

# Theory Questions for Optical Fibre Technician

Difficulty Level/Marks- Easy/Marks, Medium/Marks, Difficult/Marks

**Q.1** As we know fibre optic cable is placed in duct, the fill ratio of the duct should not exceed :  
**[Medium/4]**

1. 1:2
2. 3:4
3. 3:5
4. 7:10

**Correct Answer: 1**

**Q.2** Corning and Berk-Tech fiber are currently recommended for installation on campus. Cable from other manufacturers will be considered. All cable installed must be cleared by IST prior to installation. IST stands for: **[Medium/6]**

1. Information Services and Technology
2. Information System and Technology
3. Information Services and Technique
4. Information System and Technique

**Correct Answer: 1**

**Q.3** A way of reducing or limiting the strain in the cable during installation is to use

i. Moving Reel Method

ii Winching System

iii Stationary Reel Method **[Medium/4]**

1. only i
2. only ii
3. only iii
4. All i, ii & iii

**Correct Answer: 1**

**Q.4** As a Technician, where you are supposed to keep the faulty equipments ? **[Easy/1]**

1. Store
2. Logistics Team
3. Operations Team
4. Finance Department

**Correct Answer: 2**

**Q.5** Normal buried cable installation methods includes activities :-

- a. Ploughing
- b. Trenching
- c. Moiling
- d. Drilling **[Easy/1]**
  - 1. only a
  - 2. both a & b
  - 3. a, b, & c only
  - 4. d only

**Correct Answer: 3**

**Q.6** Explain the reason behind coordination among labour workers while installing cables in site :

- a. To help technician
- b. To increase productivity
- c. To manage safety at work site **[Easy/3]**
  - 1. only a
  - 2. only a & b
  - 3. All a,b & c
  - 4. only c

**Correct Answer: 3**

**Q.7** \_\_\_\_\_ materials provide ducts and cables with mechanical protection, it is a method to secure the infrastructure in position at the bottom of the mini-trench. **[Easy/3]**

- 1. backfilling
- 2. front filling
- 3. Both back and front filling
- 4. All the given options are incorrect

**Correct Answer: 1**

**Q.8** During the installation the length of cable at each end is coiled in the jointing pit to provide for jointing to be carried out at convenient location as well as spare length to be available for future use in case of failures should be :

- a.10m
- b. 0.5m
- c. 2m
- d. 1 m **[Medium/5]**

1. only a
2. only b
3. only b & c
4. All a, b, c & d

**Correct Answer: 1**

**Q.9** An end plug for a fiber optic splice case assembly comprises of :

- a. a substantially solid body having a longitudinal axis and having a pair of diametrically opposed rounded surfaces
- b. a pair of flat surfaces
- c. a first aperture through said end plug **[Easy/3]**

1. only b & c
2. only a
3. only a & b
4. All a,b & c

**Correct Answer: 4**

**Q.10** RCC pipes are used for additional protection of ducts. RCC stands for **[Easy/3]**

1. Reinforced Cement Concrete
2. Refined Cement Concrete
3. Reinforced Ceramic Cement
4. All the given options are incorrect

**Correct Answer: 1**

**Q.11** In case of any delay while performing given task, matter should be escalated as per compliance to : **[Easy/2]**

1. Exit Policy
2. Finance Policy
3. Enterprise policy
4. HR Policy

**Correct Answer: 3**

**Q.12** The number of joints in an optical fibre cable should not exceed more than : **[Easy/3]**

1. 0.1
2. 0.2
3. 0.25
4. 0.15

**Correct Answer: 1**

**Q.13** Name the connecting device which is been used to join two ducts in optical fibre cable ?  
[Easy/2]

1. End Plugs
2. couplers
3. RCC/ GI pipes
4. Connectors

**Correct Answer: 2**

**Q.14** While performing cabling, You are required to adhere health and safety procedures, Legal and compliance strictly. Who is the force behind designing safety procedures ? [Medium/6]

1. Organisation's Planning team
2. Labour
3. Technician
4. Customer

**Correct Answer: 1**

**Q.15** In an construction site, fire took place while giving connection to the cables. As an OFT, what will you do first and to whom you will approach?

