**NSDA Reference**

*To be added by NSDA*

**CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE**

**Name and address of submitting body:**

West Bengal State Council of Technical & Vocational Education and Skill Development

KarigariBhavan(5th Floor), Plot-B/7, Action Area-III

New Town, Kolkata-700160

**Name and contact details of individual dealing with the submission**

**Name: SUPARNA KUMAR ROYCHOWDHURY**

**Position in the organisation:Chairman, Board of Studies and Skilling**

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**List of documents submitted in support of the Qualifications File**

1. Curriculum and Course Content
2. Assessment strategy

**SUMMARY**

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| --- | --- |
| **Qualification Title** | Blood Collection Assistant |
| **Qualification Code** |  |
| **Nature and purpose of the qualification** | Short term Certificate CourseTo become self-employed i.e. entrepreneurs or wage employed under MSME |
| **Body/bodies which will award the qualification** | West Bengal State Council of Technical & Vocational Education and Skill Development |
| **Body which will accredit providers to offer courses leading to the qualification** | Committee on Recognition under the West Bengal State Council of Technical & Vocational Education and Skill Development |
| **Body/bodies which will carry out assessment of learners** | Board of Examination under the West Bengal State Council of Technical & Vocational Education and Skill Development |
| **Occupation(s) to which the qualification gives access** | Lab Assistant in Pathology / Blood Bank |
| **Licensing requirements** | NA |
| **Level of the qualification in the NSQF** | Level 3 |
| **Anticipated volume of training/learning required to complete the qualification** | 650 hours |
| **Entry requirements and/or recommendations** | Class VIII pass |
| **Progression from the qualification** | Jr. Lab Assistant ----- Lab Assistant------- Lab Technician |
| **Planned arrangements for the Recognition of Prior learning (RPL)** | RPL will consist of four stages1. Counselling- To inform, advise and guide the candidates regarding RPL
2. Pre-Assessment- To assess the current competencies of the candidates and identifying the gap between the full qualification and current competencies.
3. Orientation &Bridge Training- To train the candidates for bridging the gap.
4. Final assessment & Certification- To assess the candidate for full qualification and certify.
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| **International comparability where known** | N/A |
| **Date of planned review of the qualification.** | Every 3 years (Next: February 2021) |
| **Formal structure of the qualification** After completion of course the passed out trainee can work as Jr. Lab Assistant and after two years of field experience the passed out trainee can work as a Lab Assistant and after that with appropriate experience, the person can work as a Lab Technician. |
| Title of component and identification code. | Mandatory/ Optional | Estimated size (learning hours) | Level |
| 1. Apply safe working Practices | Mandatory | 25 | 3 |
| 2. Collect blood, Urine and swab samples from different patients with proper pre collection. | Mandatory | 20 | 3 |
| 3. Wash and clean different glass wares and syringe. | Mandatory | 30 | 3 |
| 4. Dry and sterilize the equipment and picking points. | Mandatory | 50 | 3 |
| 5. Handle laboratory instruments and chemicals with precautions. | Mandatory | 50 | 3 |
| 6. Prepare blood films and stain the smears. | Mandatory | 50 | 3 |
| 7. Use anti coagulants while collection blood samples.  | Mandatory | 50 | 3 |
| 8. Manipulate different techniques for caning and storageof glass wares and chemicals  | Mandatory | 50 | 3 |
| 9. Suggest the different first –aid measures to avoid risks and hazards. | Mandatory | 50 | 3 |
| 10. Prepare ORS to avoid dehydration.  | Mandatory | 50 | 3 |
| 11. Measure normal or abnormal blood pressure and temperature using machine and apparatus . | Mandatory | 100 | 3 |
| 12. Maintain the records of different parameters of a patient  | Mandatory | 50 | 3 |
| 12. Operate syringe of different measurements collection of different volume of blood.  | Mandatory | 20 | 3 |
| 13.Understand and practice soft skills | Mandatory | 25 | 3 |
| 14. Demonstrate knowledge of concept and principles of basic arithmetic and financial calculation, and apply knowledge of specific area to perform practical operations. | Mandatory | 25 | 3 |
| 15. Explain time management, entrepreneurship and manage/organize related task in day to day work for personal & social growth. | Mandatory | 25 | 3 |

