety Plan (GASP) spotlights the main activities for the triennium.</p> <p>2. Air Navigation Capability and Effectiveness:</p> <p>Develop the capacity and enhance the efficiency of the worldwide civil aviation system. Even though functionally and organizationally inter-reliant with Safety, this objective is spotlight on development of air navigation and airport infrastructure and developing innovative procedures to optimize aviation structure performance. The Global Air Navigation Capability and Effectiveness Plan (Global Plan) sketch the main activities for the triennium.</p> <p>3. Security &amp; Facilitation:</p> <p>In order to increase the global civil aviation security as well as facilitation, it reflects the requirement for ICAOs leadership in aviation protection, facilitation and associated border security matters.</p>	Any five point 1 x 5=5	5

	<p>4. Economic development of Air shipment: In order to boost the growth of a sound and economically pertinent civil aviation system it reflects the requirement for ICAOs leadership in maintaining the air shipment framework intended on economic guidelines and supporting activities.</p> <p>5. Environmental Protection: In order to reduce the adverse ecological effects of civil aviation activities it boosts ICAOs leadership in all aviation- connected ecological activities and is reliable with the ICAO and UN structure environmental defence policies and practices."</p>		
53	<p>"ROLE AND FUNCTIONS OF IATA</p> <p>IATA refers as the International Air Transport Association and is the official trade organisation for the globe's airlines (by admitting more than 85 participating countries). For air carriers, IATA offers a pooled resource for scheduling, routing, standardising services and the generation of an international public service for the air segment. For customers, IATA sets the global standard for services and trade practices between member airlines. As an instance, the three-digit airport codes utilised globally are an IATA convention. In addition, IATA aims to attain the subsequent mandate:</p> <ol style="list-style-type: none"> <li>1. To develop safe, regular and economic air shipment</li> <li>2. To promote air commerce</li> <li>3. To study issues linked with airline industry</li> <li>4. To offer a means of collaborating among air shipment companies and agencies</li> <li>5. To co-operate with other global air transportation organisations</li> </ol> <p>Basically, IATA is airlines working together to regulate and enhance service internationally. Owing to the vital position played by IATA in air transportation problems, it is recommended that one should ensure that their carrier/forwarder is an IATA agent.</p> <p>IATA is one of the biggest travel and tourism organisations announcing the connection among the airlines all over the globe. The organisation currently has 278 airlines below its wings which represent 117 nations. The IATA members transport around 83% of the total air traffic. The organisation sets guidelines and corporate policies for the airlines and helps airline activities. IATA headquarters is located in Montreal, Canada, and their executive office is situated in Geneva, Switzerland.</p>	5	5

### Main functions of IATA

- i. **Safety:** The main favourite of the organisation is to make sure the safety of aeroplanes and the air travellers. IATA has set up a board to generate safety standards for the air borne carriers and experts to determine that the guidelines are stringently observed. These attempts by IATA ushered many developments in terms of air travel security and the quantity of air accidents has been extremely reduced.
- ii. **Security:** The airplanes are exposure to terrorism as well as hijack activities. After the increasing amounts of hijack incidents and the September 11 attacks, IATA has taken rigorous standardisation and made necessities to tighten the safety of airlines. The structure works on the basis of passenger segregation and risk evaluation.
- iii. **Environment:** Air shipment contributes to the air pollution in a huge way and it consumes tons of fuel. The introduction of IATA teamed up with aircraft producers to set up energy efficiency with less polluting engines. These attempts were helpful in enhancing the fuel capability to 1.5 per year. The carbon emissions created by aircraft engines were decreased and the organisation is now intended for a 50% decrease in carbon emissions by 2050.
- iv. **Services:** Apart from strategy making and relevant regulatory services, IATA offers several training and advising services. Here are a few services recommended by IATA to enhance the standards of airlines and air travel :
  1. The organisation publicises accreditation for travel intermediaries and travel experts, differentiating them from fake travel agencies.
  2. The services related to billing and settlement of IATA operate a 300 billion financial structure to verify airline revenue.
  3. The ticket tax box service which is a record for airlines to preserve the tax expenditure.
  4. IATA determines the course outline and course formation for several travel and tourism courses. The IATA certification assists students to enrol for organisation approved and legitimate courses. All the foremost airlines and travel firms hire the students who possess IATA certifications.