- i. Adhere to emergency plans of safety
- ii. Escalate it to relevant authorities
- iii. Perform as per own wish [Medium/4]

1. i only
2. ii only
3. i & ii only
4. only iii

**Correct Answer: 3**

**Q.16** Each optic fiber core shall be tested using an OTDR and shall meet the minimum requirements of AS/NZS 3080:2003. Test should be done considering :-

- i. length
- ii. Defects
- iii. Attenuation [Easy/3]

1. only i
2. only ii
3. All i, ii & iii
4. only i & ii

**Correct Answer: 2**

**Q.17** Once the task is completed by technician's end, the report of the same needs to be given to Project Team Head for : **[Easy/2]**

1. Cable Integration
2. Record purpose
3. Inspection
4. All the given options are correct

**Correct Answer: 4**

**Q.18** Point out the tools mostly used for optical testing by a technician ?

- a. Power Meter
- b. Light Meter
- c. Optical Time Domain Reflectometer
- d. Mandrel Wrap **[Medium/4]**

1. only a
2. only a & b
3. only b & c
4. all a,b,c & d

**Correct Answer: 4**

**Q.19** More complex monitoring can be done using Optromix DTS system where an optical fiber cable is used to continuously monitor the : **[Easy/3]**

1. Temperature
2. Current
3. Voltage
4. Power

**Correct Answer: 1**

**Q.20** While preparing the drawing of the proposed route , which important detail/s you will indicate in the drawing?

1. Location of all turns, bends and major landmarks
2. Type, quantity and location of all the joint boxes
3. Location and number of permanent and temporary manholes.
4. Major landmarks only **[Easy/3]**
  1. only 1
  2. only 1 & 2
  3. Only 1, 2 & 3
  4. All 1,2,3, & 4

**Correct Answer: 4**

**Q.21** With the related thermal management issues as well as safety issues, \_\_\_\_\_ pump lasers with high optical power is required . **[Hard/7]**

1. (> 1 W)
2. (< 1 W)
3. (> 2 W)
4. (< 1 W)

**Correct Answer: 1**

**Q.22** The maximum cable strain at which there is no fiber strain is technically termed as : **[Hard/8]**

1. Cable tension
2. Cable strain margin
3. Fiber strain margin
4. Stress limit

**Correct Answer: 2**

**Q.23** A technician have to confirm the effectiveness of planned cabling activity by carrying out testing on spare fibres but prior starting these activities confirmation is required from which division?

**[Medium/6]**

1. Planning Centre
2. Network Operating Centre
3. Sales & Distribution Centre
4. Security Operations Centre

**Correct Answer: 2**

**Q.24** Point the most important precaution to be taken in case active fibres are used for testing ?

**[Easy/3]**

1. Water Supply
2. Power Fluctuations
3. Dampness in walls
4. All the given options are incorrect

**Correct Answer: 2**

**Q.25** You notice a fire incident during OFC repair work. Which of the emergency telephone numbers you will call to intimate the emergency? **[Medium/6]**

1. 100
2. 1025
3. 101
4. 1097

**Correct Answer: 3**

**Q.26** In a preventive maintenance schedule what is the frequency of Oil levels checking in a DG?

- a) Monthly
- b) Weekly
- c) Quarterly
- d) Daily **[Medium/5]**

- 1. only a
- 2. only b
- 3. only b & c
- 4. only d

**Correct Answer: 4**

**Q.27** For the power monitoring system it is important to choose the correct :

- a. Wavelength
- b. Power Supply
- c. Voltage Level **[Easy/5]**

- 1. only a
- 2. only b
- 3. only a & b
- 4. only c

**Correct Answer: 1**

**Q.28** Work site for Optical Fibre Installation should be assessed properly for health and safety risk. When should it be assessed ? **[Medium/6]**