| **Title of component and identification code.** | **Mandatory/Optional** | **Estimated size (learning hours)** | **Level** |
| --- | --- | --- | --- |
| **I. Theory****Theory component of the course is to develop relevant basic technical information & knowledge about collection of blood and swab sample and support healthcare system.****II. Practical****Institutional component of Practical training of the course is to impart relevant basic technical skills to perform collection of blood, swab sample from the patient using various tools & instruments maintaining basic safety and to maintain the pathological lab in rural and urban area**.**III. Employability Skills****Employability Skills component of the course is to impart Soft skills which include Communication Skills, Behaviour, IT literacy, Entrepreneurship Skills, Safety, Hygiene etc.** | **Mandatory****Mandatory****Mandatory** | **100****450****100** | **3****3****3****3** |
| **Total (I+II+III)** |  | **650** |  |

1. Curriculum Document is attached in Annexure-1.
2. Assessment Strategy Component wise distribution of marks is given in the Annexure No. 2
3. Industry Validation

**SECTION 1**

**ASSESSMENT**

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| **Body/Bodies which will carry out assessment:**Board of Examination under West Bengal State Council of Technical & Vocational Education & Skill Development, constituted under the ACT XXVI of 2013 under Department of Technical Education, Training & Skill Development, Govt. of West Bengal**How will RPL assessment be managed and who will carry it out?** RPL will consist of four stages1. Counselling- To inform, advise and guide the candidates regarding RPL
2. Pre-Assessment- To assess the current competencies of the candidates and identifying the gap between the full qualification and current competencies.
3. Orientation &Bridge Training- To train the candidates for bridging the gap.
4. Final assessment & Certification- To assess the candidate for full qualification and certify.

RPL assessment will be managed by PBSSD (PaschimBanga Society for Skill Development) under Department of Technical Education, Training & Skill Development, Govt. of West Bengal.**Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, reliable and fair and show that these are in line with the requirements of the NSQF.**Assessment will be carried out by Board of Examination under West Bengal State Council of Technical & Vocational Education & Skill Development, under Department of Technical Education, Training & Skill Development, Govt. of West Bengal. The Council has all necessary infrastructure and pool of qualified Assessors/ Examiners to carry out such assessments. Presently the Council is conducting all examinations for all courses which includeDiploma Courses, Vocational Courses in VIII+ level and X+2 level &other Short term Courses. Council also conducts all State Level Entrance tests like JEXPO for admission to Diploma Courses in Polytechnics, VOCLET for lateral entry to Diploma Courses in Polytechnics and CET (Common Entrance Test ) for admission to NCVT courses in ITIs. |

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**ASSESSMENT EVIDENCE**

**Complete a grid for each component as listed in “Formal structure of the qualification” in the Summary.**

*NOTE: this grid can be replaced by any part of the qualification documentation which shows the same information – ie Learning Outcomes to be assessed, assessment criteria and the means of assessment.*

**Title of Component:**

|  |  |
| --- | --- |
| **Outcomes to be assessed** | **Assessment criteria for the outcome** |
| 1. Apply safe working Practices
 | (1.1) Assessor will note whether the trainee is maintaining procedures to achieve a safe working environment in line with occupational health and safety regulations and requirements according to site policy.(1.2) Assessor can judge thetraineeon his ability to recognize any unsafe situations according to site policy, and assess his report accordingly.(1.3) Assessor will note whether the trainee can identify and take necessary precautions on fire and safety hazards and report according to site policy and procedures.(1.4) Assessor will ask the trainee to demonstrate safety alarms accurately.(1.5) Assessor will assess the report/recordsubmitted by trainee to supervisor/ Competent of authority in the event of accident or sickness of any staff, including accident details according to site accident/injuryprocedures(1.6) Trainee will be asked to demonstrate Personal Productive Equipment (PPE) and use the same as per related working environment.(1.7) Trainee will be asked to demonstrate basic first aid & CPR and use them under different circumstances.(1.8) Trainee will be asked to identify different fire extinguishers and to use the same as per requirement in a mock drill |
| 2. Collect blood, Urine and swab samples from different patients with proper pre collection. | (2.1)Assessor will examine whether sufficient amount of blood, urine or swab samples were collected or not and proper labelling is done to each sample regarding patient name, age, sex. Assessors will also examine whether any contamination has occurred or not. Assessor will also check the time of collection, use of anaerobic transport vials, Culturette for bacterial culture etc and filling out test request form completely and maintenance of an appropriate environment between collection of specimen and delivery to the laboratory. Assessors will also observe proper hand hygienic prior to collection.  |
| 3. Wash and clean different glass wares and syringe. | (3.1)Assessor will check whether washing and cleaning has been done by rinsing with distilled water formed by deionized water or whether detergent is used or not.  |
| 4. Dry and sterilize the equipment and picking points. | (4.1)Assessor will examine or observe what techniques are used ( Steam, alcohol, rectified spirit, low temperature, U-V ray etc ) and for what duration. |
| 5. Handle laboratory instruments and chemicals with precautions. | (5.1)Assessor will ask the blood collection assistant to demonstrate cares taken during collection of samples from patients or healthy persons ( use of gloves ). Trainee will also be asked to list precautionary measures taken to protect against electrical, thermal and chemical burns. |
| 6. Prepare blood films and stain the smears. | (6.1)Assessor will examine whether thick or thin smears are properly done, dried, stained and excess stain is washed or not. He will also examine what stain is used and at what dilution. Finally the assessors will focus the slide under microscope for detailed observation |
| 7. Use anti coagulants while collection blood samples.  | (7.1)The Assessor will ask the name of coagulants used at the time of blood collection and what are the utilities of anticoagulants or not. |
| 8. Manipulate different techniques for caning and storageof glass wares and chemicals  | (8.1)The Assessor will ask to describe the following things regarding caring and storage of glass wares and chemicals- conditions of the equipment, labelling of containers, maintenance of register regarding receipt and opening of all chemical bottles and expiry dates on chemicals. |
| 9. Suggest the different first –aid measures to avoid risks and hazards. | (9.1)The Assessors will ask to list the emergent conditions where first aid processes are applied. Secondly he may ask to demonstrate what first aid measures to be taken in care of bleeding, heart attack, burns, snake bite. Sudden collapse, stinging, artificial breathing ( CPR ), car accidents.  |
| 10. Prepare ORS to avoid dehydration.  | (10.1)The Assessors will ask what substances at what ratio are required for preparing ORS. He /She may ask the conditions where ORS can be applied. He /She may ask to demonstrate the preparation of ORS. |
| 11. Measure normal or abnormal blood pressure and temperature using machine and apparatus. | (11.1)The Assessors will ask to demonstrate how bp instrument is used to measure normal and abnormal blood pressure. He /She may observe and note down about the placement of chosen cuff on stethoscope over the brachial artery and inflation of the cuff to a pressure 30 mm Hg Above the level at which the radial pulse is no longer pulpable He /She may also listen the korfkorf sounds to detect systolic and diastolic Blood pressure |
| 12. Maintain the records of different parameters of a patient  | (12.1)The Assessors will ask what are the measurements of different types of syringes and what syringe is used for what purposes. |
| 13. Operate syringe of different measurements collection of different volume of blood.  | (13.1)The assessors may ask to prepare a record book or display record book regarding different parameters of blood of a patient. |
| 14.Understand and practice soft skills | (14.1) Assessor will rate the trainee on his ability to practice soft skills, including clear and concise communication, in day to day work with team and with higher authority |
| 15. Demonstrate knowledge of concept and principles of basic arithmetic and financial calculation, and apply knowledge of specific area to perform practical operations. | (15.1) Apply basic financial calculation to understand cost of materials & labour and basic concepts of profit/loss,(15.2) Engage in basic banking transactions as customer |
| 16. Explain time management, entrepreneurship and manage/organize related task in day to day work for personal & social growth. | (16.1) Ascertain appropriate time for the assigned task.(16.2) Execute the assigned task within time frame.(16.3) Manage own work within specified time.(16.4) Explain importance & factors affect the development ofentrepreneurship.(16.5) Identify service providers for developing entrepreneur/business establishment. |
| **Means of assessment 1**There will be two types of Assessments viz. Formative and Summative. The Formative Assessment will be carried out continuously during the conduct of course and Summative Assessment will be carried out at the end of the course. Details are mentioned under means of Assessment-2. Written test, Practical examination/ Skill test & Viva voce |
| **Means of assessment 2**1. **Means of Formative Assessment (Total marks allotted- 350)**
2. Assignments for each module of Theory component
3. Assignments for each module of Employability Skills component
4. Continuous evaluation of each module of Practical
5. **Means of Summative Assessment(Total marks allotted- 650)**
6. Written test for Theory component
7. Written test for Employability Skills component
8. Practical Test &VivavoceforPractical Component.