- 1. During the work
- 2. Prior to work commencement
- 3. Post completion of work
- 4. All the given options are incorrect

**Correct Answer: 2**

**Q.29** Accidents at the installation site should be escalated to the :

- a. Hospital
- b. Colleague
- c. Doctor
- d. Supervisor **[Easy/3]**

- 1. only a
- 2. only a & b
- 3. only a & d
- 4. all a,b,c & d

**Correct Answer: 3**

**Q.30** As the installation of cables are finished, what should be done:

- a. Documentation
- b. Informing Supervisor
- c. Time Pass
- d. Wait for next assignment **[Easy/3]**
  - 1. only a
  - 2. only a & b
  - 3. All a,b & c
  - 4. only c

**Correct Answer: 2**

**Q.31** The work once completed by a technician should be summarised forwarded in proper format. Who is the right person to whom the report should be submitted? **[Easy/2]**

- 1. Supervisor
- 2. Territory Manager
- 3. Colleague
- 4. Branch Manager

**Correct Answer: 2**

**Q.32** Name the technique that can be used in conjunction with traditional locating techniques to help provide more accurate production of underground information. **[Hard/8]**

- 1. vertical boring
- 2. Ground-penetrating radar systems (GPR)
- 3. GPRS
- 4. Binoculars

**Correct Answer: 2**

**Q.33** During the splice work what does cause "offset" errors on fixed v-groove splicer? **[Easy/2]**

- 1. irregular cutting of fiber end
- 2. low battery
- 3. debris on the v-grooves
- 4. alcohol cleaning of fiber

**Correct Answer: 3**



**Q.34** In order to identify the exact location of fault OTDR test needs to be carried out. On which fibre it should be carried out ? **[Hard/7]**

1. Soiled Fiber
2. Spare Fiber
3. Used Fiber
4. All the given options are incorrect

**Correct Answer: 2**

**Q.35** Name the protective duct which should be used to protect pigtailed and patch cords wherever they are run under floor spaces **[Hard/7]**

1. Hard PVC pipe
2. GI pipe
3. Flexible conduit
4. RCC pipe

**Correct Answer: 3**

**Q.36** As far as possible trenching, cable laying and backfilling shall be carried out : **[Hard/6]**

1. progressively and concurrently
2. In batches
3. in monthly schedule
4. In small sections

**Correct Answer: 1**

**Q.37** Optical fiber connectors are used to connect various optical fiber communication equipments. Identify the process that must be carried out with the connector each time it is used **[Hard/8]**

1. Blown
2. Cleaned and dried.
3. Heated
4. Sterilized

**Correct Answer: 2**

**Q.38** What should be blown through the PLB HDPE pipe in order to remove dirt and water safely ? **[Medium/4]**

1. Compressed air
2. hot air
3. cool air
4. air at very slow pressure

**Correct Answer: 1**

**Q.39** Identify the tool which should be provided at each entry, exit and pilot pit of the trench to caution the traffic. **[Medium/5]**

1. Security Guards
2. stick
3. Caution boards
4. fencing

**Correct Answer: 3**

**Q.40** After the fault rectification , mark the point that must be included in preparation of jointing record for future reference .

- a) Recording GPS data of the joint
- b) Recording landmark data for the joint
- c) Installing joint indicator at joint location
- d) Complete records of OTDR register **[Medium/5]**

1. only a
2. obly a & b
3. only a, b & c
4. All a,b, c & d

**Correct Answer: 4**

**Q.41** Name the protection tool which is used to join optical fibre cable as shown in the image below :



**[Medium/6]**

1. Spleaves
2. Fibre Optic Connector
3. Couplers
4. RCC Piper

**Correct Answer: 3**

**Q.42** Identify the Instrument you will use to test a fiber optics splice.

**[Easy/2]**

1. Spectrum Analyzer



2. Oscilloscope



3. Optical Power Meter



4. Field Strength Meter



**Correct Answer: 3**