Component wise distribution of marks is given in the Annexure 2 |
| **Pass/Fail**

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| **Pass/Fail**Passing criteria is based on marks obtained in Formative and Summative Assessment taken together as mentioned in Annexure No-11. Minimum Marks to pass Theory component– 60%
2. Minimum Marks to pass Employability Skills component– 60%
3. Minimum Marks to pass practical component– 70%
4. Minimum attendance required to appear in the final examination- 75%
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**SECTION 2**

**EVIDENCE OF LEVEL**

**OPTION A**

| **Title/Name of qualification/component: Asst. House Wireman and Motor Winder Level:** 3 |
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| **NSQF Domain**  | **Outcomes of the Qualification/Component** | **How the outcomes relates to the NSQF level descriptors** | **NSQF Level** |
| Process | Job holder will be able to maintain standard practices before, during and after drawing of blood / swab. | Job holder will understand and comply with safety practices while undertaking works in blood, urine and swab collection and storage. The nature of work involved is repetitive and routine. | Level 3 |
| Professional knowledge | Job holder will be able to understand importance of sterilisation, process of drawing blood, swab and methods of storing them. | Job holder will understand the basic concepts, facts, principles and processes in relation with connection of blood, swab and urine collection and storage. It is also expected that the job holder will be able to comprehend precautions in the process. | Level 4 |
| Professional skill | The user/individual will know and understand how to collect blood and swab using proper tools and taking proper precaution. | The job holder will demonstrate use of various tools and materials. He/ she will be also able to demonstrate proper practices for taking blood and swab, measuring blood pressure and temperature. The range of application of practical skill is narrow and repetitive. | Level 3 |
| Core skill | The job holder will be able to* read at least two languages, preferably in the local language of the siteand basic English
* read and interpret safety sign boards, signage, tags etc. provided atworkplace
* speak in at least one language, preferably in one of the local languages of thesite
* listen and interpret instructions / communication by co-workers
* listen and follow instructions given by supervisor
* orally and effectively communicate with team members
* engage in basic financial and banking transactions
* Understand principles of time management and entrepreneurship
 | The job holder will be able to communicate clearly, both in writing and orally, with co-workers, supervisors and customers. He will be able to use basic arithmetic calculations for his work and use basic banking services both on professional and personal level. | Level 3 |
| Responsibility | The job holder will work under the close supervision of supervisor and he will be responsible for collection and storage of blood, urine and swab. | Job holder is required to carry out functions such as sterilising containers, syringes using proper tools. He should be able to take measurement of blood pressure and temperature. In these activities job holder is doing the tasks independently, with supervision in certain risky jobs. | Level 3 |

**SECTION 3**

**EVIDENCE OF NEED**

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| **What evidence is there that the qualification is needed?** Government of West Bengal offers 42 courses in VIII+ category and trains approximately 1.5 lakhs beneficiaries per year through its 2400 approved VTCs since last 10 years. Assessment and Certification is done by the West Bengal State Council of Technical & Vocational Education and Skill Development for these courses. Blood Collection Assistant is one of these 42 courses which are successfully conducted by Government of West Bengal. |
| **What is the estimated uptake of this qualification and what is the basis of this estimate?**There has been significant opportunities for the particular course as the course is operational for more than 10 years |
| **What steps were taken to ensure that the qualification does not duplicate already existing or planned qualifications in the NSQF?**This qualification is being conducted under the West Bengal State Council of Technical & Vocational Education & Skill Development under Department of Technical Education, Training and Skill Development since the academic year 2005 in Vocational Training Centres spread all over West Bengal for class- VIII+ pass dropout youths. In the state of West Bengal the Council is affiliating and awarding body for this qualification. Thus there is no other existing or planned qualification (Short term courses) in the state aligned with NSQF. |
| **What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated?**The council has three well defined sub-committees namely Board of Studies and Skilling, Board of Examination and Recognition Committee. These committees monitor and review the progress of all qualifications under its purview on a regular basis.This qualification will be reviewed and revised at an interval of three years on the basis of the outcome of the trainees, placement and self-employment data and feedback from concerned industries/employers. |

Please attach any documents giving further information about any of the topics above.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

**SECTION 4**

**EVIDENCE OF PROGRESSION**

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| **What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector?**In case of employment under an employer, he can progress to various level-wise designations, based on either experience or on obtaining subsequent qualifications. This is as shown below.Jr. Lab AssistantLab AssistantLab Technician |